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Institute of Management & Technology

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Reference Material for Three Years

Bachelor of Commerce (Hons.)

Code : 888

Semester – IV

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SUBJECT: FINANCIAL MANAGEMENT

Code: BBA 204

Q1:" Wealth maximisation is superior criterion than profit maximisation". Do you agree? Give Reasons.

Ans. **Profit maximization** is the ability of the firm in maximum output with limited input, or it uses the minimum input for the said output. It is called the company's most important purpose.
Traditionally it has been recommended that the obvious objective of any business organization is to profit, it is essential for the company's success, survival, and development. The benefit is a long-term objective, but it has a short-term perspective, i.e. a financial year.

The profit can be calculated by cutting total cost from total revenue. Through **profit maximization**, a firm may be able to detect input-output levels, which gives the highest amount of profit.

Therefore, the finance officer of an organization should make a decision in order to maximize profit, although this is not the sole purpose of the company.

The goal of Wealth maximization A company has the ability to increase the market value of its general stock over time. The market value of the firm is based on many factors like their services, sales, goodwill, quality of products, etc.

This is a versatile **goal of wealth maximization** of the company and recommended criterion for evaluating the performance of a business organization. This will help the firm to increase its stake in the market, gain leadership, maintain consumer satisfaction and also have many other benefits.
It has been universally acknowledged that the basic aim of the business venture is to increase the property of its shareholders because they are the owners of the venture, and they buy shares of the company with this hope that it will give some returns.

It states that the firm's financial decisions should be taken in such a way that the net present value of the company's profit increases.

Profit maximization vs wealth maximization is given in the points given below:

1. Through which process the company is able to increase the earning potential, it is known as **profit maximization**. On the other hand, the company's ability to increase the value of its stock in the market is known as the maximum amount of money.
2. **Profit maximization** ignores risk and uncertainty. Unlike Wealth Maximization, which considers both.
3. **Profit maximization** is a short term objective of the firm whereas the long-term objective is money maximization.
4. **Profit maximization** avoids the time value of money, but Wealth Maximization recognizes it.
5. **Advantage maximization** is essential for the survival and development of the enterprise. On the contrary, **Goal Of Wealth Maximization** accelerates the growth rate of the enterprise and its objective is to achieve the maximum market share of the economy.
6. **Risk management** – Under profit maximization, management minimizes expenditure, so it is less likely to pay for hedges which can reduce the risk profile of the organization. A wealth-focused company works on risk mitigation, so the risk of its loss is reduced.
7. **Pricing strategy** – When the management wants to maximize profits, then the maximum price is given to the products to increase the margin. To make a market share, in the long run, a wealth-oriented company can reverse, to reduce prices.
8. **capacity planning** – A profit-oriented business will spend enough on its productive capacity to handle current sales levels and perhaps short-term sales forecasts. A wealth-oriented business will spend more heavily on the capacity to meet its long-term sales estimates.

Q2:"A rupee of today is not equal to rupee of tomorrow". Explain.

Ans. The concept of time value is that the value of money received today is more than the value of the same amount received after a certain period of time. In simple terms, money received in the future is not as valuable as money received today. If you are given the choice of receiving Rs. 1,000 today or after one year, you will definitely opt to receive it today than after one year. This is because the value of current receipt of money is higher than the future receipt of the same money. This concept is referred to as time preference of money.

The reasons are as follows:

1. Present Needs are Considered as More Important:

People consider present needs as more important than their future needs. Purchase of clothes, television, car and luxurious articles for their present use feels more urgent than saving for tomorrow. Therefore, people consider the value of money today as more than its value as of tomorrow.

2. Investment Opportunities Available:

If you pay Rs10,000 to a person today, and if he invests it at 12% per annum, he would receive Rs11,200 (Rs10,000 plus Rs10,000 X 12/100) at the end of the year. Where as if he is to receive the same amount after one year, he would receive only Rs10,000. Sometimes, by investing in shares, one can even double the money in a short period. So, a person prefers to receive a certain sum of money today rather than receiving it after a certain period of time.

3. Uncertainty and Loss:

Future is uncertain. If you expect to receive a certain amount in future, there is always an uncertainty with regard to its receipt in future. The future is subject to risks. A person may incur loss due to not getting the expected amount in future. So, a person prefers to receive the money today.

There are two techniques for adjusting the time value of money:

A. Compounding technique or Future value technique, and

B. Discounting technique or Present value technique.

A. Compounding Technique or Future Value Technique:

The time preference of money encourages a person to receive the money at present instead of waiting for the future. But he may like to wait if he is duly compensated for the waiting time by way of ensuring more money in future. For example, a person being offered Rs1,000 today may wait for a year if he is ensured of Rs1,100 at the end of one year taking his time preference for money is 10% per annum.

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B. Discounting Technique or Present Value Technique:

Present value of the money is today's value of money to be received in future. It is the future of money discounted at a given rate of interest. In other words, present value shows what the value is today of some future sum of money.

Q3:Mr Shukla wants to invest in a co that has just given a current dividend of Rs 5 per share.Dividends are expected to grow at 10% for 5 yrs,at 8% for next 3 yrs and at 5% thereafter perpetually.Find out the intrinsic value of equity share if required rate is 10%.What is the value of share at end of 8th year?If actual market price is Rs 100,should Mr shukla buy this share?

Ans.Do=5

D1=Do(1+g)

=5(1+0.10) =5.5

Yr	Dividend	PVF@10%	PV of dividend
1	5.5	0.909	5
2	6.05(5.5*1.10)	0.826	5
3	6.65(6.05*1.10)	0.751	5
4	7.32	0.683	5
5	8.05	0.621	5
6	8.70(8.05*1.08)	0.564	4.9
7	9.39	0.513	4.8
8	10.14	0.467	4.74
		Total	**39.45**

D9=D8(1+0.05)

=10.14(1.05)=10.65

P8=D9/Ke-g

=10.65/0.10-0.05

212.94

Present value of P8=P8*PVF(10%,8yrs)

=212.94*0.467

=99.44

Value of share=39.45+99.44

=138.89

Therefore,**Value** of share at the **end of 8 years is 212.94**.

Mr shukla should **buy** this bond as its value(138.89) is higher than market price of 100.

Q4:Mr. Rawat bought a 12% bond with 10 years maturity having face value of 1000 at its issue price of Rs 1000 6 years ago.The bond is redeemable at par.Its market price now is Rs 1100.Should Mr Rawat sell this bond?Why?Assume Required rate is 13%.

Ans.Value of bond=Div*PVAF(r%,n)+RV*PVF(r%,n)

=120*PVAF(13%,4)+1000(PVF(13%,4)

=120*2.974+1000*0.613

=969.88

Mr Rawat should sell this bond because its value is less than the market price.

Q5:Mr X wants to purchase a house for Rs 50 Lakhs.He is planning to pay a down payment of 10Lakhs.Remaining he will borrow from a housing co at 10% pa interest.The loan is to be repaid in 15 equal instalments beginning 3 years from now.Find out the amount of annual instalment to repay this loan.

Ans.Loan amount=50Lakhs-10Lakhs=40 Lakhs @10%

FV=PV*PVF(r%,n)

=10,00,000*PVF(10%,2)

10,00,000*1.21

=48,40,000

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Now this 48,40,000 has to be paid in 15 equal installments.

PV=Annuity*PVAF(r%,n)

48,40,000=A*PVAF(10%,15)

4840000=A*7.606

4840000/7.606=Annuity

6,36,340=Annuity

Q6:A choice is to be made between 2 proposals which require equal investment of 50,000 each and are expected to generate cash inflows as:

Year	Project A	Project B
1	25000	10000
2	15000	12000
3	10000	18000
4	Nil	25000
5	12000	8000
6	6000	4000

Which project be chosen under:

a)Payback b)ARR

Ans. A)Payback

Year	Cash Flows of A	Cumulative of A	Cash Flows of B	Cumulative of B
1	25000	25000	10000	10000
2	15000	40000	12000	22000
3	10000	50000	18000	40000
4	Nil	50000	25000	65000
5	12000	62000	8000	73000
6	6000	68000	4000	77000

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Payback period=N Year+ Rem. Inflows/Cashflows in N+1 Year

Project A= 3 Years

Project B = 3+10000/25000

=3.40 Years

B)ARR

Depreciation=50000/6=8333

Year	Cashflows of A(PAT+Dep)	Dep	PAT of A	Cashflows of B	PAT of B
1	25000	8333	16667	10000	1667
2	15000	8333	6667	12000	3667
3	10000	8333	1667	18000	9667
4	Nil	8333	(8333)	25000	16667
5	12000	8333	3667	8000	(333)
6	6000	8333	(2333)	4000	(4333)
		Total	18002	Total	27002

ARR =Avg PAT/Avg Investment *100

Project A:

Avg PAT=18002/6=3000

Avg Investment=50000/2=25000

ARR=3000/25000 *100 =**12%**

Project B:

Avg PAT=27002/6=4500

Avg Investment=50000/2=25000

ARR=4500/25000 *100 =**18%**

ARR of Project B is higher , So B is preferred.

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Q7:The co has 2 options. Project A requires outlay of 12 lakhs and Project B 18 Lakhs. Both are estimated to generate inflows for 5 years: Project A 4 lakhs Per year & Project B 580000 per year.Req. rate is 10%.Which project should be selected on basis of

i)NPV ii)PI

Ans. i) NPV=PV of cash Inflows-PV of cash Outflow

Project A: 4,00,000*PVAF(10%,5)- 12,00,000

=4,00,000*3.791 – 12,00,000

=3,16,400

Project B: 5,80,000 *PVAF (10%,5) -18,00,000

=5,80,000* 3.791 – 18,00,000

=3,98,780

ii)PI= PV of cash Inflows/PV of cash Outflow

Project A=15,16,000/12,00,00

=1.26

Project B=21,98,780/18,00,000

=1.22

On basis of NPV ,B should be selected. On basis of PI,A should be selected.In case of conflict in ranks,results given by NPV is used because it is superior and more in line with wealth maximisation criteria. Hence, Project B should be selected.

Q8:**A co is considering the possibility of manufacturing a component which at present is being bought from outside.The manufacturing requires investment of 7,50,000 besides an additional investment of 50,000 in wirking capital.Life of machine is 10 years with salvage value of 50,000.The estimated savings(before tax)would be 1,80,000 per annum.Tax is 50%.Required rate is 10%.Depreciation is on straight line method.suggest whether this investment be made or not.**

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Ans. Initial Cas Outflow:

Cost=7,50,000

+Working capital=50,000

Total Cash otflow=8,00,000

Annual Cash Inflows:

PBDT	1,80,000
Less:Dep(750000-50000/10)	70,000
PBT	1,10,000
Less:Tax(50%)	55,000
PAT	55,000
Add:Dep	70,000
Cash flows	1,25,000

Terminal Flows:

Salvage Value=50,000

Recovery of working capital=50,000

Total terminal flows at end of 10th year=1,00,000+1,25,000

=2,25,000

NPV=PV of cash inflows- PV of cash Outlows

PV of cash Inflows=1,25,000*PVAF(10%,10)+1,00,000*PVF(10%,10)

1,25,000*6.145+1,00,000*0.386

=8,06,725

NPV=806725-800000

=6725

Since NPV is positive, investment should be made.

Q 9: XYZ Ltd has 2 mutually exclusive projects. The After tax cashflows are:

Year	Project A	Project B
0	100000	100000
1	32000	0
2	32000	0
3	32000	0
4	32000	0
5	32000	200000

Required rate is 11%.

a)What is project's NPV?

b)What is project's IRR?

c)What has caused the ranking conflict?

d)Which project should be accepted?Why?

Ans. a) NPV

Year	Cashflows of A	Cashflows of B	PVF @11%	PV of cashflows A	PV of cashflows B
1	32000	0	0.901	28832	0
2	32000	0	0.812	25984	0
3	32000	0	0.731	23392	0
4	32000	0	0.659	21088	0
5	32000	200000	0.593	18976	118600
			Total PV	118272	118600
			Less:Outflow	100000	100000
			NPV	**18272**	**18600**

b)IRR

Project A:

NPV @ 11%=18272

We need a negative NPV.So increase the rate.

NPV@19%=PV of inflows – PV of outflow

PV of inflows =32000*PVAF(19%,5)

32000*3.058

=97856

NPV=97856-100000

= -2144

So,IRR lies between 11% and 19 %.

IRR= Lower rate + Npv @ lower rate/Npv @ lower rate-Npv @higher rate *(I Higher – I Lower)

= 11% + 18272/18272-(-2144)*(19-11%)

=11 % +18272/20416 *8%

= 11%+0.89 *8 %

=11 % + 7.16%

=18.16%

Project B:

NPV @ 11%=18600

We need a negative NPV.So increase the rate.

NPV@15%=PV of inflows – PV of outflow

PV of inflows =200000*PVF(15%,5)

200000*0.497

=99400

NPV=99400-100000

= -600

So,IRR lies between 11% and 15 %.

IRR= Lower rate + Npv @ lower rate/Npv @ lower rate-Npv @higher rate *(I Higher – I Lower)

= 11% + 18600/18600-(-600)*(15-11%)

=11% + 18600/19200*4%

=11% + 0.968*4%

= 11% +3.875%

=14.875%

c)There is a conflict in ranking on the basis of NPV and IRR.As per NPV,B should be selected.As per IRR,A should be selected.This conflict is due to the different patterns of cash inflows. A has uniform cash inflows but B has inflows only in last year.

d)Project B should be selected because NPV method is more in line with the objective of wealth maximisation.

Q10: Why there is conflict between NPV and IRR ranking?

Ans. Both NPV and IRR methods of capital budgeting will give identical results while evaluating independent projects having conventional cash flows. Also in most of the other cases, these methods may provide similar results. However, there could be situations where NPV and IRR methods may give contradictory results While evaluating the same set of proposals. This can happen in case of mutually exclusive investment projects. In mutually exclusive projects a choice is to be made to select one project from two or more proposals under consideration. NPV and IRR methods may give contradictory results while evaluating mutually exclusive projects in the following situations:

1. When alternative proposals have different size or scale of investment.

2. When timings or pattern of benefits (cash flows) differ among alternative proposals.

3. When projects have unequal lives.

I. When alternative proposals have different size or scale of investment: When initial cash Outflow (scale or cost of investment) of two mutually exclusive projects differ then NPV and IRR methods may give conflicting ranking. This is because of the reason that NPV method measures the net benefits of a project in absolute term. Large size investment proposal involving higher cash outflows will definitely offer larger returns (cash inflows). This will increase the NPV of proposal involving higher cash outlays in absolute term. This may results in project with larger Initial cash outflow getting relatively higher ranking by NPV method. On the other hand, the IRR method measures the net benefits of a project in relative term i.e., in percentage and hence ignores the scale of investment.

2. When timings or pattern of benefits (cash inflows) differ among alternative proposals: NPV and IRR methods may provide different ranking of mutually exclusive projects even when they involve the same initial investment. The conflict in ranking may also be due to the different timings or pattern of benefits (cash inflows) of alternative proposals. It may be possible that one proposal may provide larger cash inflows during earlier period of its life while larger cash inflows from other alternative proposal may occur during later period of its life.

3. When Projects have Unequal Lives: A conflict in ranking of mutually exclusive proposals under Npv and IRR methods may also arise because of the proposals having unequal lives.

Conclusion: IRR method is concerned with the rate of return on investment rather than total yield on investment. Hence it decides the quality of investment and not the quantum of contribution made by the project towards the value of firm. On the other hand NPV method measures the benefits in absolute term. The NPV of a project shows its net contribution to the value of A project with higher NPV will contribute more towards the value of firm. NPV meth takes into account both quality and quantum of benefits made by a project. It is more in with the wealth maximization principle as compared to IRR method. Hence NPV method preferred over IRR whenever a conflict in ranking arises.

Q 11:SR Ltd has following balance sheetas on Mar31,2018.

Equity & Liabilities	Amt	Assets	Amt
Equity Capital(10 each)	40,00,000	Fixed assets	1,28,00,000
Reserves	8,00,000	Current Assets	32,00,000
15% Debt	80,00,000		
Current Liabilities	32,00,000		
	1,60,00,000		1,60,00,000

Fixed Cost per annum(excluding interest)=32,00,000

Variable cost ratio=70%

Total asset turnover ratio=2.5

Tax=30%

Cal:a)Operating Leverage b)Financial Leverage c)Combined Leverage d)EPS

Ans.Total asset turnover ratio=Sales/Total assets

2.5=Sales/1,60,00,000

Sales=4,00,00,000

Statement of PAT

Sales=4,00,00,000

Less:VC=2,80,00,000

Contribution=1,20,00,000

Less:FC=32,00,000

EBIT=88,00,000

Less:Interest(15%of 80Lakh)=12,00,000

EBT=76,00,000

Less:Tax(30%)=22,80,000

EAT=53,20,000

a)OL=Contribution/EBIT

=1,20,00,000/88,00,000

=1.36

b)FL=EBIT/EBT

=88,00,000/76,00,000

=1.16

c)CL=OL*FL

1.36*1.16

=1.58

d)EPS=EAT/No of equity shares

=53,20,000/4,00,000

=13.30

Q12: In considering the most desirable capital structure for a co,the following estimates of cost of debt capital (after tax)have been made at various levels of debt-equity mix:

Debt as %of total capital	Cost of Debt %	Cost of equity %
0	7	15
10	7	15
20	7	15.5
30	7.5	16

40	8	17
50	8.5	19
60	9.5	20

Find out WACC for different proportions of debt and tell the optimum capital structure.

Ans:

Debt %	Equity%	Kd%	Ke%	Ko%
0	100(1)	7	15	0*7 + 1*15=15%
10(0.10)	90(0.9)	7	15	0.1*7 + 0.9*15 =14.2%
20(0.2)	80(0.8)	7	15.5	13.8%
30(0.3)	70(0.7)	7.5	16	13.45%
40(0.4)	60(0.6)	8	17	13.4%
50(0.5)	50(0.50	8.5	19	13.75%
60(0.6)	40(0.4)	9.5	20	13.7%

Optimum capital structure is 40% debt and 60% equity in the capital structure.

Q 13: ABC has following capital structure:

Equity share (4lakh shares of 10 each)=40,00,000

12%Preference Share =4,00,000

10% Debt=6,00,000

The Equity shares are quoted at 110 and expected dividend is Rs 15 per share. Growth rate=8%.tax=50%

i)Calculate WACC

ii)The co wants to raise additional term loan of 5lakh at 10%.Calculate revised WACC assuming mkt price gone down to Rs105.

Ans.i)Since it is not mentioned about Book value or market value.We'll use book value.

Source	Book value	Wt	Cost	Wt*cost
Equity	40L	0.80	21.6%(WN1)	17.28%
Pref. Share	4L	0.08	12%(WN2)	0.96%
Debt	6L	0.12	5%(WN3)	0.60%
	50L	1.0	Ko=	18.84%

WN1: Ke=D1/Po + g

15/110 + 0.08

0.136+0.08 =0.216 or 21.6%

WN 2:Kp=PD/NP

12% of face value100=12/100

0.12 or 12%

WN3:Kd=I(1-t)/NP

10(1-0.5)/100

0.05 or 5%

ii)

Source	Book value	Wt	Cost	Wt*cost
Equity	40L	0.73	22.28%(WN1)	16.26%
Pref. Share	4L	0.07	12%	0.84%
Debt	6L	0.11	5%	0.55%
10% Loan	5L	0.09	5%(WN2)	0.45%
	55L	1.0	Ko=	18.10%

WN1: Ke=D1/Po + g

15/105 + 0.08

0.142+0.08 =0.2228 or 22.8%

WN2: 10(1-0.5)/100

0.05 or 5%

Q 14:

Source	Amount	Specific Cost
Equity Share Capital(4,00,000 eq shares of 10 each)	40,00,000	11%
Pref. Share capital(1,00,000 shares of 10 each)	10,00,000	8%
10%Debt of 1000 each	30,00,000	5%
Retained Earnings	20,00,000	11%

Presently,debenture are being traded at 92%.Preference shares at par and equity shares at Rs 14 per share.Find out WACC based on book value weights and market value.

Ans. WACC based on book value weights

Source	Book Value	Wt	Cost	Wt*cost
Eq Share	40L	0.4	11%	4.4%
Pref Share	10L	0.1	8%	0.8%
Debt	30L	0.3	5%	1.5%
Retained earnings	20L	0.2	11%	2.2%
	1 Cr	1.0	Ko=	8.9%

WACC Based on Market value weights

Source	Mkt Value	Wt	Cost	Wt*cost
Debt	27,60,000	0.2949	5%	1.47%
Pref Shares	10,00,000	0.1068	8%	0.85%
Equity	37,33,333	0.3989	11%	4.387%
Retained	18,66,667	0.1994	11%	2.193%

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Earnings				
	93,60,000		Ko=	8.9%

WN=Equity capital =4Lakh shares*14= 56,00,000. Divide 56lakh in 2:1 ratio (their book value wt)

Here, the Ko is same in both cases.however,it may differ also.

Q15: Explain the NI and NOI approach of capital structure?

Ans. Net income approach and net operating income approach were proposed by David Durand.

According to NI approach, there exists positive relationship between capital structure and valuation of firm and change in the pattern of capitalisation brings about corresponding change in the overall cost of capital and total value of the firm.

Thus, with an increase in the ratio of debt to equity overall cost of capital will decline and market price of equity stock as well as value of the firm will rise. The converse will hold true if ratio of debt to equity tends to decline.

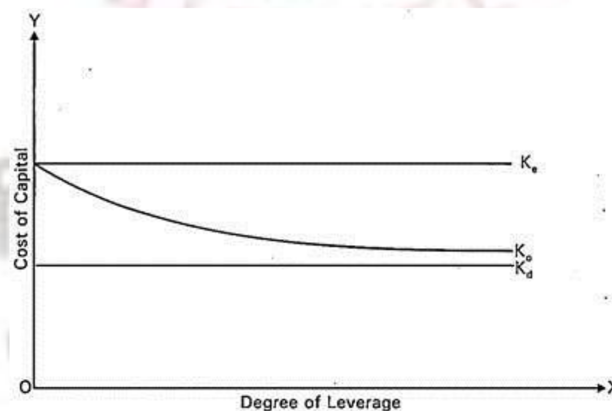

Fig. The effect of leverage on the cost of capital under NI Approach.

This approach is based on three following assumptions:

(1) There are no taxes;

(2) Cost of debt is less than cost of equity;

(3) The use of debt does not change the risk perception of investors. This implies that there will be no change in cost of debt and cost of equity even if degree of financial leverages changes.

On the basis of the above assumptions, it has been held in the NI approach that increased use of debt will magnify the shareholders' earnings (because cost of debt and cost of equity will remain constant) and thereby result in rise in share values of equity and so also value of the firm.

Thus, a firm can achieve optimal capital structure by making judicious use of debt and equity and attempt to maximise the market price of its stock.

According to Net Operating Income Approach which is just opposite to NI approach, the overall cost of capital and value of firm are independent of capital structure decision and change in degree of financial leverage does not bring about any change in value of firm and cost of capital. The market value of the firm is determined by the following formula:

V=EBIT-Interest/Ko

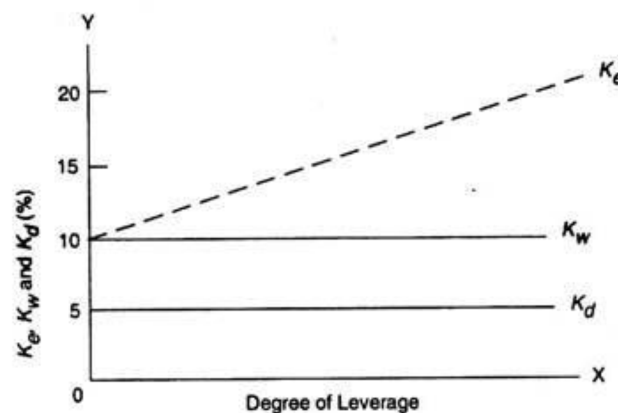

Fig. 2.2 : Behaviours of K_e, K_w and K_d under Net Operating Income Approach

The crucial assumptions of the NOI approach are:

(1) The firm is evaluated as a whole by the market. Accordingly, overall capitalisation rate is used to calculate the value of the firm. The split of capitalisation between debt and equity is not significant.

(2) Overall capitalisation rate remains constant regardless of any change in degree of financial leverage.

(3) Use of debt as cheaper source of funds would increase the financial risk to shareholders who demand higher cost on their funds to compensate for the additional risk. Thus, the benefits of lower cost of debt are offset by the higher cost of equity.

(4) The cost of debt would stay constant.

(5) The firm does not pay income taxes.

Thus, under the NOI approach the total value of the firm as stated above is determined by dividing the net operating income (EBIT) by the overall capitalisation rate and market value of equity (Ve) can be found out by subtracting the market value of debt (Vd) from the overall value of the firm (V). In other words. Ve = V – Vd

Q 16: Explain the factors affecting working capital.

Ans. Main factors affecting the working capital are as follows:

(1) Nature of Business:

The requirement of working capital depends on the nature of business. The nature of business is usually of two types: Manufacturing Business and Trading Business. In the case of manufacturing business it takes a lot of time in converting raw material into finished goods. Therefore, capital remains invested for a long time in raw material, semi-finished goods and the stocking of the finished goods.

Consequently, more working capital is required. On the contrary, in case of trading business the goods are sold immediately after purchasing or sometimes the sale is affected even before the purchase itself. Therefore, very little working capital is required. Moreover, in case of service businesses, the working capital is almost nil since there is nothing in stock.

(2) Scale of Operations:

There is a direct link between the working capital and the scale of operations. In other words, more working capital is required in case of big organisations while less working capital is needed in case of small organisations.

(3) Business Cycle:

The need for the working capital is affected by various stages of the business cycle. During the boom period, the demand of a product increases and sales also increase. Therefore, more working capital is needed. On the contrary, during the period of depression, the demand declines and it affects both the production and sales of goods. Therefore, in such a situation less working capital is required.

(4) Seasonal Factors:

Some goods are demanded throughout the year while others have seasonal demand. Goods which have uniform demand the whole year their production and sale are continuous. Consequently, such enterprises need little working capital.

On the other hand, some goods have seasonal demand but the same are produced almost the whole year so that their supply is available readily when demanded.

Such enterprises have to maintain large stocks of raw material and finished products and so they need large amount of working capital for this purpose. Woolen mills are a good example of it.

(5) Production Cycle:

Production cycle means the time involved in converting raw material into finished product. The longer this period, the more will be the time for which the capital remains blocked in raw material and semi-manufactured products.

Thus, more working capital will be needed. On the contrary, where period of production cycle is little, less working capital will be needed.

(6) Credit Allowed:

Those enterprises which sell goods on cash payment basis need little working capital but those who provide credit facilities to the customers need more working capital.

(7) Credit Availed:

If raw material and other inputs are easily available on credit, less working capital is needed. On the contrary, if these things are not available on credit then to make cash payment quickly large amount of working capital will be needed.

(8) Operating Efficiency:

Operating efficiency means efficiently completing the various business operations. Operating efficiency of every organisation happens to be different.

Some such examples are: (i) converting raw material into finished goods at the earliest, (ii) selling the finished goods quickly, and (iii) quickly getting payments from the debtors. A company which has a better operating efficiency has to invest less in stock and the debtors.

Therefore, it requires less working capital, while the case is different in respect of companies with less operating efficiency.

(9) Availability of Raw Material:

Availability of raw material also influences the amount of working capital. If the enterprise makes use of such raw material which is available easily throughout the year, then less working capital will be required, because there will be no need to stock it in large quantity.

On the contrary, if the enterprise makes use of such raw material which is available only in some particular months of the year whereas for continuous production it is needed all the year round, then large quantity of it will be stocked. Under the circumstances, more working capital will be required.

(10) Growth Prospects:

Growth means the development of the scale of business operations (production, sales, etc.). The organisations which have sufficient possibilities of growth require more working capital, while the case is different in respect of companies with less growth prospects.

(11) Level of Competition:

High level of competition increases the need for more working capital. In order to face competition, more stock is required for quick delivery and credit facility for a long period has to be made available.

(12) Inflation:

Inflation means rise in prices. In such a situation more capital is required than before in order to maintain the previous scale of production and sales. Therefore, with the increasing rate of inflation, there is a corresponding increase in the working capital.

Q 17: What are the motives of holding inventory? What are the benefits and costs of holding inventory?

Ans. Major motives for holding inventories are:

1.The transaction motive propels a business to maintain inventories so that there are no bottlenecks in production and on sales. It is natural for a business to plan inventory investment commensurate with the level of transactions in the business. The business seeks to ensure that on the shop floor, production does not get stalled for want of materials etc., and sales do not suffer on account of non-availability of finished goods.

2.The precautionary motive is also at work. Inventories are held so that there is a cushion against unpredictable events.For instance, there may be a sudden and unforeseen spirit in demand for finished goods or there may occur a sudden and unforeseen slump or delay in supply of raw materials or other components needed for production. An enterprise would surely like to have some cushion to tide over such situations.

3.Speculative Motive:Inventories may also be held so that advantage can be taken of price fluctuations. For instance, if the price of a particular raw material is expected to go up rather

steeply, an enterprise may decide to hold a larger than necessary stock of this item (acquire prior to escalation).

Benefits of Holding Inventory in a firm

Following are the benefits of holding inventory in the firm:

1. Holding Inventory avoids loss of sales

In case a firm maintains adequate inventory, it can execute the customers' orders without any delay and thus avoid any possibility of losing the patronage of customers and hence sales.

2. Holding Inventory gains quantity discount

If the firm places a large order of certain materials, the suppliers of the materials will give generous quantity discounts by reducing the price. This quantity discount will reduce the cost of goods of the firm and increase profits earned on sale.

3. Holding Inventory reduces order cost

By ordering in large numbers, a firm can reduce the cost it incurs. Some of the cost involved when making an order is forms that must be completed, approvals needed to be obtained and the goods arrived must be accepted, inspected and counted. Then an invoice must be issued and payment must be made.

The cost of receiving materials may vary according to the number of orders made. By making bulk orders, the number of orders will reduce and minimize the cost involved.

4. Achieve efficient production runs by holding inventory

Start up cost is incurred when a firm sets up its labour/man power and machines to produce goods. The cost will then be absorbed when production begins. The cost will come down when the process of production runs longer.

When the firm frequently sets up its production line, it will increase its startup cost. Holding an inventory to make sure the production line will never run out of raw materials will ensure longer run in production line, hence lower the startup cost.

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5. Holding Inventory reduces risk of production shortages

An inventory is needed to store large amount of raw materials and unprocessed components. If one single component run out of stock, the-entire production line could be halted.

To avoid the risk of shortage of essential components during a big production process, the firm should maintain inventory management. This will prevent the shortage of vital raw materials and components needed to produce goods. The system will manage and notify any shortage before it is materialized.

The inventory management systems are suitable to maintaining large quantities of stocks and always keep firm's inventory on check.

Cost of holding inventory in a firm

The various costs of maintaining higher levels of inventory have been highlighted as follows:

1. Purchase cost

A firm has to pay high price for managing inventory. Inventory management has to take into account of the price paid to the suppliers and the expense of transport for bringing the material to stores, insurance and transportation cost.

2. Ordering cost

Cost of ordering is one another factor that a firm has to consider in Inventory management. Ordering costs includes cost of requisitioning, preparation of purchase order, transportation of inventory, receiving the supplies at the warehouse etc.

3. Carrying cost

Carrying cost includes the cost of storing the inventory in warehouse, handling expenses, insurance and rent paid for managing the inventory, opportunity cost locked up in stocks etc. Opportunity cost here refers to the alternative use of funds that the firm would have used to invest in stocks.

4. Stock out (shortage) cost

Stocks results in higher costs when they fall short of demand. Shortage of stocks also results in higher cost, dissatisfaction among customers, decrease in sales and increase of loss to firm.

Measurement of shortage cost is relatively difficult because of its intangible nature. In practice, the lost contribution resulting from failure to meet demand provides a reasonable approximation. In cases where stock out does not result in loss in business, additional cost for crash procurement etc. may be considered as shortage cost.

Q 18:The following are the details relating to a manufacturer:

Elements of cost	Amount per unit(Rs)
Raw Materials	8
Direct Labour	3
Overheads	6
Total Cost	**17**
Selling Price	20

Level of activity (52 weeks)=104,000 units of output

Raw materials in stock: =On an average 4 Weeks

Processing time: =On an average 2 Weeks

Finished goods in store: =On an average 4 Weeks

Credit period:

(a) Customers: =On an average 8 Weeks

(ii) Suppliers: =On an average 4 Weeks

Lag in payment:

(a) Wages =On an average 1 Weeks

(b) Overheads expenses=On an average 2 Weeks

75% of the output is sold on credit Oasis. Cash in hand and at bank is expected to be 5,000. You are required to prepare a statement of working capital requirements, assuming that all material is introduced in the starting of the process, wages and overheads accure evenly and are completely introduced for half the processing time, i.e. one week.

Ans. **Statement of Determinaton of Working Capital requirement**

A)Current Assets:

i)Cash in hand = 5000

ii)Raw Material =64000

(104000*8*4/52)

iii)WIP =50000

(104000*8*2/52)+(104000*9*2*50%/52)

iv)Finished Goods =136000

(104000*17*4/52)

v)Debtors =204000

(104000*17*8*75%/52)

Investments in current assets(A)=459000

B)Current Liabilities

i)Creditors =64000

(104000*8*4/52)

ii)Wages =6000

(104000*3*1/52)

iii)Overheads =24000

(104000*6*2/52)

Total Current Liabilities(B)=94000

C) Net working Capital(A-B)=365000

Q 19: Z Ltd. has 10 lakh equity shares outstanding at the beginning of the year 2018. The current market price of the share is 150 each. The company recommended 8 per share as dividend. The capitalization rate is 12%.

(i)Based on MM approach, calculate the market price of the share of the company when the recommended dividend is (a) declared and (b) not declared.

(ii) How many new shares are to be issued by the company at the end of the accounting year on the assumption that the net income for the year is 2 crores and the investment budget is 4 crore when dividends are distributed? What will be the market value of shares at the end of accounting year.

Ans: i)**Calculation of market price of the share when dividend is declared (MM Model):**

Market price of the share (P0)= D1+P1 / (1+ke)

150=8+P1/(1+0.12)

P1=**160**

Calculation of market price of the share when dividend is not declared (MM Model):

Market price of the share (P0)= D1+P1 / (1+ke)

150=0+P1/(1+0.12)

P1=**168**

ii) **Amount Required for New Financing when div is declared :I-(E-nD1)**

=4,00,00,000-(2,00,00,000-80,00,000)

=4,00,00,000-1,20,00,000

=2,80,00,000

No of new shares to be issued=2,80,00,000/160

=1,75,000 shares

Market value of the shares at the end of the accounting year when div is declared :

Number of total shares (old + new)=, 10,00,000 + 1,75,000 = 11,75,000

Value of the firm (V) = 11,75,000 x 16

= Rs. 18,80,00,000

Q 20: Following are the details of 3 Companies:

X ltd	Y ltd	Z ltd
r=20%	r=15%	r=10%
Ke=15%	Ke=15%	Ke=15%
E=8	E=8	E=8

Calculate value of equity share as per Walter's Model when D/P ratio is a)40% b) 70% c)90%

Ans. Value of equity share as per Walter's Model=D/Ke + (r/Ke)*(E-D)/Ke

	X ltd(Growth Firm)r>Ke	Yltd(Normal Firm)r=Ke	Z ltd(Declining Firm)r<Ke
	r=20%	r=15%	r=10%
	Ke=15%	Ke=15%	Ke=15%
	E=8	E=8	E=8
D/P ratio	**Market Price of share**	**Market Price of share**	**Market Price of share**
40% D=3.2	P=3.2+(0.2/0.15)*(8-3.2)/0.15 **P=Rs. 64**	P=3.2+(0.15/0.15)*(8-3.2)/0.15 **P=Rs. 53.33**	P=3.2+(0.10/0.15)*(8-3.2)/0.15 **P=Rs. 42.67**

70% D=5.6	P=5.6+(0.2/0.15)*(8-5.6)/0.15 **P=Rs.58.67**	P=5.6+(0.15/0.15)*(8-5.6)/0.15 **P=Rs.53.33**	P=5.6+(0.10/0.15)*(8-5.6)/0.15 **P=Rs.48**
90% D=7.2	P=7.2+(0.2/0.15)*(8-7.2)/0.15 **P=Rs.55.11**	P=7.2+(0.15/0.15)*(8-7.2)/0.15 **P=Rs.53.33**	P=7.2+(0.10/0.15)*(8-7.2)/0.15 **P=Rs.51.55**

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X Ltd. is a "growth company", Where r > ke. Therefore, to maximise the market price, the comp, needs to retain all its earnings, otherwise its price will decline.

Y Ltd. is a normal firm, where r = k. In this case D/P ratio does not have any impact on the value of firm and it's share price.

Z Ltd. is a "declining company". The rate of return is less than the cost of capital i.e., r < ke. Therefore, to maximise the market price of the share, the company should distribute all its earnings as dividend. The value of the share is increasing when we increase the payout ratio from 40% to 90%.

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Auditing (204)

1) What is auditing? Write the importance of auditing.

Audit is the examination or inspection of various books of accounts by an auditor followed by physical checking of inventory to make sure that all departments are following documented system of recording transactions. It is done to ascertain the accuracy of financial statements provided by the organization.

Importance of Auditing

i. It helps in protecting the interest of persons who are not directly associated with enterprise like partners, shareholders, creditors, debtors etc.

ii. It helps at the time of taking government grants.

iii. It acts as a moral check on employees

iv. Helps to settle trade disputes

v. Helps to settle accounts at the time of retirement, or death of partners. And also at the time of liquidation of any company

vi. Helps to settle tax liability, helps for taking refunds of tax etc.

2) **Explain the different types of Auditing**.

i. Internal Audit: Internal Audit take place within your business. As the business owner, you initiate the audit while someone else in your business conducts it. Businesses that have shareholders or board members may use internal audits as a way to update them on their business's finances. And, internal audits are a good way to check in on financial goals.

ii. External Audit: An external audit is conducted by a third party, such as an accountant, the IRS, or a tax agency. The external auditor has no connection to your business (e.g., not an employee). And, external auditors must follow generally accepted auditing standards (GAAS). Like internal audits, the main objective of an external audit is to determine the accuracy of accounting records. Investors and lenders typically require external audits to ensure the business's financial information and data is accurate

iii. Financial Audit: A financial audit is one of the most common types of audit. Most types of financial audits are external. During a financial audit, the auditor analyzes the fairness and accuracy of a business's financial statements.

iv. Operational Audit: Operational audits are similar to internal audits. An operational audit analyzes your company's goals, planning processes, procedures, and operation results. Generally, operational audits are conducted internally. However, an operational audit can be external. The goal of an operational audit is to fully evaluate your business's operations and determine ways to improve them.

v. Compliance Audit: A compliance audit examines your business's policies and procedures to see if they comply with internal or external standards. Compliance audits can help determine whether or not your business is compliant with paying workers' compensation or shareholder distributions. And, they can help determine if your business is compliant with IRS regulations.

3) What is Government Audit? Write its Characteristics .

The government audit is the means through which public management is verified and controlled. Their activity and economy are analyzed, which work around efficiency and transparency, always acting in accordance with the relevant legal provisions applicable to the specific case.

Characteristics

i. Performs evaluations, studies, reviews and investigations of public activity.

ii. It is an objective audit, conducted and directed by an impartial auditor.

iii. Evaluates the operations that have been carried out (it is an ex post analysis). Likewise, it compares with the standards of performance, quality or with generally accepted provisions and principles.

iv. The government audit concludes with a verbal and other written report.

4) What is Statutory Auditing? Write its importance.

Statutory audit, also known as financial audit, is one of the main types of audit which is to be done as per the statutes applicable to the entity and its primary purpose is to gather all relevant information so that the auditor can give his opinion on the true and fair view of the company's financial position as on the balance sheet date.

A **statutory audit** is an examination of an entity's financial records in accordance with the requirements of a government agency. A number of organizations must undergo **statutory audits**

Importance of Statutory Audit

i. Applicability of audit to any organization doesn't state that it is an inherent sign of doing wrong acts. Rather it is the way that helps in preventing such activities like misappropriation of funds by ensuring that data are being continuously examined which may be in the scope of other types of audits.

ii. A statutory auditor can ask for the company's any financial books, records or information in relation to that. It is his right and he cannot be denied by the management for the same.

iii. After doing the entire verification and gathering information auditor is supposed to conclude by writing is an audit report based on the various evidence and information on the true and fair view of the financial statements provided to him.

Advantages of Statutory Audit

i. It increases the authenticity and credibility of financial statements as the financial statements of the company are being verified by an independent party i.e., the auditor.

ii. It confirms that management has taken due care while delivering their responsibilities.

iii. It also states regarding the compliance with the non-statutory requirements like corporate governance etc.

Disadvantages of Statutory Audit

i. The cost associated with an audit can be very high. But if any audit firm is already engaged for looking after the day to day work including accounts preparation etc then it will charge relatively very less amount to conduct the audit as compared with the firm which is not engaged for doing the same.
ii. The financial statements include judgemental as well as subjective matter. Judgemental issues may vary with persons. Sometimes personal business is also included.
iii. There are many areas in which auditors are left with no other option than to take representation from management. This is a danger if management itself is involved in frauds as in that case they will give the manipulated representation.

5) Briefly describe the errors of auditing.

i. Error of Principle: Where the recording of the items of transactions are not done according to the Principle of Accounting, it is known to be an error of principle. These errors are not traceable from trail balance; these errors may be committed unintentionally or for the purpose of manipulation of accounts to inflate or deflate profit.
Examples: Providing excessive or inadequate depreciation, Where the provision for outstanding expenses or prepaid expenses is wrong
ii. Errors of Omission: There may be two types of omission of entry while recording the transactions in the books of accounts;Where transaction is totally omitted from the books of accounts, it will not affect the trial balance and the detection of such error is difficult. Following are the examples of such errors; Omission of purchase or sale from the purchase day book or the sale day book respectively. Omission of outstanding or unpaid expenses
iii. Errors of Duplication: The detection of error of duplication is very difficult. It might be detected with proper and minute observation of accounts; for example, purchase may be recorded twice with original and duplicate copy of purchase invoice, etc. It is also possible to post the total of any ledger account twice in the trial balance.

iv. Errors of Commission: Error of commission occurs the entry made in the books of the original entry or the ledger account is wrong. Examples − Purchase of goods for Rs. 25,000 wrongly entered as Rs. 2,500 in purchase book, Credit purchase from AB Company wrongly credited to BA Company's account.

v. Compensating Errors: When the effect of an error compensates with another error; it is known to be a compensating error. Such errors do not affect the trial balance; for example, total of a debit account as well as credit account totaled short by Rs. 7,500. This type of error will compensate both.

6) What is Audit Evidence? What are the different types of audit evidence?

The Audit Evidence is the information that the auditor of the company collects from the company as the part of its auditing work for reviewing and verifying company's different financial transactions, internal control in place and other things required for the purpose expressing his opinion on the true and fair view of the financial statements of the company during the period under consideration.

Types of Audit Evidence

i. Physical Examination: Physical examination is where the audit actually inspects the asset physically and counts them whenever required. This evidence is collected wherever possible on the basis of the nature of the audit.

ii. Documentation: Under the documentation written documents are collected by the auditor like purchase invoices, sales invoices, policy document of company etc which can be internal or external. This evidence is considered to be more reliable as there is some proof in writing on the basis of which the auditor is forming his opinion.

iii. Analytical Procedure: Auditor uses the analytical procedure in order to derive the required information or to know the correctness of different information. This includes the usage of the comparisons, calculations and the relationships between the various types of data by the audit of the company under consideration

iv. Confirmation: Many times the auditors require the balances confirmations from the third party in order to ensure that the balances reflected in the financial statements are not manipulated by the clients. This receipt of the written response directly from the third party in order to verify the accuracy and authenticity of various different information required by the auditor.

v. Observation: Observation is where the auditor of the company observes the various activities of the clients and their employees before making any conclusion.

vi. Inquiries: Inquiries are the different questions asked by the auditor of the company to the management or the concerned employee of the company in the areas where the auditor is having the doubt. The answers to these questions obtained by the auditor.

7) What is Vouching? Write importance of Vouching.

The act of examining documentary evidence in order to ascertain the accuracy of entries in the account books is called "Vouching". Vouching is a technical term which refers to the inspection by the auditor of documentary evidence supporting and substantiating a transaction. Simply stated, vouching means a careful examination of all original evidence i.e invoices, statements, receipts, correspondence, minutes and contracts etc. with a view to ascertain the accuracy of the entries in the books of accounts and also to find out, as far as possible, that no entries have been omitted in the books of accounts. Therefore, vouching is the act of testing the truth of entries appearing in the primary books of accounts. It is initial for auditing.

Importance of Vouching:

i. **Vouching Is The Backbone Of Auditing** :Main aim of auditing is to detect errors and frauds for proving the true and fairness of results presented by income statement and balance sheet. Vouching is only the way of detecting all sorts of errors and planned frauds. So, it is the backbone of auditing.

ii. **Vouching Is The Essence Of Auditing:** Auditing not only checks the accuracy of books of accounts but also checks whether the transactions are related to business or not. All the transactions are performed after the prior approval of concerned authority or not, transactions are real or not because an accountant may include fictitious transactions to commit frauds. All these facts can be found with the help of vouching. So, vouching is essential for auditing.

iii. **Vouching Is Important To See Whether Evidences Are Correct Or Not:** An auditor checks the books of accounts to detect errors and frauds. Frauds may be committed presenting duplicate vouchers. All the small and big amounts of frauds can be detected with the help of vouching. So, all the evidential documents and records are to be checked carefully and in detail by an auditor which is the scope of vouching.

Principles or Techniques of Vouching

i. **Arranged Vouchers:** First of all auditor should check all the vouchers provided by the client are properly arranged. These are in the same order as the entries are made in the books

ii. **Checking Of Date:** The auditor should compare the date of the voucher with he date recorded in the cash book.

iii. **Compare The Words And Figures :** The auditor should satisfy himself amount written numbered consecutively. All the vouchers should be properly filed. On the vouchers, its figures and words are same or not

iv. **Checking Of Authority:** The auditor should examine that all the vouchers are passed by the authorized officer. If the voucher is passed by unauthorized person it will not be correct.

v. **Cutting Or Change:** If there is any cutting or change on the receipts and vouchers figures it should be signed by the authorized officer. The auditor should satisfy himself by inquiring about it.

vi. **Transaction Must Relate To Business:** The auditor should carefully examine that the entries must relate to the business.

vii. **Checking Of Account Head:** Auditor must be satisfied about the head of account on which cash is deposited and drawn. He should examine the documentary evidence in this regard.

8) Explain the rights and duties of Auditors.

Rights Of Auditor

i. **Right of Access to Books of Accounts:** Every auditor of a Company has a right of access at all times to the books of accounts and vouchers of the company whether kept at the head office of the company or elsewhere. Thus, the auditor may consult all the books, vouchers and documents whenever he so likes. This is his statutory right. He may pay a surprise visit without informing the Directors in advance but in practice, the auditors inform the Directors before they pay their visits.

ii. **Right to obtain Information and Explanations:** He has a right to obtain from the Directors and officers of the company any information and explanation as he thinks necessary for the performance of his duties as an auditor. This is another important power in the hands of the auditor. He will, however, decide as to which information or explanations he thinks necessary to obtain. It the Directors or officers of the company refuse to supply some information on the ground that in their opinion it is not necessary to furnish it, he has a right to mention the fact in his report.

iii. **Right to Correct any Wrong Statement: T**he auditor is required to make a report to the members of the company on the accounts examined by him and on every Balance Sheet and

Profit and Loss Account and on every other document declared by this Act to be part of or annexed to the Balance Sheet or Profit and Loss Account which are laid before the company in General Meeting during his tenure of office. The Directors have a duty to prepare them and present them to the auditor.

iv. **Right to visit Branches:** According to section 228, if a company has a branch office, the accounts of the office shall be audited by the company's auditor appointed under section 224 or by a person qualified for appointment as auditor of the company under section 226. Where the Branch Accounts are not audited by a duly qualified auditor, the auditor has a right of access at all time to the books, accounts and vouchers of the company and thus, may visit the branch, if he deems it necessary.

v. **Right to receive Notice and other Communications relating to General Meeting and attend them:** Under section 231 an auditor of a company has a right to receive notices and other communications relating to General Meeting in the same way as a member of the company. He is also entitled to attend any General Meeting which he attends or any part of the business which concerns him as an auditor.

Duties of Auditor

i. **To Enquire:** The duties of an auditor have been extended by the insertion of sub-section (1A) of section 227 under the Companies (Amendment) Act 1965 which is reproduced below: With prejudice to the provision of sub-section (1), the auditor shall enquire:

a) Whether loans and advances made by a company on the basis of security have been properly secured and whether the terms on which they have been made are not prejudicial to the interests of the company or its members.

b) Whether transactions of the company which are represented merely by book entries are not prejudicial to the interests of the company.

c) Whether loans and advances made by the company have been shown as deposits.

d) Whether personal expenses have been charged to revenue account.

ii. The auditor shall report to the shareholders on the accounts examined by him. The report so submitted shall contain the following:

a) Whether, in his opinion, the Profit and Loss Account referred to in his report exhibits a true and fair view of the profit or loss.

b) Whether, in his opinion, the Balance Sheet referred to in his report is properly drawn up so as to exhibit a true and fair view of the state of affairs of the business according to the best of the information and explanations given to him as shown by the books of accounts.

c) Whether he has obtained all the information and explanations which to the best of his knowledge and belief were necessary for the purpose of his audit.

d) Whether the company's Balance Sheet and Profit and Loss Account dealt with by the report are in agreement with the books of accounts and returns.

iii. Under section 229, it is the duty of an auditor to sign the report prepared by him. Only a partner in the firm practicing in India may sign the Auditor's Report or authenticate any other document.

iv. Under section 56(1), the Prospectus issued by an existing company shall contain a report from the auditor of the company regarding:

a) Profits and losses;

b) Assets and liabilities of the company and its subsidiaries; and

c) Rates of dividends paid by the company for each of the five it is auditor's duty to submit his report.

v. According to section 165 (4), the auditors of the company shall, in so far as the statutory report relates to the shares allotted by the company, the cash received in respect of shares and the receipts and payments of the company, certify it as correct after the same has been certified as correct by not less than two Directors of the company, one of whom shall be a Managing Director.

vi. When a company goes into its voluntary winding up and a declaration of solvency is made by its Directors under section 488 (I), such a declaration is to be accompanied by the report of the auditors of the company under section 488(2). It is the duty of the auditors to make such a report.

9) What are the elements of auditor's reports?

i. ***Report Title:*** This has the basic components of an audit report: date (which is usually the last day of when an audit is held) and the addressee (which is stockholders or board of directors of the audited company).

ii. ***Introductory Paragraph:*** This part is where it is stated that an audit is carried out in the company stated above. It is also stated here the financial records that were used in the audit that is conducted. This is also where it is stated that it is a company's responsibility to ensure that their financial statements are correct and fair in accordance with the internationally accepted accounting standards.

iii. ***Scope Paragraph:*** This is a paragraph that basically expresses that rules and methods that were followed by an auditor in the audit were set by the Generally Accepted Audit Standards. These were fundamentally for the intention of presenting companies a reasonable assurance that whatever is showed in their financial statements are correct.

iv. ***Executive Summary:*** This segment discusses the findings of an auditor. An auditor writes here the matters that are important in their view for the management of a company to know. This is merely the summary of what has been found by an auditor, not their opinion about their findings. This is simply comprised of what they have assessed in their timeframe in auditing.

v. ***Opinion Paragraph:*** This is where an auditor's opinion is stated, whether they believe that a company's financial statements are correct and fair and follow the accounting standards or not. They also state the methods used in how they have arrived at such a conclusion.

vi. ***Auditor's Name:*** An auditor's name is then identified after all the information above, ensuring that it is clear that the author of the audit report is the auditor who conducted the audit himself. In the event that an auditor works in a third-party organization, the name of their firm needs to be included as well.

vii. ***Auditor's Signature:*** An auditor's signature signifies that an auditor who writes an audit report acknowledges the responsibility that they are held accountable for with regard to the results of the audit they have conducted.

10) What are the different types of Audit reports?

i. Unqualified Audit Report(Clean Audit Report): Unqualified Audit Report issued by the auditor to financial statements when auditors found no material misstatements after their testing. This report contains an unqualified opinion from an independent auditor. The report showed that the entity financial statements are prepared and present true and fair and complying with the accounting framework being used. This is a good sign for all kinds of stakeholders that willing to uses the financial statements. You might find whether the audit report is clean or not in the opinion paragraph. Unqualified Audit report not only apparently shown to the shareholders that financial statements are a true and fair presentation, and free

from all material misstatements. But also imply that the management team has high integrity to the shareholders. However, before putting your truth on the audit report, make sure that the auditor who issued the reports are from independence audit firms. Big four audit firms are the firm that most of the shareholders put their truth on.

ii. Qualified Audit Report: Qualified Audit Report is the report that issue by auditors to the financial statements that found material misstatements on them. But those material misstatements are not pervasive.For example, the opening balance of the entity contains a large number of inventories that could not verify. In this case, the auditor issue a qualified audit opinion on the qualified audit report. However, if the auditor thinks that the misstatement is pervasive, they will issue the adverse opinion in their report. This kind of report, only inventories that mention are matters. Others information in the financial statements is true and fair. The term of seriousness, the qualified audit report is more serious than unqualified due to material misstatements on the mention items or accounts in the financial statements.

11) Briefly describe the verification and valuation of Assets and liability

Verification of Asset: Verification of assets means substantiation of the actual existence of assets under the legal ownership and/or possession of the clients on the date of balance sheet. This is as important as valuation of assets, if not more; because the balance sheet should include only such items as are genuinely owned by the clients and an auditor should never pass an asset unless he is fully satisfied about the bona fide ownership of the same by his clients.

Verification Of liability: Generally liabilities are valued at face value. Verification of liabilities is as important as that of assets because any under-statement or omission thereof would vitally affect the result of business and also the financial state of affairs. Usually liabilities are small in number and more or less fixed in nature and, as such, they offer less difficulties to an auditor than assets. An auditor should see that all liabilities or obligations genuinely outstanding on the closing date even those omitted accidentally or deliberately are duly accounted for, that all credit balances shown by books are real liabilities and that there is no manipulation in regard thereto.

Valuation of Asset: Valuation means finding out correct value of the assets on a particular date. It is an act of determining the value of assets and critical examination of these values on the basis of normally accepted accounting standard. Valuation of assets is to be made by the

authorized officer and the duty of auditor is to see whether they have been properly valued or not. For ensuring the proper valuation, auditor should obtain the certificates of professionals, approved values and other competent persons. Valuation is the primary duty of company officials. Auditor can rely upon the valuation of concerned officer but it must be clearly stated in the report because an auditor is not a technical person. Without valuation, verification of assets is not possible. If the valuation of assets is not correct, both the financial statements such as Balance Sheet and Profit and Loss Account cannot be correct. Hence, the auditor must take utmost care while valuing the assets to show true and fair view of the state of affairs of the financial position of the concern.

12) Describe the vouching of Credit side of cash book.

Vouching Of cash payments(credit side of csh book). All the payment made to creditors, expenses incurred un cash and all other payments done appear on the credit side of cash book and the auditor is required to vouch cash payments because chances of cash misappropriation are very high.

i. Cash Purchases: While vouching cash purchases, the auditor should see that the goods for which payment has A been made are really received in the business. For this, he should :

a) verify entries in the Goods Inward book ;

b) compare entries in the @sh book with cash memos :

c) check that only the net amount i.e., the cost of goods purchased minus trade discount if any, has been paid.

ii. Payment of Salaries:

a) Attendance record of employee and salary register

b) Appointment letter of new employees

c) Comparison of current month salary with last month's salary and if there is any abnormal change in amount, Auditor should verify the same.

iii. Payment of Wages

a) Comparison of current month wages with last month's wages and proper verification should be there for extra ordinary changes.

b) Wages sheet should compare with wages register.

c) Detailed verification for payment to casual workers

iv. Purchase of Fixed asset

a) Purchase invoice of Fixed asset

b) Freight inward charges, installation charges, erection and commissioning charges should be capitalized.

v. Rent Paid

a) Rent Deed

b) Rent receipt from Land lord

c) Provision for un-paid rent at the end of the year

13) Describe the vouching of debit side of cash book.

The receipt side or the debit side of the cash book contains items such as opening balance, cash sales, receipts from debtors, receipts from bills discounted and bills matured, income from investments, sale of investments, sale of fixed assets, loan received, and miscellaneous receipts, etc.

We shall now discuss the vouching of items, which appear in the debit side of the cash book briefly as below:

i. Cash sales: There are greater chances of fraud under this head and so much care should be taken. There is a possibility that salesmen sell goods and do not make entries in the cash book and misappropriate the money. In order to avoid this type or fraud, it is suggested that the following system should be adopted:

a) Salesman should not be allowed to receive cash from customers and a person other than the salesmen should be asked to deliver the goods.

b) He should be directed to prepare four copies of the memo of the goods sold, of which three copies are to be handed over to customer; and he has to keep one copy with him.

c) The customer goes to the counter with three copies. The cashier receives the payment and retains one copy with him and the other two copies of the cash memos are returned to the customer with "**Cash Received**" or "Cash Paid" seal.

ii. Cash Received from Debtor: When cash is received from customers, a cash memo is issued; the receiving clerk retains a counterfoil or carbon copy of such cash memo. The counterfoil is the only proper documentary evidence available for vouching. So the cash received from debtors can be vouched with reference to the counterfoils of the receipts issued to them

iii. Rent received: The auditor should consider the following points while vouching the rent receivables:

a) check rental agreement or lease deed.

b) The amount of rent should be verified from the rent deed or the lease deed

c) The Auditor should verify that the rent for all the twelve month is received or not

iv. Commission Received: While vouching commission received, the auditor should consider the following points:

a) Verification of agreement on the basis of which the commission is received.

b) Calculation of the commission receivable.

c) The commission received should be verified from counterfoils, bank statements, cash receipts, etc. and the provision for commission receivable should be rightly accounted for in the books of accounts.

v. Interest and Dividend Received: While vouching Interest and dividend received, the auditor should consider the following points:

a) Verification of the dividend warrant letter along with the covering letter for verification of dividends in case of dividends received through cheque

b) Verification of bank statement, if the dividend is directly credited to the bank account.

c) All interest received and accrued should be properly accounted for in the books of accounts.

14) What is cost audit?

Cost Audit is a critical review undertaken to verify the correctness of Cost Accounts and to check that cost accounting principles and planning have been efficiently followed. It is noteworthy that India is the only country which has introduced statutory cost audit to regulate about 45 vital industries of the country. Cost Audit has been defined by the Chartered Institute of Management Accountants (CIMA) of Landon as “the verification of cost accounts and a check on the adherence to the cost accounting plan.”

Advantages of cost audit

i. A close check will be maintained on all wastages—materials in store, labour, etc.—and they will be promptly located and reported.

ii. Inefficiencies in production (or efficiencies) will be located and converted into monetary terms.

iii. Through fixation of individual responsibility, management by exception will be possible.

iv. The system of budgetary control and standard costing will be greatly facilitated with cost audit at the hands of a qualified cost accountant.

v. Records will be up-to-date and information for various purposes will be available.

vi. Cost audit may unearth a number of errors and frauds which may not be revealed otherwise. This is because a cost auditor examines expenditure minutely and compares it with standards and ascertains exact reasons for discrepancy.

15) What are the different types of cost audit?

i. Cost Audit as in aid to management: The aim is to see that all information placed before management is relevant, reliable and prompt so that management can discharge its duties well. It must also be seen that no relevant or pertinent information is suppressed

ii. Cost audit on behalf of the customer: Often contracts are placed on "Cost Plus" basis. In other words, the customer will determine the final price to be paid on the basis of exact cost plus an agreed margin of profit. The customer, in such a case, usually gets cost accounts of the product concerned audited to establish correct cost and, therefore, price.

iii. Cost audit on behalf of the government: Sometimes the Government is approached with request for financial help or protection. Before taking a decision on the request, the Government may choose to get cost accounts of the applicant audited to establish whether the need for help is genuine or is a result of mere inefficiency.

iv. Cost audit on behalf of the Trade Association: Sometimes trade associations seek to maintain prices at a certain level. For this purpose, the accuracy of costing information submitted by various concerns has to be checked. The trade associations may seek to have full information about production capacity and the relative efficiency of productive processes.

16) What is social Audit?

Social accounting is a systematic assessment and reporting on those parts of a company's activities, which have a social impact. It refers to the identification, measurement, recording and reporting the information as to social activities of the concern to its users (both internal and external). On the other hand, social audit refers to the systematic evaluation of an organization's social performance. Here, its economic performance is not considered. It discloses the company's involvement in socially oriented activities, activities taken for the well-being of the employers of the concern, activities as to prevention of environment from pollution etc

Objective of Social Audit

i. Principal objectives

a) The extension, development and improvement of the company's business and building up of its financial independence.

b) The payment of a fair and regular dividend to the shareholders.

c) The payment of fair wages under the best possible conditions to the worker.

d) The reduction of prices to the consumers.

ii. Secondary objectives.

a) Provision of a bonus to the workers.

b) Assist in promoting the amenities of the locality.

c) Assist in developing the industry in which the firm is a member.

d) Promote education, research and development in the techniques of the industry.

17) What is Auditing Standard?

Generally accepted auditing standards (GAAS) are a set of systematic guidelines used by auditors when conducting audits on companies' financial records. GAAS helps to ensure the accuracy, consistency, and verifiability of auditors' actions and reports. The Auditing Standards Board (ASB) of the American Institute of Certified Public Accountants (AICPA) created GAAS.

Requirements for GAAS: Generally accepted auditing standards (GAAS) comprises a list of 10 standards, divided into the following three sections:

i. General Standards:

a) The auditor must have adequate technical training and proficiency to perform the audit.

b) The auditor must maintain independence in mental attitude in all matters relating to the audit.

c) The auditor must exercise due professional care in the performance of the audit and the preparation of the auditor's report.

ii. Standards for field work:

a) The auditor must adequately plan the work and must properly supervise any assistants.

b) The auditor must obtain a sufficient understanding of the entity and its environment, including its internal control, to assess the risk of material misstatement of the

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financial statements whether due to error or fraud, and to design the nature, timing, and extent of further audit procedures.

c) The auditor must obtain sufficient appropriate audit evidence by performing audit procedures to afford a reasonable basis for an opinion regarding the financial statements under audit.

iii. Standards of reporting:

a) The auditor must state in the auditor's report whether the financial statements are presented in accordance with generally accepted accounting principles.

b) The auditor must identify in the auditor's report those circumstances in which such principles have not been consistently observed in the current period in relation to the preceding period.

c) If the auditor determines that informative disclosures in the financial statements are not reasonably adequate, the auditor must so state in the auditor's report.

d) The auditor's report must either express an opinion regarding the financial statements, taken as a whole, or state that an opinion cannot be expressed. When the auditor cannot express an overall opinion, the auditor should state the reasons in the auditor's report. In all cases where an auditor's name is associated with financial statements, the auditor should clearly indicate the character of the auditor's work, if any, and the degree of responsibility the auditor is taking, in the auditor's report.

18) What is auditor's Certificate?

An **Auditor's certificate** is a written confirmation of the accuracy of the facts relating to the accounts for a particular time or to a specific matter, which does not involve any estimate or opinion.

19) What is audit planning?

The audit planning is a major part of audit works for both internal and external audits. A good audit planning will help the auditor to minimize its risks, improve audit efficiency, and meet its objective at the minimum effort.

Auditors are required to prepare a proper audit plan to ensure that all audit risks are identified and correct audit strategies are deployed to detect all concerning risk areas.

It is essential for the auditor to prepare a good strategic audit plan. If the plan is well prepared, all kind of audit risks is identified and detected.

This will help the auditor to minimize the audits risks of issuing the incorrect opinion to financial statements.

20) What are the basic principle governing audit?

i. Integrity, independence and objectivity: The auditor has to be honest while auditing, he cannot be favoring the organization. He must remain objective throughout the whole process, his integrity must not allow any malpractice. Another important principle is independence. So the auditor cannot have any interest in the organization he is auditing, which allows him to be independent and impartial at all times.

ii. Confidentiality: The auditor has access to a lot of sensitive financial information of the organization. It is important that he respect the confidential nature of such information and documents. He cannot disclose any sensitive information to any third party unless it is a requirement by law. And he must also be very careful with documents, certificates etc. that the organization entrusts to him.

iii. Skill & Competence: The auditor must be experienced and trained in the procedures of auditing, i.e. must be qualified as an auditor. And as a professional, he must be up to date on recent changes, announcements, rules etc. If necessary he can undergo training and workshops to stay up to date with the recent auditing and accounting procedures. For example, after GST was introduced, auditors had to update their knowledge.

iv. Documentation: In most cases the auditor maintains an audit notebook, an audit plan and auditing file. It is important the auditor keeps a record of important documents with respect to his audit work, as it is evidence of the work the auditor has done. And the client is inclined to these documents and files if he wishes to inspect the work.

v. Work performed by others: The scope of audit at times can be very vast. So an auditor has employees, delegates and other people who work under him. However, the auditor will continue to be fully responsible for the work done by these people working for him. So the auditor must carefully supervise and review such work and be reasonably sure of the accuracy of such work.

vi. Audit Evidence: The auditor must collect enough evidence to support his final opinion. This collection of such evidence is done by compliance and substantive procedures. There are two

sources of this evidence – internal and external. Also, external sources of evidence are always more reliable.

vii. Accounting System and Internal Control: The auditor has to assure that the accounts of the organization are accurate and represent a true and fair picture of the financial status of the company. Also, the auditor must ensure that all material information has been recorded in the accounts. Testing the internal controls system is also important as it helps determine the same.

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ISO 9001:2015 & 14001:2015

BCOM 206: Corporate Accounting

Question1. Describe the concept of IPO book building and its relevance in corporate accounting?

Answer1 Book building is the process by which an underwriter attempts to determine the price at which an initial public offering (IPO) will be offered. An underwriter, normally an investment bank, builds a book by inviting institutional investors (fund managers) to submit bids for the number of shares and the price(s) they would be willing to pay for them.

Understanding Book Building

Book building has surpassed the 'fixed pricing' method, where the price is set prior to investor participation, to become the de facto mechanism by which companies price their IPOs. The process of price discovery involves generating and recording investor demand for shares before arriving at an issue price that will satisfy both the company offering the IPO and the market. It is highly recommended by all the major stock exchanges as the most efficient way to price securities.

The book building process comprises of these steps:

- The issuing company hires an investment bank to act as underwriter who is tasked with determining the price range the security can be sold for and drafting a prospectus to send out to the institutional investing community.
- Invite investors, normally large scale buyers and fund managers, to submit bids on the number of shares that they are interested in buying and the prices that they would be willing to pay.
- The book is 'built' by listing and evaluating the aggregated demand for the issue from the submitted bids. The underwriter analyzes the information then uses a weighted average to arrive at the final price for the security, which is termed the 'cut off' price.
- The underwriter has to, for the sake of transparency, publicize the details of all the bids that were submitted.
- Allocate the shares to the accepted bidders

Even if the information collected during the book building suggests a particular price point is best, that does not guarantee a large number of actual purchases once the IPO is open to buyers. Further, it is not a requirement that the IPO be offered at that price suggested during the analysis.

Relevance In Corporate Accounting: Issue of Shares is the process in which companies allot new shares to shareholders. Shareholders can be either individuals or corporates. The company follows the rules prescribed by Companies -Act 2013 while issuing the shares. Issue of Prospectus, Receiving Applications, Allotment of Shares are three basic steps of the procedure of issuing the shares. The process of creating new shares is known as Allocation or allotment. Let us see the two types of shares of a company and the procedure for issue of shares that a company must follow.

For instance, A share of a company is one of the units into which the capital of a company is divided. So if the total capital of a company is 5 lacs, and such capital is divided into 5000 units of Rs 100/- each, then this one unit of amount 100 is a share of the company.

Thus a share is the basis of ownership of the company. And the person who holds such shares and is thus a member of the company is known as a shareholder.

Procedure of Issue of New Shares

- Issue of Prospectus- Before the issue of shares, comes the issue of the prospectus. The prospectus is like an invitation to the public to subscribe to shares of the company. A prospectus contains all the information of the company, its financial structure, previous year balance sheets and profit and Loss statements etc. It also states the manner in which the capital collected will be spent. When inviting deposits from the public at large it is compulsory for a company to issue a prospectus or a document in lieu of a prospectus.
- Receiving Applications - When the prospectus is issued, prospective investors can now apply for shares. They must fill out an application and deposit the requisite application money in the schedule bank mentioned in the prospectus. The application process can stay open a maximum of 120 days. If in these 120 days minimum subscription has not been reached, then this issue of shares will be cancelled. The application money must be refunded to the investors within 130 days since issuing of the prospectus.
- Allotment of Shares - Once the minimum subscription has been reached, the shares can be allotted. Generally, there is always oversubscription of shares, so the allotment is done on pro-rata bases. Letters of Allotment are sent to those who have been allotted their shares. This results in a valid contract between the company and the applicant, who will now be a part owner of the company.

If any applications were rejected, letters of regret are sent to the applicants. After the allotment, the company can collect the share capital as it wishes, in one go or in installments.

Question2. Explain the concept of buy back of shares and support your answer with good point?

Answer2. Buy back of shares refer to the repurchasing of shares of stock by the company that issued them. A buyback occurs when the issuing company pays shareholders the market value per share and- re-absorbs that portion of its ownership that was previously distributed among public and private investors. With stock buybacks, aka share buybacks, the company can purchase the stock on the open market or from its shareholders directly. In recent decades, share buybacks have overtaken dividends as a preferred way to return cash to shareholders. Though smaller companies may choose to exercise buybacks, blue-chip companies are much more likely to do so because of the cost involved.

Following point need to be consider :

Since companies raise equity capital through the sale of common and preferred shares, it may seem counter-intuitive that a business might choose to give that money back. However, there are numerous reasons why it may be beneficial to a company to repurchase its shares, including ownership consolidation, undervaluation, and boosting its key financial ratios.

Unused Cash Is Costly

Each share of common stock represents a small stake in the ownership of the issuing company, including the right to vote on company policy and financial decisions. If a business has a managing owner and one million shareholders, it actually has 1,000,001 owners. Companies issue shares to raise equity capital to fund expansion, but if there are no potential growth opportunities in sight, holding on to all that unused equity funding means sharing ownership for no good reason.

Businesses that have expanded to dominate their industries, for example, may find that there is little more growth to be had. With so little headroom left to grow into, carrying large amounts of equity capital on the balance sheet becomes more of a burden than a blessing.

Shareholders demand returns on their investments in the form of dividends which is a cost of equity – so the business is essentially paying for the privilege of accessing funds it isn't using. Buying back some or all of the outstanding shares can be a simple way to pay off investors and reduce the overall cost of capital. For this reason, Walt Disney (DIS) reduced its number of outstanding shares in the market by buying back 73.8 million shares, collectively valued at Rs 7.5 billion, back in 2016.

Preserves the Stock Price

Shareholders usually want a steady stream of increasing dividends from the company. And one of the goals of company executives is to maximize shareholder wealth. However, company executives must balance appeasing shareholders with staying nimble if the economy dips into a recession.

One of the hardest hit banks during the Great Recession was Bank of America Corporation (BAC). The bank has recovered nicely since then, but still has some work to do in getting back to its former glory. However, as of the end of 2017, Bank of America had bought back 509 million shares over the prior 12-month period. Although the dividend has increased over the same period, the bank's executive management has consistently allocated more cash to share repurchases rather than dividends.

Why are buybacks favored over dividends? If the economy slows or falls into recession, the bank might be forced to cut its dividend to preserve cash. The result would undoubtedly lead to a sell-off in the stock. However, if the bank decided to buy back fewer shares, achieving the same preservation of capital as a dividend cut, the stock price would likely take less of a hit. Committing to dividend payouts with steady increases will certainly drive a company's stock higher, but the dividend strategy can be a double-edged sword for

a company. In the event of a recession, share buybacks can be decreased more easily than dividends, with a far less negative impact on the stock price.

The Stock Is Undervalued

Another major motive for businesses to do buybacks: They genuinely feel their shares are undervalued. Undervaluation occurs for a number of reasons, often due to investors' inability to see past a business' short-term performance, sensationalist news items or a general bearish sentiment. A wave of stock buybacks swept the United States in 2010 and 2011 when the economy was undergoing a nascent recovery from the Great Recession. Many companies began making optimistic forecasts for the coming years, but company stock prices still reflected the economic doldrums that plagued them in years prior. These companies invested in themselves by repurchasing shares, hoping to capitalize when share prices finally began to reflect new, improved economic realities.

If a stock is dramatically undervalued, the issuing company can repurchase some of its shares at this reduced price and then re-issue them once the market has corrected, thereby increasing its equity capital without issuing any additional shares. Though it can be a risky move in the event that prices stay low, this maneuver can enable businesses who still have long-term need of capital financing to increase their equity without further diluting company ownership.

Question3. Explain the concept redemption of preference shares and when its liquidation be happened?

Answer3. Redemption of preference shares means returning the preference share capital to the preference shareholders either at a fixed date or after a certain time period during the life time of the company provided company must complied certain conditions.

According to Section 100 of the Companies Act 1956, a company is not allowed to return to its shareholders the share money without the permission of the court. A refund of money to shareholders on capital account, while the company is in existence, requires court’s sanction in addition to the special procedure. But Section 80 of the Companies Act allows a company, if -authorized by its articles to issue preference shares which at the option of the company may be redeemed, if the conditions as laid down under this Section are to be satisfied.

Preference shares having maturity after 20th years of issuing date and in case of investment more than 20th years, some exception is there in case of 30th years of investment and Preference shares holder redeem the amount after 20th years by every next year till 30th year each year at 10% redeem value.

Question4. Explain the concept of redemption of debenture and method of redemption?

Answer4. A debenture is a type of debt instrument unsecured by collateral. Since debentures have no collateral backing, debentures must rely on the creditworthiness and reputation of the issuer for support. Both corporations and governments frequently issue debentures to raise capital or funds.

Redemption of Debentures

Redemption of debentures refers to the repayment of these debentures by the company to the debenture holders. So the company will discharge its liability and remove it from the balance sheet. This is a major transaction for the company since the amount of money involved tends to be quite significant.

There are a few ways in which this redemption of shares can take place. These methods all have different accounting treatment as well. So let us take a look at the various methods of redemption of debentures.

Lump Sum Method

This method as the name suggests is a one-time payment method. Here the company will repay the whole amount in one lump sum payment to the debenture holders. The amount and the date of the payment will be according to the terms of issue.

Since the company knows the date of the repayment in advance they can plan their finances accordingly. So they make provisions to pay the debenture holders. So as per the provisions of the Companies Act and the SEBI guidelines the company has to make provisions for such a debenture. And hence the company sets up a special account known as the Debenture Redemption Reserve.

This debenture redemption reserve is a capital reserve account. It is funded by the divisible profits of each year, i.e. a portion of the profits are set aside for this purpose. This account can only be utilized for the purpose of redemption of debentures and for no other purpose.

Browse more Topics under Issue And Redemption Of Debentures

- Meaning of Debentures
- Issue of Debentures
- Terms of Issue, Interest on Debentures

Installment Method - This is also known as the drawing of lots method. Here the company will start redeeming debentures in lots or installments from one particular year as agreed by the terms of issue. Let us see the accounting entries for the same.

Conversion Method

A company may opt to not pay the debenture holders at the time of redemption. Instead of that, it can convert the debentures into a new class of debentures or even equity shares. Such debentures are known as convertible debentures. Such new debentures or shares can be issued at par, premium or even discount. Let us see the accounting treatment for these scenarios.

Purchasing Method

In this method, the company will buy its debentures from the open market and then immediately cancel them. This is known as the purchase from the open market. This way the company can defer the redemption till it is suitable to them. Also if they buy the debentures for a discount they can make additional benefits/profits as well.

Question5. In which scenario right issue and bonus share is been issued by the company, explain the concept also?

Answer5.Cash-strapped companies can turn to rights issues to raise money when they really need it. In these rights offerings, companies grant shareholders the right, but not the obligation, to buy new shares at a discount to the current trading price. We explain how rights issues work and what they mean for the company and its shareholders.

Defining a Rights Issue

A rights issue is an invitation to existing shareholders to purchase additional new shares in the company. This type of issue gives existing shareholders securities called rights. With the rights,

The shareholder can purchase new shares at a discount to the market price on a stated future date. The company is giving shareholders a chance to increase their exposure to the stock at a discount price.

Until the date at which the new shares can be purchased, shareholders may trade the rights on the market the same way that they would trade ordinary shares. The rights issued to a shareholder have value, thus compensating current shareholders for the future dilution of their existing shares' value. Dilution occurs because a rights offering spreads a company's net profit over a larger number of shares. Thus, the company's earnings per share, or EPS, decreases as the allocated earnings result in share dilution.

How Rights Issues Work

So, how do rights issues work? Let's say you own 1,000 shares in Wobble Telecom, each of which is worth Rs5.50. The company is in financial trouble and needs to raise cash to cover its debt obligations. Wobble, therefore, announces a rights offering through which it plans to raise Rs 30 million by issuing 10 million shares to existing investors at a price of Rs 3 each. But this issue is a three-for-10 rights issue. In other words, for every 10 shares you hold, Wobble is offering you another three at a deeply discounted price of Rs 3. This price is 45% less than the Rs 5.50 price at which Wobble stock trades.

As a shareholder, you have three options with a rights issue. You can (1) subscribe to the rights issue in full, (2) sell the rights to someone else. Below we explore each option and the possible outcomes.

1. Take Up the Rights to Purchase in Full
To take advantage of the rights issue in full, you would need to spend Rs 3 for every Wobble share that you are entitled to purchase under the issue. As you hold 1,000 shares, you can buy up to 300 new shares (three shares for every 10 you already own) at the discounted price of Rs 3 for a total price of Rs 900.

2. Sell Your Rights to Other Investors
In some cases, rights are not transferable. These are known as non-renounceable rights. But in most cases, your rights allow you to decide whether you want to take up the option to buy the shares or sell your rights to other investors or the underwriter. Rights that can be traded are called renounceable rights. After they have been traded, the rights are known as nil-paid rights.

Bonus share

Bonus shares are additional shares given to the current shareholders without any additional cost, based upon the number of shares that a shareholder owns. These are company's accumulated earnings which are not given out in the form of dividends, but are converted into free shares.

Description: The basic principle behind bonus shares is that the total number of shares increases with a constant ratio of number of shares held to the number of shares outstanding. For instance, if Investor A holds 200 shares of a company and a company declares 4:1 bonus, that is for every one share, he gets 4 shares for free. That is total 800 shares for free and his total holding will increase to 1000 shares. Companies issue bonus shares to encourage retail participation and increase their equity base. When price per share of a company is high, it becomes difficult for new investors to buy shares of that particular company. Increase in the number of shares reduces the price per share. But the overall capital remains the same even if bonus shares are declared

Question6. Why we preparing profit and loss account and explain its important points from the company point of view?

Answer6. Profit and Loss Account

Another important set of account in company's final account is the profit and loss account. The Company Act 2053 of Nepal requires that the company must prepare profit and loss account at the end of each financial year to show its operating result of the period. The profit and loss account of the company can be defined as final account, which summarizes income and gain earned and expenses incurred during the financial year and the result thereof. Therefore, the profit and loss account is prepared to ascertain the operating results of a company in term of net profit or loss. The profit and loss account determines net income or loss by matching income and expenses occurred during a particular financial year.

Importance and advantage of Profit and Loss Account

The importance and advantages of a profit and loss account are as follows:

- It helps to calculate the operating results of a company in terms of Profit / Loss for a specific period.
- It helps to control indirect expenses.
- It helps to judge the overall efficiency of the business.
- It helps to determine the amount of dividend of the year.

Preparation of Profit and Loss Account

Profit and loss account is prepared after the trading which shows gross profit or loss. It records all the revenue expenses including capital losses such as loss on sale of fixed assets, and revenue is a nominal account which is debited by the expenses and credited by incomes. The difference between total incomes and gains and total expenses and losses is either net profit or net loss. The excess of total credit over total debit result is net profit, while the excess of total debt over total gains result is a net loss.

Question7. Explain the balance sheet as per revised schedule III and explain its important points from the company point of view?

Answer7.Balance Sheet

The balance sheet is a report that summarizes all of an entity's assets, liabilities, and equity as of a given point in time. Typical line items included in the balance sheet (by general category) are: Assets: Cash, marketable securities, prepaid expenses, accounts receivable, inventory, and fixed assets.

Importance and Objectives of Balance Sheet

The balance sheet is one of the most important final account of a company. It provides important information to different users such as shareholders, management, investors, lenders, bankers, creditors, and government for making financial decisions of their own.

- It helps to know the financial position reflecting the true and fair view of assets and liabilities.
- It helps to judge the debt paying capability of the company.
- It helps to show the nature and value of all assets.

- It helps to determine purchase consideration of the company.
- It helps to know about capital, owner's equity and borrowed capital in detail, including authorized, issued, subscribed called up ad paid up capital.

Question8. Differentiate between profit & loss account and trading account by given four basis of difference points?

Answer8**.** Differences between Trading and Profit & Loss Account

The points presented below explain the difference between trading and profit & loss account in detail:

- Trading account is a part of the financial statement, prepared by the entities to show the result of trading activities, i.e. purchase and sale of goods. On the other hand, profit & loss account is an account indicating the actual profit earned or loss sustained by the business during the accounting period.
- Trading account determines the gross profit or loss for the accounting period. As against, profit & loss account ascertains the net profit or loss for the given period.
- The balance of the trading account is transferred to the trading account, whereas the balance of profit & loss account is taken to capital account, in the Balance Sheet.
- Trading account is a summary of all direct revenue and direct expenses. Conversely, Profit & Loss account takes into account all operating and non-operating incomes and expenses.

Question9. Explain the concept of Holding companies as per Provision of Accounting Standard?

Answer9. **Holding company**
A holding company is one which controls one or more companies either by means of holding shares in that company or companies or by having powers to appoint—directly or indirectly—the whole, or a majority, of the Board of Directors of those companies.
A company controlled by a holding company is known as a subsidiary company. Practically, it is a part and parcel of the combination movement in business and is operated for the purpose of controlling companies engaged in a similar line of business.

A company, viz., X Ltd., may control another company, viz., Y Ltd., by any one of the three ways:
(i) by holding more than half the shares—having voting rights in Y Ltd.;
(ii) by controlling the composition of the Board of Directors of Y Ltd.; and
(iii) by controlling a holding company which actually controls Y Ltd. i.e., if Y Ltd. becomes the subsidiary of Z Ltd., and Z Ltd. becomes the subsidiary of X Ltd., in that case, Y Ltd. will also be the subsidiary of X Ltd.

Advantages of Holding Companies:

Formation of a holding company offers many advantages some of which are:

(a) Since the subsidiary company can maintain its own separate entity, it can retain its own individual existence, i.e., goodwill cannot be damaged as a result of the amalgamation.
(b) The subsidiary company can carry forward its losses for income-tax purposes as it possesses its own separate entity.
(c) Economic and/or financial trend and rate of earning profit of subsidiary companies can be known since they prepared their individual accounts.
(d) If a particular process is found to be unprofitable, the same can be recognized and, if necessary, may be dissolved. Necessary arrangement may be made for the same.
(e) Expenses and costs may be reduced as a result of the combination of different general charges and overheads.
(f) Since a large organization can afford greater facilities for experiment and research, technical knowledge and experience may be utilized properly.

Disadvantages:

Formation of a holding company is also not free from snags. Some of them are :
(a) There is a greater possibility of the exploitation of 'outside' shareholders, i.e., interest of minority shareholders are not properly protected.
(b) It invites manipulation of accounts since the system of accounting is a complicated one, particularly when the financial accounts of both the holding and subsidiary companies are prepared at different dates.
(c) Valuation of share of a holding company is not so easy to calculate; as a result, the shareholders find it very difficult to ascertain the value of their holdings.
(d) Since the companies are connected with a number of companies, creditors are easily mislead.
(e) The financial conditions of the subsidiary companies may not be expressed properly to the shareholders of the holding company.
(f) Inter-company transactions are not made and adjusted properly.
(g) Where the holding company has worldwide interest, it is very difficult to prepare accounts in different currencies.
(h) Inter-company stock at a huge quantity creates a further trouble for their verification and valuation.

Question10. Explain the following method:

- **Purchased Goodwill**
- **Acquired Goodwill**
- **Net Asset method**

Answer10. **Purchased goodwill** - It is the difference between the value paid for an enterprise as a going concern and the sum of its assets less the sum of its liabilities, each item of which

has been separately identified and valued.
The value of goodwill includes anything of long-term benefit to the business that has not been separately identified as an asset, as well as the value of the fact that the group of assets is used jointly and is not simply a collection of separable assets.

Acquired Goodwill – Any **goodwill** or deferred tax items **existing** on the target's balance sheet at the time of **acquisition** are written off in the purchase price allocation (PPA) since their fair values (FVs) are zero. Any **goodwill** or deferred tax items **existing** on the target's balance sheet at the time of **acquisition** are written off in the purchase price allocation (PPA) since their fair values (FVs) are zero.

Net assets method - **Net assets** is defined as the total **assets** of an entity, minus its total liabilities. The amount of **net assets** exactly matches the stockholders' equity of a business. In a nonprofit entity, **net assets** are subdivided into unrestricted and restricted **net assets**. **Net assets** are the value of a company's **assets** minus its liabilities. It is **calculated** ((Total Fixed **Assets** + Total Current **Assets**) – (Total Current Liabilities + Total Long Term Liabilities)

Question11. Explain the concept of Amalgamation of companies (accounting) by using some suitable example of it?

Answer11. Amalgamation is defined as the combination of one or more companies into a new entity. It includes:

- Two or more companies join to form a new company
- Absorption or blending of one by the other

Thereby, amalgamation includes absorption.

However, one should remember that Amalgamation as its name suggests, is nothing but two companies becoming one. On the other hand, Absorption is the process in which the one powerful company takes control over the weaker company. Generally, Amalgamation is done between two or more companies engaged in the same line of activity or has some synergy in their operations. Again the companies may also combine for diversification of activities or for expansion of services. Transfer or Company means the company which is amalgamated into another company; while Transfer Company means the company into which the transfer or company is amalgamated. However, one should remember that Amalgamation as its name suggests, is nothing but two companies becoming one. On the other hand, Absorption is the process in which the one powerful company takes control over the weaker company. Generally, Amalgamation is done between two or more companies engaged in the same line of activity or has some synergy in their operations. Again the companies may also combine for diversification of activities or for expansion of services. Transfer or Company means the company which is amalgamated into another company; while Transfer Company means the company into which the transfer or company is amalgamated. For example - Existing companies A and B are wound up and a new company C is formed to take over the businesses of A and B.

Question12. Explain the concept of Internal Reconstruction of companies (accounting) by using some suitable example of it?

Answer12. When a company has been making losses for a number of years, the financial position does not present a true and fair view of the state of the affairs of the company. In such a companythe assets are overvalued, the assets side of the balance sheet consists of fictitious assets, useless intangible assets and debit balance in the profit and loss account. Such a situationdoes not depict a true picture of financial statements and shows a higher net worth than what the real net worth ought to be. In short the company is over capitalized. Such a situationbrings the need forreconstruction.

Reconstruction is a process by which affairs of a company are reorganized by revaluation of assets, reassessment of liabilities and by writing off the losses already suffered byreducing the paid up value of shares and/or varying the rights attached to different classes of shares.The object of reconstruction is usually to reorganize capital or to compound with creditors or to effect economies. Such a process is called **internal reconstruction** which is carried outwithout liquidating the company. However, there may be external reconstruction. Wherever an undertaking is being carried on by a company and is in substance transferred, not to an outsider, but to another company consisting substantially of the same shareholders with a view to its being continued by the transferee company, there is external reconstruction. Such external reconstruction is essentiallycoveredunderthecategory'amalgamationinthenatureofmerger'inAS-14. For example, if X ltd 1996 sick unit changed to New X ltd 2019.

Question13. Differentiate between External Reconstruction of companies (accounting) and Internal Reconstruction of companies with five basis of difference?

Answer13.

Liquidation	The existing company is not liquidated.	The existing company is liquidated.
Formation	No new company is formed but only the rights of shareholders and creditors are changed.	A new company is formed to take over the liquidated company.
Reduction of capital	There is certain reduction of capital and sometimes the outside liabilities like debenture holders may have to reduce their claim.	There is no reduction of capital. In fact there is a fresh share capital of the company.
Legal position	Internal reconstruction is done as per provisions of section 100 of the Companies Act, 1956.	External reconstruction is regulated by section 394 of the Companies Act,1956.

Liquidation	The existing company is not liquidated.	The existing company is liquidated.

Question14. Explain the concept of Liquidation of companies (accounting) by using some suitable example of it?

Answer14. Liquidation is the process of selling off assets to repay creditors and distributing the remaining assets to the owners. In other words, liquidation is the process of closing a business, paying off creditors, and giving the investors whatever is left over.
Businesses can liquidate their assets for any number of reasons, but the main two reasons are the company is failing and restructuring or investors want to leave the business. Liquidations are far more common in bankruptcies and situations where the business is closing because it can't support itself with revenues than any other instance. In a bankruptcy, the court generally takes control of the assets in order to sell them at auction to pay off the outstanding liabilities. In many cases, there aren't enough assets to pay off creditors, so many of the unsecured lenders are out of luck. They won't be repaid. For Example - Liquidation does not always have to be Company wise and under bankruptcy, however. Many businesses decide to close departments or merge with other companies. The unneeded departments and divisions are often closed with their assets sold or added to other divisions.

Question15. Differentiate between Winding up of companies and Liquidation of companies?

Answer15. As a business owner, you can't simply put a lock on your doors to end a company's activities. You are legally required to follow a number of steps, including liquidation and dissolution. Now that you understand the difference between liquidation and winding up, you may wonder what *"dissolution"* means.

In general, business owners choose to **dissolve a company** when it's no longer active or when they decide to retire or start a new venture. This process involves **ending a company as a legal entity**. Most times, it's voluntarily done when a business owner decides to cease operations. However, if an organization fails to pay taxes, it may be dissolved involuntarily by the secretary of state. The dissolution process may or may not involve the liquidation of assets.

Compared to the liquidation and winding up of a company, this process is less formal. You must pay all legal, federal and state taxes, satisfy the creditors' claims and take the steps needed to remove the company's name from registrar records. The dissolution process, though, depends on the type and size of your business, among other factors. Dissolving a small business is different than dissolving a corporation or a multinational organization. In both cases, it's necessary to notify the IRS, close any business accounts, make final payments to your employees and ensure that everything you owe is paid off.

Question16. Explain the Accounting concept of Banking Companies and support your answer with relevant points?

Answer16.Section 5 of banking regulation act defines banking as "the accepting, for the purpose of lending or investment, of deposit of money from the public repayable on demand or otherwise and withdrawal by cheque, draft, order or otherwise. The borrowing , raising , or taking up of money.The lending or advancing of money either upon or without security.The granting and issuing of letters of credit , travelers , cheques and circular notes.Buying and selling of bullion, buying and selling of foreign exchange including foreign bank notes, contracting for public and private loans negotiating and issuing the same.

Undertaking and executing trust.

- The acquisition, constructing, maintenance and alternation of any building or works necessary or convenient for the purpose of the company.
- Carrying on and transacting every kind of guarantee and indemnity business.
- The collecting and transmitting of money and securities.
- Undertaking the administration of estates as executor, trustee or otherwise

Information

- No banking company can carry on business in India unless its subscribed capital is not less than one- half of the authorized capital and its paid up capital is not less than one – half of subscribed capital.
- A banking company cannot create any charge upon its uncalled capital.
- Every banking company shall transfer a sum equal to 25% of profits to statutory reserve.
- A bank can open a branch only at the permission or reserve bank

Accounting system

The accounting system of a banking company is different from that of a trading or manufacturing company. A bank has a large number of customers whose acc are to be maintained in such a way so that these should be kept upto date.

Features of banking account system

- Entries in the personal ledgers are made directly from vouchers.
- From such entries in personal acc each day summary sheets in total are prepared.
- The general ledger's trial balance is extracted and agreed every day.
- Trial balance is prepared periodically and get agreed with general ledger.

- Two vouchers are prepared for every transaction not involving cash- debit and credit voucher.

Principal books of accounts are:

Cash book: This book gives the summary of the receiving cashier's counter cash book and paying cashier's cash book. General ledger: This ledger contains control acc for subsidiary ledger listed above and acc of expenses and assets not covered by the subsidiary ledger.

Notes and Instruction For Compilation

The formats of balance sheet and profit n loss acc cover all items likely to appear in these statement. The words 'current year' and 'previous year' used in the formats are only to indicate the order of presentation and may not appear in account. Figures should be rounded off to nearest thousand.

BANKS PREPARE THEIR ACCOUNTS ACCORDING TO BANKING REGULATION ACT, 1949. THE FINAL ACCOUNTSOF BANK ARE IN VERTICAL FORMAT . THE FINAL ACCOUNTS CONSIST OF :-

a) PROFIT and LOSS ACCOUNT

b) PROFIT and LOSS APPROPRIATION ACCOUNT

c) BALANCE SHEET

d) Explanation of some terms relating to balance sheet

MONEY AT CALL AND SHORT NOTICE :-This item appears on the assets side of a bank balance sheet and represents temporary loans to Bill Brokers and other banks . If the loan is given for one day, it is called 'money at call' and if the loan cannot be called back on demand and will require at least a notice of three days for calling back , it is called ' money at short notice ' . It also includes deposits repayable within 10 days or less than 15 days notice lent in the inter bank call money market . The rate of interest on which money is lent fluctuate every day , sometimes very sharply (more than 30 %) , depending on the demand and supply of money .

ADVANCES :-Advances appear on the Assets side as fourth head and include loans , cash credits , bank overdrafts and bills discounted and purchased . Banks generally advance money to their -customers in the form of loans , cash credits , overdrafts and purchasing and discounting of bills .

PROVISIONS IN RESPECT OF DOUBTFUL ADVANCES ARE DEDUCTED FROM ADVANCES TO THE EXTENT NECESSARY AND THE EXCESS PROVISION FOR DOUBTFUL DEBTS IS INCLUDED UNDER " OTHER LIABILITIES AND PROVISIONS" .

CASH CREDIT :- It is an arrangement by which the customer is granted the right to borrow money from time to time upto a certain limit . Cash credit is usually given on hypothecation or pledge of stock . The bank usually charges a higher bank interest on the actual amount withdrawn than that charged on loan because the bank has to keep the amount allowed as cash credit .

OVERDRAFT :- This facility is available to a customer who operates a current account with the bank . This facility is granted to customers who have high goodwill and need for honest dealings.

LOAN :-Loan is advance of fixed amount to a customer to be withdrawn in lump sum by him . Interest is charged on the total amount of the loan agreed to be paid to a customer whether he uses the full amount of the loan or not .So , customers prefer to take cash credit and pay interest at a little higher rate .

DISCOUNTING OF BILLS :-Discounting of a bill means making the payment of the bill before the maturity date of the bill . While making payment of the bill , the bank deducts the discount for the unexpired period for the amount of the bill discounted . The bank keeps the bill with it, till the maturity date and customer get its payment on the due date.

PURCHASING AND DISCOUNTING OF BILLS :-The bank may purchase or discount clean or documentary bills at the current rate of interest.

NON-BANKING ASSETS :-A banking company is not allowed to deal directly or indirectly in the purchase or sale or barter of goods except in connection with its legitimate banking business . But a bank can always lend against the security of assets . The bank may have to take possession of the asset given as a security if the loan fails to repay the loan .

Question17. Explain the Accounting concept of Insurance Companies and support your answer with relevant points?

Answer17. Insurance Companies - General insurance business means business other than life insurance business. General insurance companies operating in India were nationalised on 13th May, 1971 by the Ordinance of the President of India. The accounts of the General Insurance Companies were maintained according to the provisions of Insurance act 1938. Under the previous law, separate Revenue Account had to be prepared for each type of business-fire, marine, accident, etc.

The following accounts were used to be prepared in the case of General Insurance Companies:-

(a) Revenue Account:

A separate revenue account is prepared for each type of business. Incomes and expenses of a particular business are recorded separately and profit or loss arising there from is transferred to Profit and Loss Account.

(b) Profit and Loss Account:

General incomes and expenses not belonging to a particular business are recorded in it and balance of profit or loss is transferred to Profit and Loss Appropriation Account.

(c) Profit and Loss Appropriation Account:
Appropriations of profit for various purposes are shown in it and it's balance is transferred to balance sheet.

(d) Balance Sheet:
It shows various assets and liabilities of general insurance companies. Performa of Balance Sheet is same for general and life insurance companies.

Before the incorporation of IRDA Act, 2000 which allowed private players, general insurance business was conducted by General Insurance Corporation of India and its four subsidiaries.

The summaries of these accounts are as follows:
1. Revenue Account:
A separate Revenue Account is prepared for each type of business e.g., fire, marine etc. It records the incomes and expenses of a particular business and profit/loss is transferred to Profit and Loss Account.

2. Profit and Loss Account:
Besides, profit/loss of different business, it records incomes and expenses of general nature and it shows how the profit has been appropriated. Its balance is shown in the Balance Sheet.

3. Balance Sheet:
It records various assets and liabilities of the General Insurance Companies. It must be observed that difference in revenue account does reveal profit or loss of business. The revenue account is closed by transfer to respective fund account viz., fire fund, marine fund etc. General insurance policies are normally issued for short terms renewable every year. It is quite possible that on the accounting date, some of the contracts are still alive and hence represent unexpired risk. A suitable provision is made for that unexpired risk on a generalized basis as it is impractical to create it for specific policies. Sometimes an additional provision is also created. The total of reserve for unexpired risk and additional risk is collectively termed as 'Respective Fund' which may be fire fund, marine fund, motor vehicle fund, etc. The revenue account starts and ends with respective value of the fund besides recording normal revenue and expenditure. The difference of the account is called profits or loss and is transferred to Profit and Loss Account.

Reserve for Unexpired Insurance:
According to the provisions of Insurance Act, 1938, provision for unexpired risks in case of fire, marine, cargo and miscellaneous business is to be created-@ 40% of the net premiums received and 100% in case for marine Hull. However, income determination of general

insurance business is done as per section 44 of Income-tax Act, 1961 and Rule 6 E of the Income-tax Rules.

They provide for reserve for unexpired risk allowed as deduction up to 50% of net premium income in case of fire insurance and miscellaneous insurance and 100% of net premium in case of marine insurance.

As such, reserve is to be made at 50% of the net premium income in case of fire and other insurance businesses and at 100% of the net premium income in case of marine insurance business. A prudent insurance company may make additional reserve in case of fire and miscellaneous insurance business, if it considers it necessary.

Commission to Agents:
Commission on policies effected through insurance agents cannot exceed 5% of the premium in respect of fire and marine business and 10% in case of miscellaneous business. In case of policies effected through principal agents the maximum limits are 20% for fire and marine policies and 15% in the case of miscellaneous insurance less any commission payable to an insurance agent with respect to the policy concerned. Certain concessions are available in this respect to principal agents having a foreign domicile.

Claims:
Claims paid must include all expenses directly incurred in settling claims such as legal expenses, medical expenses, surveyor's expenses etc. No claim of Rs. 20,000 or more can be paid, except as the Controller of Insurance may otherwise direct, unless there is a report in respect thereof from an approved surveyor or loss assessor (licensed under the Insurance Act).

Regulations Given by Insurance Regulatory and Development Authority:
An insurer carrying on general insurance business, after the commencement of Regulations given by the Insurance Regulatory and Development Authority on 30th March, 2002, shall comply with the requirements of Schedule B for the preparation of financial statements, management report and auditor's report.

(I) For the purposes of financial statements, unless the context otherwise requires:
(a) The expression 'provision' shall, subject to note (II) below mean any amount written off or retained by way of providing for depreciation, renewals or diminution in value of assets, of retained by way of providing for any known liability or loss of which the amount cannot be determined with substantial accuracy.

(b) The expression 'reserve' shall not, subject to as aforesaid, include any amount written off or retained by way of providing for depreciation, renewals or diminution in value of assets or retained by way of providing for any known liability.

(c) The expression 'capital reserve' shall not include any amount regarded as free for distribution through the profit and loss account; and the expression 'revenue reserve' shall mean any reserve other than a capital reserve.

(d) The expression "liability" shall include all liabilities in respect of expenditure contracted for and all disputed or contingent liabilities.

(II) Where: (a)Any amount written off or retained by way of providing for depreciation, renewals or diminution in value of assets, or
(b)Any amount retained by way of providing for any known liability is in excess of the amount which in the opinion of the directors is reasonably necessary for the purpose, the excess shall be treated for the purpose of these accounts as a reserve and not provision.

6. The company should make provision for damages under law suits where the management is of the opinion that the award may go against the insurer.

7. Extent of risk retained and reinsured shall be separately disclosed.

8. Any debit balance of the Profit and Loss Account shall be shown as deduction from uncommitted reserves and the balance, if any, shall be shown separately: An insurer shall prepare the Revenue Account, Profit and Loss Account [Shareholders' Account] and the Balance Sheet in Form B-RA, Form B-PL and Form B-BS, or as near thereto as the circumstances permit.
Provided that an insurer shall prepare Revenue Account and Balance Sheet for fire, marine and miscellaneous insurance business and separate schedules shall be prepared for Marine Cargo, Marine-other than Marine Cargo and the following classes of miscellaneous insurance business under miscellaneous insurance and accordingly application of AS-17 (Segment Reporting) shall stand modified.

(i) Motor

(ii)Workmen's Compensation/Employers' Liability

(iii)Public/Product Liability

(iv)Engineering

(v) Aviation

(vi)Personal Accident

(vii)Health Insurance

(viii) Others

2. An insurer shall prepare separate Receipts and Payments Account in accordance with the Direct Method prescribed in AS-3 "**Cash Flow Statement**" issued by the ICAI.

Question18. Explain the Accounting concept of Electricity Companies and support your answer with relevant points?

Answer18. The Electricity (Supply) Act, 1948, came into force on 10th September 1948 and was modified by the Electricity Supply Amendment Act, 1956. The financial provisions contained in the 6th and 7th Schedules to the above Act are applicable to all Electricity Supply Companies in India. Every Electricity Supply Company is required to submit to the State Government (or to its nominee, which is the State Electricity Board formed as per Sec. 3) contain statistical statements in the prescribed form according to Rule 26 of the Indian Electricity Rules 1956. As a result, every electricity company must submit their annual accounts as per prescribed format within 6 months from the date of year end.

The Electricity Companies may also prepare their accounts as per Schedule VI of the Companies Act, 1956, for the purpose of informing their shareholders. But at the time of submitting their accounts to the Central Government they have to follow the prescribed format framed by the Indian Electricity Rules, 1965. In this regard one may refer Annexure IV and Annexure V of the Indian Electricity Rules, 1956.

1. Depreciation: Every fixed asset must be depreciated; and for the purpose of depreciation, the life of each asset is to be taken as stated in the table given in the Seventh Schedule. As regards the depreciation method that can be applied, the Act makes provision for only two, viz., (a) Compound Interest or Sinking Fund Method, and (b) Straight Line Method.

- Under the Compound Interest Method a certain sum is set aside every year and accumulated at compound interest of 4% p.a. This process of setting aside a certain sum continues throughout the prescribed period of the life of the asset till an amount equal to 90% of the original cost of the asset is reached.
- Under this method interest at the rate of 4% p.a. on the opening balance of the Depreciation Reserve must be transferred from the Revenue Account to the Depreciation Reserve Account.
- Under the Straight Line Method of depreciation, an allowance is made each year which is equivalent to 90% of the cost of the asset divided by the prescribed period of the life of the asset.
- When an asset has been written down to 10% (or less) of its original cost, no further depreciation is allowed in respect of that asset.
- When a fixed asset becomes obsolete or inadequate or superfluous or is discarded for any other reason, it cannot be depreciated any further.
- Every electricity company is required to maintain a contingencies reserve. Reserve is created by transferring from the Revenue Account every year an amount equivalent to

not less than 1/4 per cent and not more than 1/2 per cent of the original cost of the fixed assets until it equals 5 per cent of the original cost of the fixed assets. The amount is to be invested in trust securities.

- **It can be utilized with the approval of the State Government for the following purposes:**
- Meeting expenses or loss of profits arising out of accidents, strikes or circumstances beyond the control of the management.
- Meeting expenses of replacement or removal of plant or works other than the expenses necessary for normal maintenance or renewal.
- Paying compensation payable under law for which no other provision has been made.

3. Development Reserve: The reserve is created by transfer of an amount equivalent to income-tax and super-tax (calculated at current rates) saved on account of development rebate allowed by the income-tax authorities. If in any accounting year the clear profit excluding the special appropriations together with the accumulations, if any, in the Tariffs and Development Control Reserve fall short of reasonable return, the appropriations to this reserve can be reduced by the amount of shortfall. The amount of such reserve is to be invested in the same electricity undertaking and is to be handed over to purchaser of the business in case the business is sold away.

4. General Reserve: Section 67 of the Act provides for the creation of a General Reserve. An annual contribution at a rate not exceeding ½% of the original cost of the fixed asset can be made after providing for interest and depreciation. This Reserve can be created until the total of such Reserve exceeds 8 per cent of the original cost of the assets.

5. Tariffs and Dividend Control Reserve: The reserve is created out of profits in excess of the reasonable return earned by an electricity undertaking. This can be utilized whenever the clear profit is less than the reasonable return. The balance in the reserve should be handed over to the purchaser in case the business is sold away.

6. Remuneration: The remuneration given to Managing Agents is, in the first place, a percentage of net profits. This percentage cannot exceed 10% of the first Rs 5 lacs of such net profits and 7% of all net profits in excess of Rs 5 lacs. In the second place, the amount paid to Managing Agents is subject to a minimum payment which should not exceed Rs 2 p.a. for each Rs 1,000 of paid up share and debenture capital. The office allowance which Managing Agents can draw is to include the salaries and wages of all persons employed in the office but not the salaries of the engineering staff employed for purposes of the undertaking.

7. Reasonable Return: The Electricity (Supply) Act, 1948, imposes restrictions on electricity undertakings on earning too high a profit, by means of the concept of reasonable return, which stipulates the following: A yield at the standard rate which is the Bank Rate stipulated by the Reserve Bank of India from time to time, plus 2% on the Capital Base. Income derived from investments excluding investments made against the

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Contingencies Reserve. An amount equal to ½% on any loans advanced by the Board.An amount equal to ½% on the amounts borrowed from organizations or institutions approved by the State Government.An amount equal to ½% on the amounts realized by the issue of debentures.An amount equal to ½% on the accumulations in the Development Reserve. Any other amount as may be allowed by the Central Government, having regard to the prevailing tax structure in the country.

Question19. Explain the Basis of Accounting as per Prudential Norms of Accounting?

Answer19. **Prudential Norms:**
A loan asset of a bank is considered as a Standard Asset as long as the borrower is paying the interest, installments and other charges as and when debited to his account. A period of 30 days is generally allowed to the borrower to make such payments to the bank. In case the borrower fails to pay or service the account within 30 days from the data of charging, the borrowal account is termed as Irregular/Out of Order. An account remaining irregular continuously for 90 days is classified as Sub-standard/Non-Performing Asset (NPA). Thus, in line with the international practices on prudential norms for banks, an asset is defined as non-performing when it ceases to generate income for the bank. Availability of security is never a criterion for deciding whether a loan asset is performing or non-performing.

Thus, Non-Performing Asset (NPA) is a loan or advance where:
(i) Interest and/or installment of principal remaining overdue for a period of more than 90 days in respect of a Term Loan;

(ii) The bill remains overdue for a period of more than 90 days in case of bills purchased and discounted;

(iii) When an advance is disbursed in the form of overdraft/cash credit and the account remains out of order for more than 90 days. An overdraft/ cash credit account is considered to be out of order when the outstanding balance remains continuously in excess of the sanctioned limit/drawing power.

The account shall also be treated as out of order if there is no credit in the account continuously for a period of 90 days or more or the credits are not enough to cover the interest debited during the period of last 90 days. Non-submission of inventory and receivable statements for 90 days for computation of drawing power will also render the account out of order. In terms of the prudential norms, an overdue amount means any amount due to the bank under any credit facility, which is not paid by the borrower on the due date fixed by the bank. Further, any amount to be received for use of credit cards, debits in suspense account, etc., from a customer and if it remains overdue for a period of more than 90 days, the same is also to be treated as NPA. Ideally, a bank should have all its assets performing all the time and there should not be any non-performing asset. But it is extremely difficult to maintain a zero-NPA level. Like any other business activity, the banking business also witnesses a certain percentage of NPA in its asset (Credit) portfolio. However, the banks always

endeavour to keep the NPA level to zero or the bare minimum. This is done by a structured NPA management in the bank.

NPA Management:
Immediately after an asset becomes non-performing it is classified as Substandard and thereafter, based on the length of the period of NPA and realizable value of security, the asset is further downgraded as doubtful or loss. Absence of any realizable value of the security offered by the borrower will straight away render the asset as a Loss Asset. It is not necessary that every NPA should pass through all the stages like Sub-standard and doubtful, before becoming a Loss Asset. If erosion in value of the security is more than 90% of amount outstanding in the loan account, the account should directly be classified as Loss Asset.

The NPA management function comprises:
(i) Prevention of slippage;

(ii) Up-gradation of the asset after its slippage; and

(iii) Initiation of recovery process which culminates into actual recovery.

Management of NPA begins with Prevention of Slippage of a borrow account and keeping the Asset in standard category continuously. This can be done with adequate and uninterrupted monitoring of the loan accounts and recovery of interest and installments as and when they fall due.

Avoiding large scale slippages is very important for management of NPA. In order to meet this objective, the bank should have a sound credit appraisal system in place. There should be personnel in the credit department with proper skills and expertise for credit appraisal. Proper scrutiny of the borrower and his business at the entry level plays a very important role in preventing slippage later. Periodical review of the account should be done with utmost seriousness. Credit monitoring should be effective at pre-disbursement, during disbursement, and post-disbursement stages. Early warning signals need to be identified in time and necessary corrective steps are to be initiated without loss of time. The task of restructuring/re-phasing of payables by the borrower is to be undertaken before the accounts slip into NPA category, provided the activities of the borrowing unit is considered economically viable. When the slippage cannot be prevented and the borrowal account slips to NPA category, efforts should be made to recover the dues, if necessary, by restructuring/re-phasing, as soon as possible and upgrade the account to standard category in conformity with the prescribed norms.

Up-gradation of sub-standard or doubtful account will reduce the quantum of NPA immediately and the asset starts performing or generating income once again. Sometimes, the banks prepare a rehabilitation package in an NPA account, where the business activity has become sick, but remain economically viable. If the viability of the business activity of the unit can be established beyond doubt, the banks can devise a package whereby the existing

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dues of the borrowing unit are restructured or re-phased for repayment over a longer period of time, with a moratorium at the beginning. As per the package, banks also disburse additional loans or take further exposure on the borrowing unit. The scheme may even entail giving several concessions in the rate of interest and other charges and even waiver of some interest charged in the past. This package is generally known as Rehabilitation Package.

Where a loan asset is impaired beyond control and there is hardly any scope for up-gradation, it is marked for initiation of recovery action. The bank has to recall the advance and demand repayment of the outstanding dues from the borrower. If the borrower fails to come up with the repayment, the bank has to take necessary action, either for filing of suit or recovery of the dues by disposing of the securities as per provisions of the law in the country. Many a time, instead of filing suit for recovery of the dues, which is time consuming with attendant costs, the banks prefer a compromise settlement with the defaulting borrower, resulting into savings in recovery expenses. Even after filing of the suit, the bank and the borrower may opt for an out of the court settlement and file for a consent decree from the court.

In a situation when there is no realisable value of security and the borrower and/ or guarantor have neither any income nor any personal property to be attached by the bank, there will be no other option but to write off the outstanding.

Question20. What is the classification of income recognition assets and explain the each point of it?

Answer20. **Income Recognition Asset Classification**- The policy of income recognition has to be objective and based on the record of recovery. Internationally income from non-performing assets (NPA) is not recognised on accrual basis but is booked as income only when it is actually received. Therefore, the banks should not charge and take to income account interest on any NPA.

However, interest on advances against term deposits, NSCs, IVPs, KVPs and Life policies may be taken to income account on the due date, provided adequate margin is available in the accounts.

Fees and commissions earned by the banks as a result of renegotiations or rescheduling of outstanding debts should be recognized on an accrual basis over the period of time covered by the renegotiated or rescheduled extension of credit. If Government guaranteed advances become NPA, the interest on such advances should not be taken to income account unless the interest has been realized.

Reversal of income - If any advance, including bills purchased and discounted, becomes NPA as at the close of any year, the entire interest accrued and credited to income account in the past periods, should be reversed or provided for if the same is not realized. **This will apply to Government guaranteed accounts also.**

In respect of NPAs, fees, commission and similar income that have accrued should cease to accrue in the current period and should be reversed or provided for with respect to past periods, if uncollected.

Leased Assets - The *finance charge* component of finance income [as defined in 'AS 19 - Leases' issued by the Council of the Institute of Chartered Accountants of India (ICAI)] on the leased asset which has accrued and was credited to income account before the asset became nonperforming, and remaining unrealized, should be reversed or provided for in the current accounting period.

Appropriation of recovery in NPAs - Interest realized on NPAs may be taken to income account provided the credits in the accounts towards interest are not out of fresh/ additional credit facilities sanctioned to the borrower concerned. In the absence of a clear agreement between the bank and the borrower for the purpose of appropriation of recoveries in NPAs (i.e. towards principal or interest due), banks should adopt an accounting principle and exercise the right of appropriation of recoveries in a uniform and consistent manner.

Interest Application - There is no objection to the banks using their own discretion in debiting interest to an NPA account taking the same to Interest Suspense Account or maintaining only a record of such interest in proforma accounts.

Computation of NPA levels - Banks should deduct the following items from the Gross Advances and Gross NPAs to arrive at the Net advances and Net NPAs respectively:

i) Balance in Interest Suspense Account

ii) DICGC/ECGC claims received and held, pending adjustment

iii) Part payment received and kept in suspense account

iv) Total provisions held (excluding amount of technical write off and provision on standard assets)

For the purpose, the amount of gross advances should exclude the amount of Technical Write off but would include all outstanding loans and advances; including the advances for which refinance has been availed but excluding the amount of rediscounted bills. The level -of gross and net NPAs will be arrived at in percentage terms by dividing the amount of gross and net NPAs by gross and net advances, computed as above, respectively.

Indian Economy (208)

1) Discuss the need for Economic Development in India.

India has followed a different **path of development** from many other countries. India went more quickly from agriculture to services that tend to be less tightly regulated than heavy industry. That said there are some emerging manufacturing giants in the Indian economy.

Supply-side factors supporting Indian growth and development

1. **A fast-growing population of working age**. There are 700 million Indians under the age of 35 and the demographics look good for Indian growth in the next twenty years at least. India is India is experiencing demographic transition that has increased the share of the working-age population from 58 percent to 64 percent over the last two decades.
2. **India has a strong legal system and many English-language speakers** – this has been a key to attracting inward investment from companies such as those specialising in IT out-sourcing.
3. **Wage costs are low in India** and India has made strides in recent years in **closing some of the productivity gap** between her and other countries at later stages of development.
4. **India's economy** has successfully developed highly advanced and attractive clusters of businesses in the technology space – witness the rapid emergence of Bangalore as a hub for global software businesses**. External economies of scale** have deepened their competitive advantages in many related industries.

Growth and Development Limiters for India

Despite optimism for India's prospects for economic growth and development, there are a number of obstacles which may yet see growth and development falter.

- Poor infrastructure - notably in transport and power networks
- Low productivity and weak human capital. A high % of workers are low-skilled and work in small businesses
- High inflation and a persistent trade deficit
- Low national savings as a share of GDP, low share of capital investment
- Relatively closed economy - India is a net importer of primary products

Indian Development – An Infrastructure Gap

India is a good case study to use when discussing the problems that persist when a country cannot rely on adequate **critical infrastructure** such as roads, railways, power and basic sanitation. India wants to build $1 trillion worth of infrastructure in the next five years but the

government expects the private sector to fund half of it – this is unlikely! Poor infrastructure hurts the Indian economy in numerous ways:

1. Causes **higher energy costs and irregular energy supplies** for nearly every business and especially India emerging manufacturing sectors – there were huge power black outs in 2012
2. It is more **expensive to transport products** across the country and it creates delays at ports hamper export businesses and delays at airports which increases the cost of international freight.
3. It makes India less attractive to **inward FDI**
4. It adds to the **cost of living** and limits the extent to which millions of India's lowest income families can escape extreme poverty
5. A creaking infrastructure damages the reputation and potential of India's **tourism industry**

Despite these growth constraints, India's expansion far exceeds that of the vast majority of developed nations – to put this into some context, India is delivering 30 years of US economic advance every ten years!

2) Discuss the various causes of Under Development in India.

(i) Capital Deficiency:

Capital is of crucial importance for economic growth, but this is what the under-developed countries lack. With the low level of national output much saving is not possible but whatever there is, it is frittered away in conspicuous consumption and extravagance in social ceremonies or is invested in real estate or jewellery.

(ii) Lack of Entrepreneurial and Managerial Talent:

It is the bold and prudent entrepreneur and a wise manager who makes success of a business enterprise. Lack of this talent is responsible for missing available opportunities of profitable investment. Hence such countries remain economically backward.

(iii) Lack of Skilled Personnel and Technical Know-how:

Another very important bottleneck in the way of economic growth is the scarcity of technical know-how and skilled personnel. These elements of productive power take long in building up and foreign technicians are very costly. Hence, the underdeveloped countries remain under-developed.

(iv) Limited Size of the Market:

The purchasing power of the people is very low on account of their proverbial poverty. Hence the productive enterprises are handicapped in the sale of goods. Only an expanding market can provide a fruitful field for profitable investment and result in economic development of the country.

3) State the Reason behind Inter-Regional variations of National Income

For computing aggregate income of respective states in India, State Domestic Products (SDP) of various states are estimated regularly for every year by its government agencies. The data related to SDP estimates are widely in use by various agencies like Planning Commission, Finance Commission and other research organisations for assessing the degree of regional disparities and also for formulating necessary policies in connection with transfer of resources from the Centre to states.

The estimates of SDP can be successfully utilised for measuring the degree of development attained by a state. Accordingly the level of development attained by a state can also be measured by its per capita income which can again be compared with the all India average of per capita income.

The SDP estimates also work as useful indicators to show structural transformation, if any, among the constituent sectors of these states. Let us now look at the CSO estimates of per capita income of 15 major states of India to have a look at the dynamics of growth and the ratio of disparity between various states.

Table 3.7 reveals that during the 14-year period, i.e. from 1980-81 to 1993-94, the per capita income figures of most of the states, excepting a few rich states like, Punjab, Haryana and Maharashtra have gone for a little change.

Moreover, the relative ranking of the most of the states by per capita income has not shown any significant change excepting Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Rajasthan, Assam and Orissa whose relative ranking has shown a change to some extent.

During this period, the five top ranking states in respect of per capita income were Punjab, Haryana, Maharashtra, Gujarat and Himachal Pradesh.

But the five poorest states in respect of per capita income during the same period were Bihar, Orissa, Madhya Pradesh, Uttar Pradesh and Rajasthan. In 1993-94, Karanataka, Assam and Rajasthan have improved its relative position. The per capita income figure of Bihar was lowest among all the 16 states.

TABLE 3.7. Per Capita Income of Major States at 1980-81 Prices

(in ₹)

States	1980-81		1993-94	
	Per Capita Income	Rank	Per Capita Income	Rank
Punjab	2,674	1	3,865	1
Maharashtra	2,422	2	3,440	3
Haryana	2,370	3	3,456	2
Gujarat	1,948	4	2,526	4
Himachal Pradesh	1,704	5	2,074	7
West Bengal	1,611	6	2,084	6
Karnataka	1,528	7	2,171	5
Kerala	1,510	8	1,886	10
Tamil Nadu	1,498	9	2,056	8
Andhra Pradesh	1,380	10	1,840	11
Madhya Pradesh	1,333	11	1,588	14
Uttar Pradesh	1,278	12	1,606	13
Orissa	1,231	13	1,155	15
Rajasthan	1,222	14	1,717	12
Assam	1,200	15	1,915	9
Bihar	919	16	1,122	16

The table further reveals that the inter-state disparity in respect of per capita income has been widened during the 14 year period as a result of the strategy followed in planning for economic development in India. As a result of this, the disparity ratio between the richest state—Punjab and the poorest state—Bihar which was 2.91: 1 in 1980-81 gradually increased to 3.44: 1 in 1993-94.

Thus the planning process followed in India has totally failed in fulfilling one of its basic objectives of removing regional imbalances and maintaining balanced regional development throughout the country. The following table shows the disparity ratio in respect of per capita income of different states at constant prices during the recent years.

4) What are various determinants of economic development?

Economic Factors as determinants of Development

Economic factors as determinants of development include natural and human resources. Natural resources (those which are available as a free gift of nature) include land, water, minerals, fossil-fuel, forest products, wind and solar energy, etc. Natural resources can be broadly divided into three categories viz. Bioclimatic resources (land, water, forests and climatic environment), Fossil Fuel and non-fuel mineral resources. The countries, which are rich in natural resources have more scope for high economic growth. Many of the western countries development is due to their abundant availability of natural resources. But there are a lots of exception to this. For example, many countries in Africa are rich in natural resources, but poor in development. Human resources are also equally important. Few countries such as Japan are poor in natural resources but their human resources have turned those countries into epitome of success. Human resources are a prerequisite for development of a country. A country devoid of human resources cannot progress even if it is abundant with natural resources. Human resource can be divided into two categories viz. Physical labour and Human skill. Physical labour is the labour supply and skill is the knowledge embodied in humans. Human skill is formed when investment is made into education, health, training etc.

Non-economic Factors

Non-economic factors refer to socio-political factors or even religious factors. Political environment directly influences the economic development. Stable political administration generates faith of the people in the programmes and policies of the government. Accordingly, people venture to make investment in diverse areas of economic activity. Social institutions like caste system, joint family system and laws of inheritance play an important role in economic development. A corruption-free system is certainly more conducive to the process of growth and development, than the one where corruption is present.

5) Explain the role of NITI Aayog in India.

NITI Aayog has been entrusted with the role to co-ordinate 'Transforming our world: the 2030 Agenda for Sustainable Development' (called as SDGs). Moving ahead from the Millennium Development Goals (MDGs), SDGs have been evolved through a long inclusive process for achievement during 2016-2030. The SDGs cover 17 goals and 169 related targets resolved in the UN Summit meet 25-27 September 2015, in which India was represented at the level of Hon'ble Prime Minister. These SDGs will stimulate, align and accomplish action

over the 15-year period in areas of critical importance for the humanity and the planet. The task at hand for NITI Aayog is not merely to periodically collect data on SDGs but to act proactively fructify the goals and targets not only quantitatively but also maintaining high standards of quality. Ministry of Statistics and Programme Implementation (MoSPI) has already undertaken a parallel exercise of interaction with the ministries to evolve indicators reflecting the SDG goals and targets. To achieve these tasks, the draft mapping of the goals and targets as an initial step on proposed Nodal and other Ministries has been carried out in consultation with MoSPI. Further, as an illustration, the Centrally Sponsored Schemes (CSSs),including the 'core of the core', 'core' and 'optional' Schemes being implemented by the States have been mapped alongwith some of the recent initiatives undertaken by the Central Government. In addition, Ministries are implementing Central Sector Schemes and States are also implementing various State Schemes aligned with one or more SDGs.

6) Discuss the main features of Indian Population.

1. Large Size and Fast Growth:

The first main feature of Indian population is its large size and rapid growth. According to 2001 census, the population of India is 102.87 crore. In terms of size, it is the second largest population in the world, next only to China whose population was 127 crore in 2001. India's population was 23.6 crore in 1901 and it increased to 102.7 crore in 2001. In addition to its size, the rate of growth of population has been alarming since 1951. At present, India's population is growing at a rate of 1.9 percent per annum; 21 million people are added every year which is more than the population of Australia. This situation is called population explosion and this is the result of high birth rate and declining death rate.

2. Second Stage of Demographic Transition:

According to the theory of demographic transition, the population growth of a country passes through three different stages as development proceeds. The first stage is characterised by high birth rate and high death rate. So in this stage the net growth of population is zero. Till 1921, India was in the 1st stage of demographic transition.

The second stage is featured by high birth rate and declining death rate leading to the rapid growth of population. India entered the second stage of demographic transition after 1921. In 1921-30 India entered the 2nd stage, the birth rate was 464 per thousand and death rate was 363 per thousand. In 2000-01, birth rate was 25.8 and death rate declined to 85. This led to rapid growth of population. India is now passing through the second stage of demographic transition. While developed countries are in 3rd stage.

3. Rapidly Rising Density:

Another feature of India's population is its rapidly rising density. Density of population means to the average number of people living per square kilometer. The density of population in India was 117 per square km. in 1951 which increased to 324 in 2001. This makes India one of the most densely populated countries of the world. This adversely affects the land-man ratio. India occupies 2.4 per-cent of the total land area of the world but supports 16.7 per-cent of the total world population. Moreover, there is no causal relationship between density of population and economic development of a country. For example, Japan & England having higher density can be rich and Afghanistan & Myanmar having lower density can be poor. However in an underdeveloped country like India with its low capital and technology, the rapidly rising density is too heavy a burden for the country to bear.

4. Sex Ratio Composition Unfavourable to Female:

Sex ratio refers to the number of females per thousand males. India's position is quite different than other countries. For example the number of female per thousand males was 1170 in Russia, 1060 in U.K., 1050 in U.S.A. whereas it is 927 in India according to 1991 census. The sex ratio in India as 972 per thousand in 1901 which declined to 953 in 1921 and to 950 in 1931. Again, in 1951, sex ratio further declined to 946. In 1981, sex ratio reduced to 934 against 930 per thousand in 1971. During 1991, sex ratio was recorded 927 per thousand.

The sex ratio is 933 per thousand in 2001. State wise Kerala has more females than males. There are 1040 females per thousand males. The lowest female ratio was recorded in Sikkim being 832. Among the union territories Andaman and Nicobar Islands has the lowest sex ratio

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i.e. 760. Therefore, we can conclude that sex ratio composition is totally unfavourable to female.

7) State the reason for overpopulation in India.

India is the second biggest population in the world after China at a population rate of 1,210,193,422 in 2011. This means that India has reached over 1-billion people. There are some studies that predict India to have the biggest population in 2025, but this is a problem, because unlike China, India does not have a large landmass.

Two main common causes leading to over population in India are: The birth rate is higher that the death rate. The fertility rate is decreasing, but still is way too high, comparing the fertility rate to the other countries

Also, other important causes of overpopulation are;

- Early Marriage and Universal Marriage System

- Poverty & Illiteracy

- Old age & cultural norm

- Illegal migration

Early Marriage and Universal Marriage System

The legal age to get married is at 18, but in India marriage is a sacred tradition and obligation, putting pressure on younger woman to get married at an earlier age. Also, the concept of marriage at a younger age is happening more and more, to make the childbearing age longer.

Poverty & Illiteracy

Poverty is also a factor for the fast growth of population in India. Pour families think that the more kids you have the more income you earn. They also think that later when the parents are old, the children can take care of them. The death rate for children is also because of famine, so families try to have as much children as possible. Strangely enough, some Indians are also not using birth control methods, because they are either against it, not willing to discuss it, or unaware of the existence of it. These are all causes for the overpopulation in India

8) Discuss the New Economic Policy 1991.

The main objectives behind the launching of the New Economic policy (NEP) in 1991 by the union Finance Minister Dr. Manmohan Singh are stated as follows:

1. The main objective was to plunge **Indian Economy** in to the arena of 'Globalization and to give it a new thrust on market orientation.

2. The NEP intended to bring down the rate of inflation

3. It intended to move towards higher economic growth rate and to build sufficient foreign exchange reserves.

4. It wanted to achieve economic stabilization and to convert the economy into a market economy by removing all kinds of un-necessary restrictions.

5. It wanted to permit the international flow of goods, services, capital, human resources and technology, without many restrictions.

6. It wanted to increase the participation of private players in the all sectors of the economy. That is why the reserved numbers of sectors for government were reduced. As of now this number is just 2.

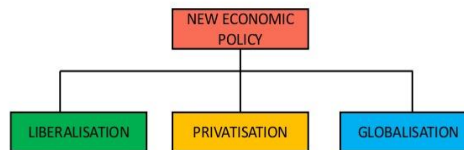
Beginning with mid-1991, the govt. has made some radical changes in its policies related to foreign trade, Foreign Direct Investment, exchange rate, industry, fiscal discipline etc. The various elements, when put together, constitute an economic policy which marks a big departure from what has gone before.

The thrust of the **New Economic Policy** has been towards creating a **more competitive environment** in the economy as a means to **improving the productivity and efficiency** of the system. This was to be achieved by removing the barriers to entry and the restrictions on the growth of firms.

9) Discuss Liberalization, Privatization & Globalization

Main Measures Adopted in the New Economic Policy

Due to various controls, the economy became defective. The entrepreneurs were unwilling to establish new industries (because laws like **MRTP Act 1969** de-motivated entrepreneurs). Corruption, undue delays and inefficiency risen due to these controls. Rate of economic growth of the economy came down. So in such a scenario economic reforms were introduced to reduce the restrictions imposed on the economy.



Following steps were taken under the Liberaliation measure:

(i) Free determination of interest rate by the commercial Banks:

Under the policy of liberalisation interest rate of the banking system will not be determined by RBI rather all commercial Banks are independent to determine the rate of interest.

(ii) Increase in the investment limit for the Small Scale Industries (SSIs):

Investment limit of the small scale industries has been raised to Rs. 1 crore. So these companies can upgrade their machinery and improve their efficiency.

(iii) Freedom to import capital goods:

Indian industries will be free to buy machines and raw materials from foreign countries to do their holistic development.

(v) Freedom for expansion and production to Industries:

In this new liberalized era now the Industries are free to diversify their production capacities and reduce the cost of production. Earlier government used to fix the maximum limit of production capacity. No industry could produce beyond that limit. Now the industries are free to decide their production by their own on the basis of the requirement of the markets.

(vi) Abolition of Restrictive Trade Practices:

According to **Monopolies and Restrictive Trade Practices (MRTP) Act 1969**, all those companies having assets worth Rs. 100 crore or more were called MRTP firms and were subjected to several restrictions. Now these firms have not to obtain prior approval of the Govt. for taking investment decision. Now MRTP Act is replaced by the competition Act, 2002.

Cess: Meaning and Types in India

1. Liberalisation

Removal of Industrial Licensing and Registration:

Previously private sector had to obtain license from Govt. for starting a new venture. In this policy private sector has been freed from licensing and other restrictions.

Industries licensing is necessary for following industries:

(i) Liquor
(ii) Cigarette
(iii) Defence equipment
(iv) Industrial explosives
(v) Drugs
(vi) Hazardous chemicals

2.* Privatisation*:

Simply speaking, privatisation means permitting the private sector to set up industries which were previously reserved for the public sector. Under this policy many PSU's were sold to private sector. Literally speaking, privatisation is the process of involving the private sector-in the ownership of Public Sector Units (PSU's). The main reason for privatisation was in currency of PSU's are running in losses due to political interference. The managers cannot work independently. Production capacity remained under-utilized. To increase competition and efficiency privatisation of PSUs was inevitable.

Step taken for Privatisation:

The following steps are taken for privatisation:

1. Sale of shares of PSUs:

Indian Govt. started selling shares of PSU's to public and financial institution e.g. Govt. sold shares of MarutiUdyog Ltd. Now the private sector will acquire ownership of these PSU's. The share of private sector has increased from 45% to 55%.

2. Disinvestment in PSU's:

The Govt. has started the process of disinvestment in those PSU's which had been running into loss. It means that Govt. has been selling out these industries to private sector. Govt. has sold enterprises worth Rs. 30,000 crores to the private sector.

3. Minimisation of Public Sector:

Previously Public sector was given the importance with a view to help in industralisation and removal of poverty. But these PSU's could not able to achieve this objective and policy of contraction of PSU's was followed under new economic reforms. **Number of industries reserved for public sector was reduces from 17 to 2.**

(a) Railway operations

(b) Atomic energy

***4.* Globalization:**

Literally speaking Globalisation means to make Global or worldwide, otherwise taking into consideration the whole world. Broadly speaking, Globalisation means the interaction of the domestic economy with the rest of the world with regard to foreign investment, trade, production and financial matters.

Steps taken for Globalisation:

Following steps are taken for Globalisation:

(i) Reduction in tariffs:

Custom duties and tariffs imposed on imports and exports are reduced gradually just to make India economy attractive to the global investors.

(ii)Long term Trade Policy:

Forcing trade policy was enforced for longer duration.

10) Discuss the Problem of Unemployment in India.

Unemployment is a term referring to individuals who are employable and seeking a job but are unable to find a job. Furthermore, it is those people in the workforce or pool of people who are available for work that does not have an appropriate job. Usually measured by the unemployment rate, which is dividing the number of unemployed people by the total number of people in the workforce, unemployment serves as one of the indicators of an economy's status.

Types of unemployment

There are basically four types of unemployment: (1) demand deficient, (2) frictional, (3) structural, and (4) voluntary unemployment.

#1 Demand deficient unemployment

This is the biggest cause of unemployment that happens especially during a recession. When there is a reduction in the demand for the company's products or services, they will most likely cut back on their production, making it unnecessary to retain a wide workforce within the organization. In effect, workers are laid off.

#2 Frictional unemployment

Frictional unemployment refers to workers who are in between jobs. An example is a worker who recently quit or was fired and is looking for a job in an economy that is not experiencing a recession. It is not an unhealthy thing because it is usually caused by workers looking for a job that is most suitable to their skills.

#3 Structural unemployment

Structural unemployment happens when the skills set of a worker does not match the skills demands of the jobs available or if the worker cannot reach the geographical location of a job. An example is a teaching job that requires relocation to China, but the worker cannot secure a work visa due to certain visa restrictions. It can also happen when there is a technological change in the organization, such as workflow automation.

#4 Voluntary unemployment

Voluntary unemployment happens when a worker decides to leave a job because it is no longer financially fulfilling. An example is a worker whose take-home pay is less than his or her cost of living.

Causes of unemployment

Unemployment is caused by various reasons that come from both the demand side, or employer, and the supply side, or the worker.

From the demand side, it may be caused by high interest rates, global recession, and financial crisis. From the supply side, frictional unemployment and structural employment play a great role.

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Effects

The impact of unemployment can be felt by both the workers and the national economy and can create a ripple effect.

Unemployment causes workers to suffer financial difficulties that may lead to emotional destruction. When it happens, consumer spending, which is one of an economy's key drivers of growth, goes down, leading to a recession or even a depression when left unaddressed.

Unemployment results in lowered purchasing power, which, in turn, causes lowered profits for businesses and leads to budget cuts and workforce reductions. It creates a cycle that goes on and on and on. Everyone loses in the end.

Long-term unemployment vs. Short-term unemployment

Unemployment that lasts longer than 27 weeks even if the individual has sought employment in the last four weeks is called long-term unemployment. Its effects are far worse than short-term unemployment for obvious reasons, and the following are noted as some of its effects.

- A huge 56% of the long-term unemployed reported a decrease in their income.
- It seems that financial problems are not the only effects of long-term unemployment as 46% of those in such a state reported experiencing strained family relationships. The figure is relatively higher than the 39% percent who weren't unemployed for as long.
- Another 43% of the long-term unemployed reported a significant effect on their ability to achieve their career goals.
- Sadly, long-term unemployment led to 38% of these individuals to lose their self-respect and 24% to seek professional help.

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11) Discuss various problems of Small Scale Industries in India.

The following are the problems faced by Small Scale Industries:

1. Poor capacity utilization

In many of the Small Scale Industries, the capacity utilization is not even 50% of the installed capacity. Nearly half of the machinery remains idle. Capital is unnecessarily locked up and idle machinery also occupies space and needs to be serviced resulting in increased costs.

2. Incompetent management

Many Small Scale Industries are run in an incompetent manner by poorly qualified entrepreneurs without much skill or experience. Very little thought has gone into matters such as demand, production level and techniques, financial availability, plant location, future prospects etc. According to one official study, the major reason for SSI sickness is deficiency in project Management i.e., inexperience of promoters in the basic processes of production, cash flow etc

3. Inadequate Finance

Many Small Scale Industries face the problem of scarcity of funds. They are not able to access the domestic capital market to raise resources. They are also not able to tap foreign markets by issuing ADR's (American Depository Receipts) GDR's (Global Depository Receipts) etc because of their small capital base. Banks and financial institutions require various procedures and formalities to be completed. Even after a long delay, the funds allocated are inadequate.
Bank credit to the small scale sector as a percentage of total credit has been declining. It fell from 16% in 1999 to 12.5% in 2002. Small Scale Industries are not able to get funds immediately for their needs. They have to depend on private money lenders who charge high interest. Finance, as a whole, both long and short term, accounts for as large as 43% of the sector's sickness.

4. Raw material shortages

Raw materials are not available at the required quantity and quality. Since demand for raw materials is more than the supply, the prices of raw materials are quite high which pushes up the cost. Scarcity of raw materials results in idle capacity, low production, inability to meet demand and loss of customers.

5. Lack of marketing support

Small Scale Industries lack market knowledge with regard to competitors, consumer preferences, market trends. Since their production volume is small and cannot meet demand for large quantities their market is very restricted. Now with the process of liberalization and globalization they are facing competition from local industries as well as foreign competitors who sell better quality products at lower prices. For e.g. heavily subsidized but better quality imports from China has made most of the Indian SSI units producing toys, electronic goods, machine tools, chemicals, locks and paper etc., unviable.

12) Discuss Regional Imbalances in India.

Historical Factor:

Historically, regional imbalances in India started from its British regime. The British rulers as well as industrialists started to develop only those earmarked regions of the country which as per their own interest were possessing rich potential for prosperous manufacturing and trading activities.

Geographical Factors:

Geographical factors play an important role in the developmental activities of a developing economy. The difficult terrain surrounded by hills, rivers and dense forests leads to increase in the cost of administration, cost of developmental projects, besides making mobilisation of resources particularly difficult.

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Most of the Himalayan states of India, i.e., Himachal Pradesh, Northern Kashmir, the hill districts of Uttar Pradesh and Bihar, Arunachal Pradesh and other North-Eastern states, remained mostly backward due to its inaccessibility and other inherent difficulties.

Adverse climate and proneness to flood are also responsible factors for poor rate of economic development of different regions of the country as reflected by low agricultural productivity and lack of industrialisation. Thus these natural factors have resulted uneven growth of different regions of India.

Locational Advantages:

Locational advantages are playing an important role in determining the development strategy of a region. Due to some locational advantages, some regions are getting special favour in respect of site selections of various developmental projects.

While determining the location of iron and steel projects or refineries or any heavy industrial project, some technical factors included in the locational advantage are getting special considerations. Thus regional imbalances arise due to such locational advantages attached to some regions and the locational disadvantages attached to some other backward regions.

Failure of Planning Mechanism:

Although balanced growth has been accepted as one of the major objectives of economic planning in India, since the Second Plan onwards but it did not make much headway in achieving this object. Rather, in real sense, planning mechanisms has enlarged the disparity between the developed states and less developed states of the country.

In respect of allocating plan outlay relatively developed states get much favour than less developed states.

13) What is Parallel Economy?

Parallel economy is the functioning of an unsanctioned sector in the economy whose objectives run in opposite to the objectives of official sanctioned or legitimate sectors. The parallel economy has political, commercial, legal, industrial, social, and ethical aspects.

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Prevalence of black money gives rise to parallel economy. The term parallel economy is also referred as block economy uncounted economy subterranean economy or unsanctioned economy.

A striking point about parallel economy is that it promotes the type of economic activities where undisclosed income remains hidden to tax authorities. Usually, conspicuous consumption, real estate, investment in foreign assets, criminal activities, corruption ect are the are typical spending pattern in the parallel economy. Transactions are executed in an opaque manner.

14) Discuss India Foreign Trade.

Foreign trade has got an important place in the economic development of a country. What is the importance of foreign trade for economic development of country is stated below:

Firstly, foreign trade helps to produce those commodities which have a comparative cheaper cost than others. It results in less cost of production in producting a commodity. If all the countries adopt this procedure to produce these goods in. which they have less comparative cost, it will lead to availability of goods at a lower price.

Secondly, foreign trade increases the scope of market because of domestic demand and foreign demand for the product. So there is mass production. If the production of goods increases, average cost declines and price of goods declines.

Thirdly, foreign trade helps the people to get different varieties of goods both in quantities terms and qualitative terms.

Fourthly, foreign trade helps a developing country like India in its economic development. Iron and steel industry, has been established due to stored iron-ore and coal. But for the establishment of this type industry, we have to import technical knowledge from foreign countries. Had there been no foreign trade, then it would not have been only difficult but also too expensive.

Without foreign trade, it is not possible to fulfill the demand for petroleum products and it will retard the economic development of our country. There is also scarcity of consumer goods due to natural calamities or due to any other reason. During the time scarcity of consumer goods, we import these goods from foreign countries and keep prices stable which help people to get their commodities.

Due to all these above reasons, foreign trade has got an important place in every country.

15) Discuss India Balance of Payment.

The Balance of Payments position improved to USD 433.7 billion by September, 2019 from USD 412.9 billion of forex reserves in March, 2019. This is on the back of **Current Account Deficit (CAD) narrowing further to 1.5 per cent of GDP in the first half of 2019-20** from 2.1 per cent in 2018-19. Net FDI inflows remained buoyant attracting USD 24.4 billion in the first eight months of 2019-20, much higher than the corresponding period of 2018-19. Net overseas remittances in the first half of 2019-20 were more than 50 per cent of total receivables in 2018-19, standing at USD 38.4 billion. As per World Bank report of 2019, India's 17.5 million diaspora made it the top remittance-recipient country in 2018.

India's foreign reserves are comfortably placed at USD 461.2 billion as on 10th January, 2020. Further, External Debt levels remained low at 20.1 per cent of GDP by the end of September 2019. India's external debt liabilities to GDP, including debt and equity components, has increased at the end of June 2019, primarily driven by increase in FDI, portfolio flows and External Commercial Borrowings (ECBs).

Composition of Trade

The Survey noted that India's merchandise trade balance improved from 2009-14 to 2014-19 on the back of decline in crude prices. **The merchandise Exports-to-GDP ratio declined to 11.3 per cent**, due to weakened global demand and heightened trade tensions over 2018-19 to H1 of 2019-20.Petroleum, Oil and Lubricants (POL), precious stones, drug formulations &biologicals, gold and other precious metals continue to be the top exported commodities; the largest export destinations being United States of America (USA), followed by United Arab Emirates (UAE), China and Hong Kong.

The merchandise Imports-to-GDP ratio also declined, entailing a net positive impact on the BoP position. This is because of the large presence of crude oil in the import basket. Share of gold imports, another important component of import basket, has remained stable in spite of rise in gold prices. Crude petroleum, gold, petroleum products, coal, coke &briquittes constitute top import items. India's imports continue to be largest from China, followed by USA, UAE and Saudi Arabia in that order.

The Economic Survey 2019-20 further observes that non-POL-non-gold imports are understood to be positively correlated with GDP growth. However, non-POL-non-oil imports fell as a proportion to GDP from 2009-14 to 2014-19 when GDP growth accelerated. This may have happened because of consumption driven growth while the investment rate declined. Continuous decline in investment rate decelerated GDP growth, weakened consumption, dampened the investment outlook; which further reduced GDP growth and along with it, non-POL-non-gold imports as a proportion of GDP from 2018-19 to H1 of 2019-20.

Global Economic Environment

In sync with an estimated 2.9 percent growth in global output in 2019, global trade is estimated to grow at 1.0 percent after having peaked in 2017 at 5.7 percent. The slowdown in world trade reflects a confluence of factors, including a slowdown in investment, reduced spending on capital goods and decline in trade of cars and car parts. The Survey adds that global trade is projected to recover to 2.9 percent in 2020, with recovery in global economic activity, although the future is ridden with uncertainties over trade tensions and change in global value chain structures.

Trade Facilitation

Under trade facilitation, India has improved its ranking from 143 in 2016 to 68 in 2019 under the indicator, "Trading across Borders", monitored by World Bank in determining the overall ranking of around 190 countries in its Ease of Doing Business Report.In a recently released UN Global Survey on Digital and Sustainable Trade Facilitation 2019, India not only improved its overall trade facilitation score from 69 per cent to 80 per cent but also outperformed other countries in the Asia-Pacific and South and South-West Asia region. The Survey highlighted schemes like Direct Port Delivery (DPD) for imports and Direct Port Entry(DPE) for exports to encourage faster clearances, 'e-Sanchit' for lodging supporting documents online, apart from the next-generation software for Indian Customs - "Turant".

Trade Logistics

The logistics industry of India is a sunshine sector, currently estimated to be around US$ 160 billion and shortly expected to touch US$ 215 billion. According to World Bank's Logistics Performance Index, India ranks 44th in 2018 globally, up from 54th rank in 2014.The Economic Survey observed that driving down logistics cost from estimated current levels of 13-14 per cent of GDP to 10 per cent in line with global standards is the next step forward, for which interventions like Fast-tag, Bharatmala, Sagarmala and Dedicated Freight Corridors will be a huge boost.

16) Explain the Fiscal Policy of India.

There are several component policies or a mix of policies that contribute to the fiscal policy. These include subsidy, taxation, welfare expenditure, etc. Also, there are a certain investment and disinvestment policies and debt and surplus management that contributes to fiscal policies.

Objectives of a Fiscal Policy

- In order to stabilize the pricing level in the economy.
- The main objective is to achieve and maintain the level of full employment in the country.
- Also, to stabilize the growth rate in the economy.
- Also, promote the economic development in a country.
- In order to maintain the level of balance of payment in the economy.

Various Types of Fiscal Policies

Contractionary Fiscal Policy

This involves cutting government spending or raising taxes. Thus, the tax revenue generated is more than government spending. Also, it cuts on the aggregate demand in the economy. So, the economic growth leading to the reduction in inflationary pressures of the economy.

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Expansionary Fiscal Policy

This is generally used to give a boost to the economy. Thus, it speeds up the growth rate of the economy. Also, during the recession period when the growth in national income is not enough to maintain the current living of the population. So, a tax cut and an increase in government spending would boost economic growth and decrease the unemployment rates. Although this is not a sustainable solution.Because this can lead to a budget deficit. Thus, the government should use this with caution.

Neutral Fiscal Policy

This policy implies a balance between government spending and Furthermore, it means that tax revenue is fully used for government spending. Also, the overall budget outcome will have a neutral effect on the level of economic activities.

Types of Fiscal Policy

There are major components to the fiscal policies and they are

Expenditure Policy

Government expenditure includes capital expenditure and revenue expenditure. Also, the government budget is the most important instrument that embodies government expenditure policy. Furthermore, the budget is also for financing the deficit. Thus, it fills the gal between income and government spending.

Taxation Policy

The government generates its revenue by imposing both indirect taxes and direct taxes. Thus, it is important for the government to follow a judicial system for taxation and impose correct tax rates. This is because of two reasons. The higher the tax, the reduction in the purchasing power of the people.

This will lead to a decrease in investment and production. Furthermore, the lower tax will leave more money with people that lead to high spending and thus higher inflation.

Surplus and Debt Management

When the government receives more amount than it spends than it is known as surplus.Also, when the spending is more than the income than it is known as a deficit. In order to fund the deficits, the government needs to borrow from domestic or foreign sources.

17) Discuss the Importance of Economic Planning

Economic Planning is a term used to describe the long term plans of government to co-ordinate and develop the economy with efficient use of resources. Economic planning in India was stared in 1950 after independence, it was deemed necessary for *economic development* and growth of the nation.

The idea of Five year planning was taken from the erstwhile Soviet Union under socialist influence of first Prime Minister Jawaharlal Nehru.

Long term objectives of our Five Year Plans are:

- A high rate of growth to improve the standard of living of residents.
- Economic self-reliance.
- Social justice and reduction of inequalities.
- Modernization of the economy.
- Economic stability for prosperity.

An overview of all plans implemented in India is given below. The first eight plans had their emphasis on growing the public sector with massive investments in basic and heavy industries, but since the launch of the Ninth Plan in 1997, attention has shifted towards making government a facilitator in growth.

18) Discuss the Feature of Five Year Plan in India.

From 1947 to 2017, the Indian economy was premised on the concept of planning. This was carried through the **Five-Year Plans**, developed, executed, and monitored by the Planning Commission (1951-2014) and the NITI Aayog (2015-2017). With the prime minister as the ex-officio chairman, the commission has a nominated deputy chairman, who holds the rank of a cabinet minister. Montek Singh Ahluwalia is the last deputy chairman of the commission (resigned on 26 May 2014). The Twelfth Plan completed its term in March 2017. Prior to the

Fourth Plan, the allocation of state resources was based on schematic patterns rather than a transparent and objective mechanism, which led to the adoption of the Gadgil formula in 1969. Revised versions of the formula have been used since then to determine the allocation of central assistance for state plans. The new government led by NarendraModi, elected in 2014, has announced the dissolution of the Planning Commission, and its replacement by a think tank called the NITI Aayog (an acronym for National Institution for Transforming India).

Objectives

The main objective of the Ninth Five-Year Plan was to correct historical inequalities and increase the economic growth in the country. Other aspects which constituted the Ninth Five-Year Plan were:

- Population control.
- Generating employment by giving priority to agriculture and rural development.
- Reduction of poverty.
- Ensuring proper availability of food and water for the poor.
- Availability of primary health care facilities and other basic necessities.
- Primary education to all children in the country.
- Empowering the socially disadvantaged classes like Scheduled castes, Scheduled tribes and other backward classes.
- Developing self-reliance in terms of agriculture.
- Acceleration in the growth rate of the economy with the help of stable prices.

Strategies

- Structural transformations and developments in the Indian economy.
- New initiatives and initiation of corrective steps to meet the challenges in the economy of the country.
- Efficient use of scarce resources to ensure rapid growth.
- Combination of public and private support to increase employment.
- Enhancing high rates of export to achieve self-reliance.
- Providing services like electricity, telecommunication, railways etc.
- Special plans to empower the socially disadvantaged classes of the country.
- Involvement and participation of Panchayati Raj institutions/bodies and Nagar Palikas in the development process.

Performance

- The Ninth Five-Year Plan achieved a GDP growth rate of 5.4% against a target of 6.5%
- The agriculture industry grew at a rate of 2.1% against the target of 4.2%
- The industrial growth in the country was 4.5% which was higher than that of the target of 3%
- The service industry had a growth rate of 7.8%.
- An average annual growth rate of 6.7% was reached.

19) Discuss the importance of Industrial Policy 1991.

Industrial Licensing Policy

This policy abolished the Industrial licensing for all industries except for a short list of 18 industries. This list of 18 industries was further pruned in 1999 whereby the number reduced to six industries viz. drugs and pharmaceuticals, hazardous chemicals, explosives such as gun powder and detonating fuses, tobacco products, alcoholic drinks, and electronic, aerospace and defence equipment. The compulsion for obtaining prior approval for setting units in metros was also removed.

However, in this policy, industries reserved for the small scale sector were continued to be so reserved.

Foreign Investment and Capital

This was the first Industrial policy in which foreign companies were allowed to have majority stake in India. In 47 high priority industries, up to 51% FDI was allowed. For export trading houses, FDI up to 74% was allowed. Today, there are numerous sectors in the economy where government allows 100% FDI.

34 Industries were placed under the automatic approval route for direct foreign investment up to 51 percent foreign equity. It was promised that there will be no bottlenecks of any kind in this process provided that foreign equity covers the foreign exchange requirement for imported capital goods. A promise to carry out some amendments in Foreign Exchange Regulation Act (1973) was also made. (The act was later replaced by FEMA in 1999)

NRIs were allowed to 100% equity investments on non-repatriation basis in all activities except the negative list.

A provision was made that in cases where imported capital goods are required, automatic clearance is given, provided there is foreign exchange availability is ensured through foreign equity. The government also established a special empowered board called *Foreign*

Investment Promotion Board (FIPB) to negotiate with international firms and approve FDI in selected areas.

Foreign Technology Agreements

Automatic permission was given for foreign technology agreements in high priority industries up to a lump sum payment of Rs. 1 crore, 5% royalty for domestic sales and 8% for exports, subject to total payment of 8% of sales over a 10 year period from date of agreement or 7 years from commencement of production. Further, government eased hiring of foreign technicians.

Review in Public Sector Investments

A promise was made to review the portfolio of public sector investments with a view to focus the public sector on strategic, high-tech and essential infrastructure. This indicated a disinvestment of the public sector. The PSUs which were chronically sick and which are unlikely to be turned around were to be referred to the Board for Industrial and Financial Reconstruction (BIFR). It was promised that Boards of public sector companies would be made more professional and given greater powers.

Amendments to MRTP Act

The MRTP Act will be amended to remove the threshold limits of assets in respect of MRTP companies and dominant undertakings. This eliminates the requirement of prior approval of Central Government for establishment of new undertakings, expansion of undertakings, merger, amalgamation and takeover and appointment of Directors under certain circumstances. The MRTP Limit for MRTP companies was made Rs. 100 Crore. Currently, MRTP act is replaced by Competition Act 2002.

Definition of Tiny Sector

The definition of Tiny Unit was changed as a unit having an investment limit of Less than Rs. 5 Lakh.

National Renewal Fund to provide safety net for labourers

Via this policy, the Government announced to establish a National Renewal Fund (NRF) to provide a social safety net to the labour. This fund was established in 1992 and two schemes were brought under this- first Voluntary Retirement Scheme (CRS) and another re-training scheme for rationalised workers in organised sector. The fund monies would be used to make payments under these two schemes. This fund was later abolished in 2000.

Why NRF was abolished?

The NRF was established to provide relief to the workers affected by technological changes, privatisation of public sector units and closure of public sector units. Those who lost their jobs would be either paid money under VRS scheme or will be retrained / rehabilitated. The VRS scheme was under DIPP at that time. What happened was that for around 10 years, bulk of the payments in NRF was paid for VRS only; the fund did not adequately serve the stated objective of "re-training and rehabilitation". Further, initially the private sector was also listed as its beneficiary, but later it was felt that only public sector should be exclusively benefitted from this fund. This, this fund was no more than a "golden handshake scheme". Due to this NRF was abolished and the VRS was shifted to Department of Public Enterprises (DPE).

Tangible outcomes of the Industrial Policy 1991

- This policy made Licence, Permit and Quota Raj a thing of past. The process of liberalization is continuing. The 1991 policy attempted to liberalise the economy by removing bureaucratic hurdles in industrial growth.
- The role of public sector was limited. Only 2 sectors were finally left reserved for public sector. This reduced burden on the government. A process of either transforming or selling off the sick units started. The process of disinvestment in PSUs also started.
- The policy provided easier entry of multinational companies, privatisation, removal of asset limit on MRTP companies, liberal licensing. All this resulted in increased competition, that led to lower prices in many goods such as electronics prices. This brought domestic as well as foreign investment in almost every sector opened to private sector.

20) What are the various problems faced by India with regards to Poverty?

Poverty is often defined by economists and social workers with reference to certain basic amenities such as food, floor space per person, medical care, etc. When a family lacks these basic amenities, it is considered poor, regardless of its income.

An alternative approach is to define poverty **"in terms of both minimum needs of food consumption",** or, more specifically, calorie or nutrition requirements to sustain life is determined first. This is then converted into an income level for a particular base year. Families with income less than the **"critical level"** are classified as poor regardless of size and actual living conditions as a result of past savings, accumulated wealth and private gifts.

Poverty Estimates in India:

Poverty is of two types absolute and relative. Absolute poverty is measured by the percentage of people living below the poverty line or by the head count ratio. Relative poverty refers to income inequality.

In measuring poverty the first step is to set a standard and then estimate the number of persons who satisfy the standard in different regions of the country and at different points of time. However, specification of that standard has to be arbitrary, reflecting a social value judgment.

The poverty line is updated by estimating what would it cost to obtain the base year consumption basket with prices prevailing in subsequent years. The process has one major drawback; it does not take into account the substitution that consumers may make when the relative prices of some items of consumption change or their tastes change.

Causes of Mass Poverty:

Now, we will mention some factors which are operating in India to cause mass poverty despite planned efforts to reduce such poverty.

In the first place, ownership of industries in the hands of a few small businessmen in India has made the distribution of income inequitable. And poverty is a reflection of inequality. These people have accumulated huge profit and, hence, wealth.

Secondly, in the initial stage of planning, planners placed a great deal of emphasis on growth objective as growth itself would take care of inequality or poverty. The Fifth Plan stated that a higher rate of growth of national income would itself enlarge employment opportunities and, hence, standards of living of poor masses.

But this did not happen. In a society characterised by gross inequality in the distribution of assets, economic growth itself failed to reduce poverty. Thus, the problem of poverty in India lies in the economic structure—"skewed distribution of the ownership of income-yielding assets."

FINANCIAL MODELLING (210)

Unit -1

1. Explain financial modeling in your words.

Ans. Financial modeling is one of the most highly valued, but thinly understood, skills in finance. The objective is to combine accounting, finance, and business metrics to create an abstract representation of a company in Excel, forecasted into the future. This guide to financial modeling for beginners and “dummies” will teach you all the basics a beginner needs to know!

Forecasting a company’s operations into the future can be very complex. Each business is unique and requires a very specific set of assumptions and calculations. Excel is used because it is the most flexible and customizable tool available. Software, as an alternative, can be too rigid and doesn’t let you understand each line of the business the way Excel does.

Example of Financial modeling In Excel for dummies one of the most multipurpose and hot finance skills in today’s scenario. Financial models play a vital role in most major business decisions. Generally, the financial model is prepared whenever any company is planning to expand their business, evaluating particular project (also called project finance modeling), Merger or acquisition of particular (target) company and future forecasting of financials. For startup companies, the preparation of financial Model is important for further business planning and for big organizations Financial Modeling In Excel plays an important role in long-term planning, expansion, development, cost planning etc. Commonly financial models are prepared in excel spreadsheets.

2. Write some example of Financial modeling In Excel.

Ans. There is some examples of financial modeling In Excel term .

Forecasting: Forecasting means Company’s expected financial position in the future.

Assumptions: To build a financial model you need to make some Hypothetical assumptions. Now, what does it means? Assumptions are used to present a condition that is not necessarily expected to occur but is consistent with the purpose of the projection.

Financial statement Analysis: Financial Analysis means analysis of financial statements like income statement, Balance sheet, Cash Flow Statement using various techniques.

In this financial modeling for beginners and “dummies” guide, we have laid out the basic steps of how to build a financial model.

Historical data

Input at least 3 years of historical financial information for the business.

Ratios & metrics

Calculate the historical ratios/metrics for the business such as margins, growth rates, asset turnover, inventory changes, etc.

Assumptions

Continue building the ratios and metrics into the future by making assumptions about what future margins, growth rates, asset turnover, and inventory changes will be going forward.

Forecast

Forecast the income statement, balance sheet, and cash flow statement into the future by reversing all the calculations you used to calculate historical ratios & metrics. In other words, use the assumptions you made to fill in the financial statements.

Valuation

After the forecast is built, the company can be valued using the Discounted Cash Flow (DCF) analysis method.

3.What is conditional formatting?

Ans. Conditional formatting is useful for highlighting certain results in an Excel financial model. For example, breaches in financial ratios or bank covenants. If a financial ratio in the model is breached, then Excel formatting automatically changes so that the key result is highlighted in a bright colour. The instructions below will get you started if you have one of the later versions of Excel (2007 and beyond).

Financial modeling & conditional formatting: setting the condition

Next set the condition that triggers the covenant breach. Under the “Format only cells with” section, select “Cell Value” “equal to”. In the next box type this text: =”Code Red”.

Conditional formatting: set the format

Next, set the format that applies should the breach occur. Towards the bottom of the “New Formatting Rule” box, click on the “Format” button. Should the breach occur, we’re going to highlight the background of the result cell bright red, with bold white text. After you have clicked on the “Format” button, on the “Fill” tab, select the colour red. On the “Font” tab, select a white and bold font. Click on “OK”. The format you have selected is now previewed in the bottom of the “New Formatting Rule” box. Click on “OK”.

4. Write a short note on pivot table.

Ans. A pivot table allows you to organize, sort, manage and analyze large data sets in a dynamic way. Pivot tables are one of Excel’s most powerful data analysis tools, used extensively by financial analysts around the world. In a pivot table, Excel essentially runs a database behind the scenes, allowing you to easily manipulate large amounts of information.

Below is a step by step guide of how to insert a pivot table in Excel:

Organize the data

The first step is to ensure you have well-organized data that can easily be turned into a dynamic table. This means ensuring that all data is in the proper rows and columns. If data is not properly organized, then the table will not work properly.

Insert the pivot table

In step two, you select the data you want to include in the table and then, on the Insert Tab on the Excel ribbon, locate the tables Group and select Pivot Table.

When the dialog box comes up, ensure the right data are selected and then decide if you want the table to be inserted as a new worksheet, or located somewhere on the current worksheet. This is entirely up to you and your personal preference.

Setup the pivot table fields

Once you've completed step two, the "PivotTable Fields" box will appear. This is where you set the fields by dragging and dropping the options that are listed as available fields. You can also use the tick boxes next to the fields to select the items you want to see in the table.

Sort the table

Now that the basic pivot table is in place, you can sort the information by multiple criteria, such as name, value, count, or other things.

To sort the date, click on the autosort button (highlighted in the image below) and then click "more sort options" to pick from the various criteria you can sort by.

Another option is to right-click anywhere in the table and then select Sort, and then "more sort options".

Filter the data

Adding a filter is a great way of sorting the data very easily. In the above example, we showed how to sort, but now with the filter function, we can see the data for specific sub-sections with the click of a button.

In the image below you can see how, by dragging the "channel" category from the list of options down to the Filters section, all of a sudden an extra box appears at the top of the pivot table that says "channel", indicating the filter has been added.

In accounting and financial analysis, this is a very important feature, as it's often necessary to move back and forth between units/volume (the count function) and total cost or revenue (the sum function).

Adding an extra dimension to the pivot table

At this point, we only have one category in the rows and one in the columns (the values). It may be necessary, however, to add an extra dimension. A brief warning, however, that this could significantly increase the size of your table.

In order to do this, click on the table so that the "fields" box pops up and drag an extra category, such as "dates", into the columns box. This will subdivide each column heading into additional columns for each date contained in the data set.

5. Explain goal seeking.

Ans. Goal seeking is the ability to calculate backward to obtain an input that would result in a given output. This can also be called what-if analysis or back-solving. It can either be attempted through trial and improvement or more logical means. Basic goal seeking functionality is built into most modern spreadsheet packages such as Microsoft Excel.

According to O'Brien and Marakas,[1] optimization analysis is a more complex extension of goal-seeking analysis. Instead of setting a specific target value for a variable, the goal is to find the optimum value for one or more target variables, given certain constraints. Then one or more other variables are changed repeatedly, subject to the specified constraints, until you discover the best values for the target variables.

6. Write some advance excel funtions.

Ans. Excel has its immense purposeful applications. 95% of the users apply the basic form. There are functions and advanced excel formula that can be used for complex calculations. The functions are designed for easy lookup and formatting of large pool of data whereas the advanced excel formula are implemented to get new information from a given particular set of data.

1. VLOOKUP

The function is used to look up for a piece of information in a large segment of data and pull that data to your newly formed table. You have to visit the function option. The insert function tab will let you enter 'VLOOKUP' or you can find it in the list. Once it is selected a wizard box will open with different set of box options.

advanced excel formulas

You can enter your variables into:

Lookup_value

This is the option where your typed variables will go to look for the values in the cells of the larger table for information.

Table Array

It sets the range of the large table from where the information will be drawn. It sets the extent of the data you want to pick.

Col_index_num

This command box specifies the column from where data has to be pulled.

Range_lookup

Here you enter either true or false. The true option will give the set of information which is the closest to what you want to find, when anything does not match with the variables. When you enter false it will give you the exact value you are looking for or will show #N/A when the data is not found.

2. Sum Function

This function is mot popularly used to sum a group of numbers in the particular column. The sum function has a dedicated button for itself in the Home tab which can be used to sum after selecting the part of the column.

3. MAX MIN function

This function is used to pull the maximum and the minimum values from the selected set of data. To get the maximum value you have to enter 'MAX' in the function tab and to get the minimum value you have to enter 'MIN'. The function will automatically draw the values from the primary data table.

4. IF Function

The IF function is used to pull an information of truth and false regarding a parameter set in the variable box. The IF statement is written or broken as:

IF(Criteria,True,False value)

After the criteria are lodged in the selected column then the answers are used to check out for the forecast to give results accordingly.

5. SUMIF Function

SUMIF function helps you to look up for a certain set of information that matches your criteria. The criteria are entered in a wizard box which contains the range tab, criteria tab and the sum range tab.

The range tab signifies the area you want to look in. The cell is found by the criteria tab and the sum range tab adds up the data which match your criteria.

6. COUNTIF Function

The only difference between the previous function and COUNTIF function is that the latter does not add up the matching values from the cells. It just pulls and shows the set to you.

7. AND Function

This function is used to set more than one criterion for searching the variables. If the variable matches with the multiple criteria then the value is returned as True or else the search shows FALSE. The wizard box has tabs where you can enter logical set of criteria to find the behavior of the selected set of data. The result comes with another column of TRUE and FALSE at the right side.

8. OR function

The OR function is a little different from the previous AND Function. OR function checks for only one criterion to be TRUE and pulls the value whereas the AND needs every criterion to match to give a TRUE result. In no criterion matches then the FALSE value comes out.

9. LEFT Function

The LEFT function helps you to pull the part of the data in a selected column from the left side. You can set the variable or the extent of data you want in your new column via commands.

10. RIGHT Function

You can pull a part of data from the selected column set from the right side of the information by setting variables in the command box.

11. CONCATENATION Function

This function is the combination of both LEFT and RIGHT Functions in Excel where a new column of data is prepared by setting the variable to pull a particular section of the data from left and right.

12. ROUND Function

This function is used to round up data with a lot of digits after the decimal point for the convenience of calculation. You do not need to format the cell.

13. PROPER Function

This proper function is used to capitalize or uppercase the letters of a sentence in the cells. It can be done in a customized way. You can selectively change the letters in whatever format you want.

14. NOW Function

The NOW function is used to insert a column that defines the time when the entry of data is done in that particular cells at the right side of the NOW column. You can change the NOW value to date only also.

7. What are the four component of financial modeling?

Ans. We have the four major components of a financial model: the income statement, balance sheet, cash flow statement, and a debt schedule to keep track of debt repayments or borrowings if cash is needed. To understand the linkage between the financial statements, we will start with net income.

All items on the income statement, starting with revenues all the way down to taxes, affect net income at the end of the day. Net income is our starting point for the cash flow statement and this will be critical in understanding the circularity that will be created in a financial model. Because net income is not exactly cash, some adjustments are made, such as the add-back for depreciation expense (non-cash) that was found in the income statement, as well as the change in inventories year-over-year on the balance sheet

Next on the cash flow statement we find that the company spent on capital expenditures during the year, decreasing cash flows but increasing PP&E on the balance sheet due to the increase in equipment purchased.

8. What Is Financial Forecasting?

Ans. Financial forecasting is the process of estimating or predicting how a business will perform in the future. The most common type of financial forecast is an income statement, however, in a complete financial model, all three financial statements are forecasted. In this guide on how to build a financial forecast, we will complete the income statement model from revenue to operating profit or EBIT. There are inherent tensions in model building between making your model realistic and keeping it simple and robust. The first-principles approach identifies various methods to model revenues with high degrees of detail and precision. For instance, when forecasting revenue for the retail industry, we can forecast the expansion rate and derive income per square meter.

When forecasting revenue for the telecommunications industry, we can predict the market size and use current market share and competitor analysis. When forecasting revenue for any service industries, we can estimate the headcount and use the income for customer trends. The quick and dirty approach to robust models outlines how you can model revenues in a much more straightforward way, with the benefit that the model will be more simple and easy to use (although less accurate and detailed). With this approach, users predict future growth based on historical figures and trends.

Forecasting Gross Margin and SG&A Expenses

9. How to Create the template.

Ans. Create a Template

Excel creates the workbook Home inventory1.xlsx based on this template.

Create a Template

If you create your own template, you can safely store it in the Templates folder. As a result, you can create new workbooks based on this template without worrying that you overwrite the original file.

To create a template, execute the following steps.

1. Create a workbook.

2. On the File tab, click Save As.

3. Click Browse.

Click Browse

4. Enter a file name.

5. Select Excel Template (*.xltx) from the drop-down list.

Save As Template

Excel automatically activates the Templates folder. Notice the location of the Templates folder on your computer. It's usually located here:

C:\Users\<username>\Documents\Custom Office Templates

6. Click Save.

Templates Folder

To create a workbook based on this template, execute the following steps.

7. On the File tab, click New.

8. Click Personal.

9. Click WeddingBudget.

Click WeddingBudget

Excel creates the workbook WeddingBudget1.xlsx based on this template.

Note: to edit a template, on the File tab, click Open and then click Browse, to open the template. Edit the file and save the file to its original location.

10. Explain financial modeling.

Ans. Financial modeling is the task of building an abstract representation (a model) of a real world financial situation.This is a mathematical model designed to represent (a simplified version of) the performance of a financial asset or portfolio of a business, project, or any other investment. Typically, then, financial modeling is understood to mean an exercise in either asset pricing or corporate finance, of a quantitative nature. It is about translating a set of hypotheses about the behavior of markets or agents into numerical predictions.At the same time, "financial modeling" is a general term that means different things to different users; the reference usually relates either to accounting and corporate finance applications or to quantitative finance applications. While there has been some debate in the industry as to the nature of financial modeling—whether it is a tradecraft, such as welding, or a science—the task of financial modeling has been gaining acceptance and rigor over the years.

11. Explain financial ratios.

Ans. Financial ratios are created with the use of numerical values taken from financial statements to gain meaningful information about a company. The numbers found on a company's financial statements – balance sheet, income statement, and cash flow statement are used to perform quantitative analysis and assess a company's liquidity, leverage, growth, margins, profitability, rates of return, valuation, and more.

Financial ratios are grouped into the following categories:

Liquidity ratios

Leverage ratios

Efficiency ratios

Profitability ratios

Market value ratios

Uses and Users of Financial Ratio Analysis

Analysis of financial ratios serves two main purposes:

Track company performance:

Determining individual financial ratios per period and tracking the change in their values over time is done to spot trends that may be developing in a company. For example, an increasing debt-to-asset ratio may indicate that a company is overburdened with debt and may eventually be facing default risk.

Make comparative judgments regarding company performance

Comparing financial ratios with that of major competitors is done to identify whether the company is performing better or worse than the industry average. For example, comparing the return on assets between companies helps an analyst or investor to determine which company's assets are being used most efficiently.

Users of financial ratios include parties external and internal to the company:

External users: Financial analysts, retail investors, creditors, competitors, tax authorities, regulatory authorities, and industry observers

Internal users: Management team, employees, and owners

12. Explain various financial ratios.

Ans. Liquidity Ratios

Liquidity ratios are financial ratios that measure a company's ability to repay both short- and long-term obligations. Common liquidity ratios include the following:

The current ratio measures a company's ability to pay off short-term liabilities with current assets:

Current ratio = Current assets / Current liabilities

The acid-test ratio measures a company's ability to pay off short-term liabilities with quick assets:

Acid-test ratio = Current assets – Inventories / Current liabilities

The cash ratio measures a company's ability to pay off short-term liabilities with cash and cash equivalents:

Cash ratio = Cash and Cash equivalents / Current Liabilities

The operating cash flow ratio is a measure of the number of times a company can pay off current liabilities with the cash generated in a given period:

Operating cash flow ratio = Operating cash flow / Current liabilities

Leverage Financial Ratios

Leverage ratios measure the amount of capital that comes from debt. In other words, leverage financial ratios are used to evaluate a company's debt levels. Common leverage ratios include the following:

The debt ratio measures the relative amount of a company's assets that are provided from debt:

Debt ratio = Total liabilities / Total assets

The debt to equity ratio calculates the weight of total debt and financial liabilities against shareholders equity:

Debt to equity ratio = Total liabilities / Shareholder's equity

The interest coverage ratio determines how easily a company can pay its interest expenses:

Interest coverage ratio = Operating income / Interest expenses

The debt service coverage ratio determines how easily a company can pay its debt obligations:

Debt service coverage ratio = Operating income / Total debt service

Efficiency Ratios

Efficiency ratios, also known as activity financial ratios, are used to measure how well a company is utilizing its assets and resources. Common efficiency ratios include:

The asset turnover ratio measures a company's ability to generate sales from assets:

Asset turnover ratio = Net sales / Total assets

The inventory turnover ratio measures how many times a company's inventory is sold and replaced over a given period:

Inventory turnover ratio = Cost of goods sold / Average inventory

The accounts receivable turnover ratio measures how many times a company can turn receivables into cash over a given period:

Receivables turnover ratio = Net credit sales / Average accounts receivable

The days sales in inventory ratio measures the average number of days that a company holds onto its inventory before selling it to customers:

Days sales in inventory ratio = 365 days / Inventory turnover ratio

Profitability Ratios

Profitability ratios measure a company's ability to generate income relative to revenue, balance sheet assets, operating costs, and equity. Common profitability financial ratios include the following:

The gross margin ratio compares the gross profit of a company to its net sales to show how much profit a company makes after paying off its cost of goods sold:

Gross margin ratio = Gross profit / Net sales

The operating margin ratio compares the operating income of a company to its net sales to determine operating efficiency:

Operating margin ratio = Operating income / Net sales

The return on assets ratio measures how efficiently a company is using its assets to generate profit:

Return on assets ratio = Net income / Total assets

The return on equity ratio measures how efficiently a company is using its equity to generate profit:

Return on equity ratio = Net income / Shareholder's equity

Market Value Ratios

Market value ratios are used to evaluate the share price of a company's stock. Common market value ratios include the following:

The book value per share ratio calculates the per share value of a company based on equity available to shareholders:

Book value per share ratio = Shareholder's equity / Total shares outstanding

The dividend yield ratio measures the amount of dividends attributed to shareholders relative to the market value per share:

Dividend yield ratio = Dividend per share / Share price

The earnings per share ratio measures the amount of net income earned for each share outstanding:

Earnings per share ratio = Net earnings / Total shares outstanding

The price-earnings ratio compares a company's share price to the earnings per share:

Price-earnings ratio = Share price / Earnings per share

13. Explain various fundamental analysis.

Fundamental Analysis: Economic, Industry, Company Analysis

In security selection process, a traditional approach of Economic Industry Company analysis is employed. EIC analysis is the abbreviation of economic, industry and company. The person conducting EIC analysis examines the conditions in the entire economy and then ascertains the most attractive industries in the light of the economic conditions. At last the most attractive companies within the attractive industries are pointed out by the analyst.

EIC Analysis of a Company

Below are the further details of the components of EIC analysis, which analyst always consider before choosing or reaching any decision about any business.

Economic Analysis

Industry Analysis

Company Analysis

Economic Analysis:

Every common stock is susceptible to the market risk. This feature of almost all types of common stock indicates their combined movement with the fluctuations in the economic conditions towards the improvement or deterioration.

Stock prices react favorably to the low inflation, earnings growth, a better balance of trade, increasing gross national product and other positive macroeconomic news. Indications that unemployment is rising, inflation is picking up or earnings estimates are being revised downward will negatively affect the stock prices. This relationship is reasonably reliable that the US economy is better represented by the Standard & Poor 500 stock index, which is famous market indicator. The stock market will forecast an economic boom or recession properly from the signs in front of average citizen. The Federal bank of New York has conducted a research that describes that the slope of the yield curve is the perfect indicator of the economic growth more than three months out. Recession is indicated by negative slope while positive slope is considered as good one.

The implications of market risk should be clear to the investor. When there is recession in the economy, the prices of stocks moves downward. All the companies suffer the effects of recession despite of the fact that these are high performing companies or low performing ones. Similarly the stock prices are positively affected by the boom period of the economy.

Industry Analysis:

It is clear there is certain level of market risk faced by every stock and the stock price decline during recession in the economy. Another point to be remembered is that the defensive kind of stock is affected less by the recession as compared to the cyclical category of stock. In the

industry analysis, such industries are highlighted that can stand well in front of adverse economic conditions.

In 1980, Michael Porter proposed a standard approach to industry analysis which is referred to as competitive analysis frame work. Threats of new entrants evaluate the expected reaction of current competitors to new competitors and obstacles to entry into the industry. In certain industries it is quite difficult for new company to compete successfully.

For example new producers in the automobile industry face difficulty in competing the established companies, like General Motors and Ford etc. There are certain other industries where the entry of new company is easier like financial planning industry. No extraordinary efforts are required in such kind of industries to establish any new company. The growth in the industry is slowed down through the rivalry among the current competitors. Profits of the company are reduced when it tries to cover more market share because under existing rivalry the company has to invest a large portion of its earnings in this enhancing market share. The industry where the rivalry is friendly or modest among competitors provides greater opportunity for product differentiation & increased profits. The intense competition is favorable for the customer but not good for the producer of the product. In case of airline industry there are common fare price wars among the competitors. When one airline company reduces its price then the other must also adjust its price accordingly in order to retain the existing customers.

Another threat faced by company in industry is the treat of substitutes which prevents the companies to enhance the price of their products. When there is much increase in the price of particular product, then the consumer simply switches to other alternative product which has lower price. For example there are two different video games named Sega and Nintendo. These games competes each other directly in the market. If the price of Nintendo is enhanced then the new video game customers are switch toward the Sage which has relatively lower price. The investor conducting industry analysis should focus the level of risk of product substitution which seriously affects the future growth of company.

Another aspect of the industry analysis is the bargaining power of buyers which can greatly influence the large percentage of sales of seller. In this condition the profit margins are lower. Concessions are necessary to be offered by the seller because it is not affordable for him to lose customer. For example there is ship building company and the US Navy is its main customer. Only two to three ships are produced by the company every year and so it is very

harmful for the firm to lose the Navy contract. On the other hand in case of departmental store, there is large number of customers and so the bargaining power of customers is low. In this business, losing one or two customers will not much affect the sales or profitability of the retail store.

The only capital intensive industry should not be focused. There are other industries that are not capital intensive like consultants required in retail computer store. There is need that is present which force the computer technician to solve the problems of the computer systems of people. In recent year, consumers are usually more sophisticated in area of personal computers. So they are better guided and they try to make their own decisions in the needs of software and hardware aspects. In fact they possess high power when they contact the sales staff.

The bargaining power of suppliers has also substantial influence over the profitability of the company. The supplies for manufacturing products are required by the company and it does not have sufficient control over the costs. It is not possible for the company to increase the price of its finished products in order to cover the increased costs due to the presence of powerful buyer groups in market of substitute products. So while conducing industry analysis, the presence of powerful suppliers should be considered as negative for the company.

The above considerations of industry structure should be analyzed by the investor in order to make an estimate about the future trends of the industry in the light of the economic conditions. When potential industry is identified then comes the final step of EIC analysis which is narrower relating to companies only.

Company Analysis:

In company analysis different companies are considered and evaluated from the selected industry so that most attractive company can be identified. Company analysis is also referred to as security analysis in which stock picking activity is done. Different analysts have different approaches of conducting company analysis like

Value Approach to Investing

Growth Approach to Investing

Additionally in company analysis, the financial ratios of the companies are analyzed in order to ascertain the category of stock as value stock or growth stock. These ratios include price to book ratio and price-earnings ratio. Other ratios like return on equity etc. can also be analyzed to ascertain the potential company for making investment.

14. Concept of EBIT-EPS Analysis:

Ans.The EBIT-EBT analysis is the method that studies the leverage, i.e. comparing alternative methods of financing at different levels of EBIT. Simply put, EBIT-EPS analysis examines the effect of financial leverage on the EPS with varying levels of EBIT or under alternative financial plans.

It examines the effect of financial leverage on the behavior of EPS under different financing alternatives and with varying levels of EBIT. EBIT-EPS analysis is used for making the choice of the combination and of the various sources. It helps select the alternative that yields the highest EPS.

We know that a firm can finance its investment from various sources such as borrowed capital or equity capital. The proportion of various sources may also be different under various financial plans. In every financing plan the firm's objectives lie in maximizing EPS.

Advantages of EBIT-EPS Analysis:

We have seen that EBIT-EPS analysis examines the effect of financial leverage on the behavior of EPS under various financing plans with varying levels of EBIT. It helps a firm in determining optimum financial planning having highest EPS.

Various advantages derived from EBIT-EPS analysis may be enumerated below:

Financial Planning:

Use of EBIT-EPS analysis is indispensable for determining sources of funds. In case of financial planning the objective of the firm lies in maximizing EPS. EBIT-EPS analysis evaluates the alternatives and finds the level of EBIT that maximizes EPS.

Comparative Analysis:

EBIT-EPS analysis is useful in evaluating the relative efficiency of departments, product lines and markets. It identifies the EBIT earned by these different departments, product lines and from various markets, which helps financial planners rank them according to profitability and also assess the risk associated with each.

Performance Evaluation:

This analysis is useful in comparative evaluation of performances of various sources of funds. It evaluates whether a fund obtained from a source is used in a project that produces a rate of return higher than its cost.

Determining Optimum Mix:

EBIT-EPS analysis is advantageous in selecting the optimum mix of debt and equity. By emphasizing on the relative value of EPS, this analysis determines the optimum mix of debt and equity in the capital structure. It helps determine the alternative that gives the highest value of EPS as the most profitable financing plan or the most profitable level of EBIT as the case may be.

Limitations of EBIT-EPS Analysis:

Finance managers are very much interested in knowing the sensitivity of the earnings per share with the changes in EBIT; this is clearly available with the help of EBIT-EPS analysis but this technique also suffers from certain limitations, as described below

No Consideration for Risk:

Leverage increases the level of risk, but this technique ignores the risk factor. When a corporation, on its borrowed capital, earns more than the interest it has to pay on debt, any financial planning can be accepted irrespective of risk. But in times of poor business the reverse of this situation arises—which attracts high degree of risk. This aspect is not dealt in EBIT-EPS analysis.

Contradictory Results:

It gives a contradictory result where under different alternative financing plans new equity shares are not taken into consideration. Even the comparison becomes difficult if the number of alternatives increase and sometimes it also gives erroneous result under such situation.

Over-capitalization:

This analysis cannot determine the state of over-capitalization of a firm. Beyond a certain point, additional capital cannot be employed to produce a return in excess of the payments that must be made for its use. But this aspect is ignored in EBIT-EPS analysis.

Indifference Points:

The indifference point, often called as a breakeven point, is highly important in financial planning because, at EBIT amounts in excess of the EBIT indifference level, the more heavily levered financing plan will generate a higher EPS. On the other hand, at EBIT amounts below the EBIT indifference points the financing plan involving less leverage will generate a higher EPS.

Concept:

Indifference points refer to the EBIT level at which the EPS is same for two alternative financial plans. According to J. C. Van Home, 'Indifference point refers to that EBIT level at which EPS remains the same irrespective of debt equity mix'. The management is indifferent in choosing any of the alternative financial plans at this level because all the financial plans are equally desirable. The indifference point is the cut-off level of EBIT below which financial leverage is disadvantageous. Beyond the indifference point level of EBIT the benefit of financial leverage with respect to EPS starts operating.

The indifference level of EBIT is significant because the financial planner may decide to take the debt advantage if the expected EBIT crosses this level. Beyond this level of EBIT the firm will be able to magnify the effect of increase in EBIT on the EPS.

In other words, financial leverage will be favorable beyond the indifference level of EBIT and will lead to an increase in the EPS. If the expected EBIT is less than the indifference point then the financial planners will opt for equity for financing projects, because below this level, EPS will be more for less levered firm.

Computation:

We have seen that indifference point refers to the level of EBIT at which EPS is the same for two different financial plans. So the level of that EBIT can easily be computed. There are two approaches to calculate indifference point: Mathematical approach and graphical approach.

Financial Breakeven Point:

In general, the term Breakeven Point (BEP) refers to the point where the total cost line and sales line intersect. It indicates the level of production and sales where there is no profit and no loss because here the contribution just equals to the fixed costs. Similarly financial breakeven point is the level of EBIT at which after paying interest, tax and preference dividend, nothing remains for the equity shareholders.

In other words, financial breakeven point refers to that level of EBIT at which the firm can satisfy all fixed financial charges. EBIT less than this level will result in negative EPS. Therefore EPS is zero at this level of EBIT. Thus financial breakeven point refers to the level of EBIT at which financial profit is nil.

15. Write a brief note on sensitivity analysis.

Ans. The Sensitivity Analysis or What-if Analysis means, determining the viability of the project if some variables deviate from its expected value, such as investments or sales. In other words, since the future is uncertain and the entrepreneur wants to know the feasibility of the project in terms of its variable assumptions Viz, investments or sales change, can apply the sensitivity analysis.

Whether to accept or reject the proposed project depends on its net present value (NPV). Hence, sensitivity analysis is calculated in terms of NPV. Firstly, the base-case scenario is developed; wherein the NPV is calculated for the project based on the assumptions which are believed to be the most accurate. Then make some changes in the initial assumptions based on the other potential assumptions, and recalculate the NPV. Once the new NPV is calculated, analyze its sensitivity in terms of the changes made in the initial assumptions.

Sensitivity Analysis is very useful for a firm that shows, the robustness and the vulnerability of the project due to the change in the values of underlying variables. It indicates whether the project is worth to be carried forward or not with the help of NPV value. If the NPV value is

highly sensitive to the changes in variables, the firm can explore the variability of that critical factor.

This method is very subjective in nature and suffers from certain limitations. Sensitivity analysis shows the change in NPV due to the change in variables and does not talk about how likely the change will be. Also, under this method, it is assumed that one variable changes at a time, but in reality, variables tend to move together.

16. Detail note on Time Value of Money.

Ans.The time value of money (TVM) is the concept that money available at the present time is worth more than the identical sum in the future due to its potential earning capacity. This core principle of finance holds that, provided money can earn interest, any amount of money is worth more the sooner it is received. TVM is also sometimes referred to as present discounted value.

The time value of money draws from the idea that rational investors prefer to receive money today rather than the same amount of money in the future because of money's potential to grow in value over a given period of time. For example, money deposited into a savings account earns a certain interest rate, and is therefore said to be compounding in value.

Basic Time Value of Money Formula

Depending on the exact situation in question, the TVM formula may change slightly. For example, in the case of annuity or perpetuity payments, the generalized formula has additional or less factors. But in general, the most fundamental TVM formula takes into account the following variables:

FV = Future value of money

PV = Present value of money

i = interest rate

n = number of compounding periods per year

t = number of years

Based on these variables, the formula for TVM is:

FV = PV x [1 + (i / n)] (n x t)

There are five (5) variables that you need to know

Present value (PV)– This is your current starting amount. It is the money you have in your hand at the present time, your initial investment for your future.

Future value (FV)– This is your ending amount at a point in time in the future. It should be worth more than the present value, provided it is earning interest and growing over time.

The number of periods (N)– This is the timeline for your investment (or debts). It is usually measured in years, but it could be any scale of time such as quarterly, monthly, or even daily.

Interest rate (I)– This is the growth rate of your money over the lifetime of the investment. It is stated in a percentage value, such as 8% or .08.

Payment amount (PMT)– These are a series of equal, evenly-spaced cash flows

17. Explain capital budgeting.

Ans. The resources of a business firm is invested in current and fixed assets. Current assets are acquired for the smooth running of business whereas fixed assets are purchased for generating revenue. The profitability of a firm depends upon the productive capacity of the fixed assets. Furthermore, the decision of investing in fixed assets has far-reaching impact because it requires huge capital for long period. The failure of any project may lead the firm in the door of liquidation. Therefore, the cost, benefit and probable risk of the proposed project should be analyzed systematically before making the investment.

Capital budgeting decision comprises of three words 'Capital', 'Budgeting' and 'Decision'. Capital means the fund or resource available for investing. Budgeting is the numerical aspect of planning. Decision or decision making is the process of deciding whether alternative action is to be undertaken or not. In this way, capital budgeting decision is the process under which different investment alternatives are evaluated and the best alternative is selected. In other words, capital budgeting decision is concerned with the long-term investment decision i.e. making capital expenditure. The expenditure on fixed asset such as land and building, furniture and fixtures, plant and machinery etc. is called capital expenditure. The life of these fixed assets is more than one year. So, capital budgeting decision is concerned with long-term planning. Capital budgeting is also decision making process for an investment which includes

the process of investment, evaluating, planning and financing major investment project of an organization. Therefore, it can be said that capital budgeting is concerned with the allocation of the firm's financial resources among the available investment alternatives. It is a part of long-term planning and comprises the evaluation and selection of investment projects.

Need And Importance Of Capital Budgeting

Capital budgeting is the process of evaluating and selecting long-term investments that are consistent with the goal of the firm. The need and importance of capital budgeting has been explained as follows:

1. Long-term Implication

Capital expenditure decision affects the company's future cost structure over a long time span. The investment in fixed assets increases the fixed cost of the firm which must be recovered from the benefit of the same project. If the investment turns out to be unsuccessful in future or give less profit than expected, the company will have to bear the extra burden of fixed cost. Such risk can be minimized through the systematic analysis of projects which is the integral part of investment decision.

2. Irreversible Decision

Capital investment decision are not easily reversible without much financial loss to the firm because there may be no market for second-hand plant and equipment and their conversion to other uses may not be financially viable. Hence, capital investment decisions are to be carried out and performed carefully and effectively in order to save the company from such financial loss. The investment decision which is undertaken carefully and effectively can save the firm from huge financial loss aroused due to the selection of unfavorable projects.

3. Long-term Commitments Of Funds

Capital budgeting decision involves the funds for the long-term. So, it is long-term investment decision. The long-term commitment of funds leads to the financial risk. Hence, careful and effective planning is must to reduce the financial risk as much as possible.

Capital Budgeting Processes

The extent to which the capital budgeting process needs to be formalized and systematic procedures established depends on the size of the organization, number of projects to be considered, direct financial benefit of each project considered by itself, the composition of the firm's existing assets and management's desire to change that composition, timing of expenditures associated with the that are finally accepted.

1. Planning

The capital budgeting process begins with the identification of potential investment opportunities. The opportunity then enters the planning phase when the potential effect on the firm's fortunes is assessed and the ability of the management of the firm to exploit the opportunity is determined. Opportunities having little merit are rejected and promising opportunities are advanced in the form of a proposal to enter the evaluation phase.

2. Evaluation

This phase involves the determination of proposal and its investments, inflows and outflows. Investment appraisal techniques, ranging from the simple pay back method and accounting rate of return to the more sophisticated discounted cash flow techniques, are used to appraise the proposals. The technique selected should be the one that enables the manager to make the best decision in the light of prevailing circumstances.

3. Selection

Considering the returns and risk associated with the individual project as well as the cost of capital to the organization, the organization will choose among projects so as to maximize shareholders wealth.

4. Implementation

When the final selection has been made, the firm must acquire the necessary funds, purchase the assets, and begin the implementation of the project.

5. Control

The progress of the project is monitored with the aid of feedback reports. These reports will include capital expenditure progress reports, performance reports comparing actual performance against plans set and post completion audits.

6. Review

When a project terminates, or even before, the organization should review the entire project to explain its success or failure. This phase may have implication for forms planning and evaluation procedures. Further, the review may produce ideas for new proposal to be undertaken in the future.

In brief, capital budgeting processes include:

A. Estimation of initial investment

B. Estimation of cash inflows

C. Evaluation of projects

D. Selection of projects

18. Explain cost of capital.

Ans. Investment decision is major decision for an organization. Under investment decision process, the cost and benefit of prospective projects is analyzed and the best alternative is selected on the basis of the result of analysis. The benchmark of computing present value and comparing the profitability of different investment alternatives is cost of capital. Cost of capital is also known as minimum required rate of return, weighted average cost of capital, cut off rate, hurdle rate, standard return etc. Cost of capital is determined on the basis of component cost of financing and proportion of these sources in capital structure.

Business firms raise the needed fund from internal sources and external sources. Undistributed and retained profit is the main source of internal fund. External fund is raised either by the issue of shares or by issue of debenture (debt) or by both means. The fund collected by any means is not cost free. Interest is to be paid on the fund obtained as debt and dividend is to be paid on the fund collected through the issue of shares. The average cost rate of different sources of fund is known as cost of capital.

From the view point of return, cost of capital is the minimum required rate of return to be earned on investment. In other words, the earning rate of a firm which is just sufficient to satisfy the expectation of the contributors of capital is called cost of capital. Shareholders and debenture holders are the contributors of the capital. For example, a firm needs $ 5,00,000 for investing in a new project. The firm can collect $3,00,000 from shares on which it must pay 12% dividend and $ 2,00,000 from debentures on which it must pay 7% interest. If the fund is raised and invested in the project, the firm must earn at least $50,000 which becomes sufficient to pay $36,000 dividend(12% of $3,00,000) and $14000 interest(7% of $2,00,000). The required earning $50,000 is 12% of the total fund raised. This 12% rate of return is called cost of capital.

In this way, cost of capital is only minimum required rate of return to earn on investment and it is not the actual earning rate of the firm. As per above example, if the firm is able to earn only 10%. all the earnings will go in the hands of contributors of capital and nothing will be left in the business. Therefore, any business firm should try to maximize the earning rate by investing in the projects that can provide the rate of return which is more than the cost of capital.

Significance Of Cost Of Capital

Cost of capital is considered as a standard of comparison for making different business decisions. Such importance of cost of capital has been presented below.

1. Making Investment Decision

Cost of capital is used as discount factor in determining the net present value. Similarly, the actual rate of return of a project is compared with the cost of capital of the firm. Thus, the cost of capital has a significant role in making investment decisions.

2. Designing Capital structure

The proportion of debt and equity is called capital structure. The proportion which can minimize the cost of capital and maximize the value of the firm is called optimal capital structure. Cost of capital helps to design the capital structure considering the cost of each sources of financing, investor’s expectation, effect of tax and potentiality of growth.

3. Evaluating The Performance

Cost of capital is the benchmark of evaluating the performance of different departments. The department is considered the best which can provide the highest positive net present value to the firm. The activities of different departments are expanded or dropped out on the basis of their performance.

4. Formulating Dividend Policy

Out of the total profit of the firm, a certain portion is paid to shareholders as dividend. However, the firm can retain all the profit in the business if it has the opportunity of investing in such projects which can provide higher rate of return in comparison of cost of capital. On the other hand, all the profit can be distributed as dividend if the firm has no opportunity investing the profit. Therefore, cost of capital plays a key role formulating the dividend policy.

Components Of Cost Of Capital

The individual cost of each source of financing is called component of cost of capital. The component of cost of capital is also known as the specific cost of capital which includes the individual cost of debt, preference shares, ordinary shares and retained earning. Such components of cost of capital have been presented below:

A. Cost Of Debt

Cost of perpetual or irredeemable debt

Cost of non-perpetual or redeemable debt

Cost of debt issued on redeemable condition

Cost of callable debt

B. Cost Of Preference Share

Cost of perpetual preference Share

Cost of redeemable preference Share

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C. Cost of ordinary/equity shares or common stock

D. Cost of retained earning

19. What is trend analysis?

Ans. Also known as the Pyramid Method. Studying the operational results and financial position over a series of years is trend analysis. Calculations of ratios of different items for various periods is done & then compared under this analysis. Whether the enterprise is trending upward or backward, the analysis of the ratios over a period of years is done. By observing this analysis, the sign of good or poor management is detected.

Ratio Analysis

Quantitative analysis of information contained in a company's financial statements is ratio analysis. It describes the significant relationship which exists between various items of a balance sheet and a statement of profit and loss of a firm.

To assess the profitability, solvency, and efficiency of a business, management can go through the technique of ratio analysis. It is an attempt at developing a meaningful relationship between individual items (or group of items) in the balance sheet or profit and loss account.

Cash Flow Analysis

The actual movement of cash into and out of a business is cash flow analysis. The flow of cash into the business is called the cash inflow. Similarly, the flow of cash out of the firm is called cash outflow. The difference between the inflow and outflow of cash is the net cash flow.

Cash flow statement is prepared to project the manner in which the cash has been received and has been utilized during an accounting year. It is an important analytical tool. Analysis of cash flow explains the reason for a change in cash. It helps in assessing the liquidity of the enterprise and in evaluating the operating, investment & financing decisions.

20. Explain Moving Average.

Ans. A moving average is a technique that calculates the overall trend in a data set. In operations management, the data set is sales volume from historical data of the company. This technique is very useful for forecasting short-term trends. It is simply the average of a select set of time periods. It's called 'moving' because as a new demand number is calculated for an upcoming time period; the oldest number in the set falls off, keeping the time period locked. Let's look at an example of how the sales manager at ABC Inc. will forecast demand using the moving average formula.

The formula is illustrated as follows:

Moving Average = (n1 + n2 + n3 + ...) / n

Where n = the number of time periods in the data set. The sum of the first time period and all additional time periods chosen is divided by the number of time periods. Bob decides to create his demand forecast based on a 5-year moving average. This means that he will use the sales volume data from the past 5 years as the data for the calculation.

RESEARCH METHODOLOGY (214)

Q1) What do you understand by research? Explain in detail with characteristics and objectives of research.

Research is a scientific and systematic search for various information about a specific topic. It is just like a search for truth and knowledge. The English Dictionary meaning of Research is "a careful investigation or inquiry especially through search for new facts in any branch of knowledge." information about a subject can be collected by deliberate effort and it is presented in a new form after analyzing thoroughly in research work.

Research is an academic activity. It is a movement from the known to the unknown, which may be called a discovery. Different definitions of research are given by the experts.

According to Redman and Mory, "Research is a systematized effort to gain new knowledge."

According to P.M. Cook, "Research is an honest, exhaustive, intelligent searching for facts and their meanings or implications with reference to a given problem."

J.M. Francis Rumel defines, "Research is an endeavour to discover, develop and verify knowledge."

Clifford Woody, defines "Research is a careful enquiry or examination in seeking facts or principles a diligent investigation to ascertain something."

Objectives

The main purpose of research is to discover answers to the meaningful questions through scientific procedures and systematic attempt. The hidden truths which are not discovered yet can easily come to light by research.

The main objectives of Research are

1. To gain familiarity or to achieve new insights into a phenomenon. This is known as Exploratory or Formularize Research studies.

2. To describe the accurate characteristics of a particular individual, situation or a group. This is known as Descriptive Research studies.
3. To determine the frequency with which something occurs or with which it is associated with other things. This is known as Diagnostic Research studies.
4. To test a hypothesis of a casual relationship between variables. Such studies are known as Hypothesis-testing Research studies.

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Characteristics of Research

1. Research is directed towards the solution of a problem.
2. Research gathers new knowledge or data from primary sources.
3. Research is based upon observable experience or experimental evidence.
4. Research is logical and objective, applying every possible test to verify the data collected and the procedures employed.
5. Research is expert, systematic and accurate investigation.
6. Research demands accurate observation and description.
7. Research requires patience and courage. The researcher should courageously face the unpleasant consequences of his finding if any.
8. Research is highly purposive. It deals with a significant problem which must be solved.
9. Research is carefully recorded and reported. Everything must be carefully defined and described in detail.
10. Research activity is characterized by carefully designed procedures which are to be analyzed thoroughly.

Q2)Explain the purpose of research with respect to exploration, descriptive and explanation.

Purpose of Research

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It can be hard to tell the exact purpose of business research. It will always be based on the situation and the person conducting such study. Generally speaking, a business research's purpose is to ensure future success. Whenever a person or a group enters the market, their aim is to earn considerable profits. Well, almost all businesses want to earn money, right? Unless yours is a non-profit organization, the primary purpose of researching the market is to generate more sales and income.

When you conduct a business research, you will be gathering relevant information that you can use to make your business better. For instance, in a marketing search, you will be identifying your target market and the needs. You have to offer something that the market needs or you will not be able sell anything! Never enter into a business unless you have everything planned out. Running a business can get complicated especially if you lack knowledge. If you conduct a thorough business research, you can learn the basics and put it to good use.

EXPLORATORY RESEARCH

Exploratory research, as the name implies, intends merely to explore the research questions and does not intend to offer final and conclusive solutions to existing problems. This type of research is usually conducted to study a problem that has not been clearly defined yet.

Conducted in order to determine the nature of the problem, exploratory research is not intended to provide conclusive evidence, but helps us to have a better understanding of the problem. When conducting exploratory research, the researcher ought to be willing to change his/her direction as a result of revelation of new data and new insights.

Exploratory research design does not aim to provide the final and conclusive answers to the research questions, but merely explores the research topic with varying levels of depth. It has been noted that "exploratory research is the initial research, which forms the basis of more conclusive research. It can even help in determining the research design, sampling methodology and data collection method". Exploratory research "tends to tackle new problems on which little or no previous research has been done". Unstructured interviews are the most popular primary data collection method with exploratory studies.

Examples of Exploratory Research Design

- A study into the role of social networking sites as an effective marketing communication channel
- An investigation into the ways of improvement of quality of customer services within hospitality sector in London
- An assessment of the role of corporate social responsibility on consumer behaviour in pharmaceutical industry in the USA

DESCRIPTIVE RESEARCH

Descriptive research focuses on throwing more light on current issues through a process of data collection. Descriptive studies are used to describe the behavior of a sample population. In descriptive research, only one variable (anything that has quantity or quality that varies) is required to conduct a study. The three main purposes of descriptive research are describing, explaining and validating the findings. For example, a research conducted to know if top-level management leaders in the 21st century posses the moral right to receive a huge sum of money from the company profit.

EXPLANATORY RESEARCH

Explanatory research or causal research is conducted to understand the impact of certain changes in existing standard procedures. Conducting experiments is the most popular form of casual research. For example, research conducted to understand the effect of rebranding on customer loyalty.

Q3) What do you understand by unit of analysis? Explain in detail.

Units of Analysis are the objects of study within a research project. In sociology, the most common units of analysis are individuals, groups, social interactions, organizations and institutions, and social and cultural artifacts. In many cases, a research project can require multiple units of analysis.

Identifying your units of analysis is an important part of the research process. Once you have identified a research question, you will have to select your units of analysis as part of the process of deciding on a research method and how you will operationalize that method. Let's review the most common units of analysis and why a researcher might choose to study them.

Individuals

Individuals are the most common units of analysis within sociological research. This is the case because the core problem of sociology is understanding the relationships between individuals and society, so we routinely turn to studies composed of individual people in order to refine our understanding of the ties that bind individuals together into a society. Taken together, information about individuals and their personal experiences can reveal

patterns and trends that are common to a society or particular groups within it, and can provide insight into social problems and their solutions.

For example, researchers at the University of California-San Francisco found through interviews with individual women who have had abortions that the vast majority of women do not ever regret the choice to terminate the pregnancy. Their findings prove that a common right-wing argument against access to abortion–that women will suffer undue emotional distress and regret if they have an abortion–is based on myth rather than fact.

Organizations

Organizations differ from groups in that they are considered more formal and, well, organized ways of collecting people together around specific goals and norms. Organizations take many forms, including corporations, religious congregations and whole systems like the Catholic Church, judicial systems, police departments, and social movements, for example.

Social scientists who study organizations might be interested in, for example, how corporations like Apple, Amazon, and Walmart impact various aspects of social and economic life, like how we shop and what we shop for, and what work conditions have become normal and/or problematic within the U.S. labor market. Sociologists who study organizations might also be interested in comparing different examples of similar organizations to reveal the nuanced ways in which they operate, and the values and norms that shape those operations.

Groups

Sociologists are keenly interested in social ties and relationships, which means that they often study groups of people, be they large or small. Groups can be anything from romantic couples to families, to people who fall into particular racial or gender categories, to friend groups, to whole generations of people (think Millennials and all the attention they get from social scientists). By studying groups sociologists can reveal how social structure and forces affect whole categories of people on the basis of race, class, or gender, for example.

Sociologists have done this in pursuit of understanding a wide range of social phenomena and problems, like for example this study that proved that living in a racist place leads to Black

people having worse health outcomes than white people; or this study that examined the gender gap across different nations to find out which are better or worse at advancing and protecting the rights of women and girls.

Q4) Write short note on the following:

1) **Construct**
2) **Attribute**
3) **Variable**
4) **Hypothesis**

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Constructs

Constructs are measured with multiple variables. **Constructs exist at a higher level of abstraction than concepts**. Justice, Beauty, Happiness, and Health are all constructs. Constructs are considered latent variable because they cannot be directly observable or measured. Typical constructs in marketing research include Brand Loyalty, Purchase Intent, and Customer Satisfaction. Constructs are the basis of working hypotheses.

Brand loyalty is a construct that marketing researchers study often. Brand loyalty can be measured using a variety of measures:

- Number of items purchased in the past
- Monetary value of past purchases
- Frequency of past purchase occasions
- The likelihood of future purchases
- The likelihood of recommending the brand to a friend or family member
- The likelihood of switching to a competitive brand

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An **attribute** is a single feature or **dimension** of a construct.

Measurement: Measurement is the assignment of numbers or symbols to phenomena. Measurement requires a **scale**. A scale provides a range of values—a yardstick—that corresponds to the presence of the properties of the concept under investigation. A scale provides the rules that associate values on the scale to the concept we are studying.

Variables

Variables are measurements that are free to vary. Variable can be divided into **Independent Variables** or **Dependent Variables**. A dependent variable changes in response to changes in the independent variable or variables.

A variable can be transformed into a constant when the researcher decides to **control** the variable by reducing its expression to a single value. Suppose a researcher is conducting a test of consumers' taste preference for three brands of frozen pizza. There are a number of variables in this test:

(1) Respondents' ratings of the taste of each brand of pizza,

(2) The manner in which is each pizza is presented, the type of the plates and table cloths used, and

(3) The manner in which each brand is prepared. To get an accurate measure of the first variable—respondents' ratings of the taste of the three pizza brands—the researcher will hold the second and third variables constant. By serving all three pizzas on the same kind of plates with the table dressed in the same manner, preparing the pizzas in identical ways, and serving them at identical temperatures, the research controls for these variables. In doing so, the researcher has removed, or controlled for the affect of the second and third variables on respondents' taste preferences.

Hypotheses

A hypothesis (plural hypotheses) is a proposed explanation for a phenomenon. For a hypothesis to be a scientific hypothesis, the scientific method requires that one can test it. Scientists generally base scientific hypotheses on previous observations that cannot satisfactorily be explained with the available scientific theories. Even though the words "hypothesis" and "theory" are often used synonymously, a scientific hypothesis is not the same as a scientific theory. A working hypothesis is a provisionally accepted hypothesis proposed for further research, in a process beginning with an educated guess or thought.

A different meaning of the term hypothesis is used in formal logic, to denote the antecedent of a proposition; thus in the proposition "If P, then Q", P denotes the hypothesis (or antecedent); Q can be called a consequent. P is the assumption in a (possibly counterfactual) What If question.

The adjective hypothetical, meaning "having the nature of a hypothesis", or "being assumed to exist as an immediate consequence of a h**ypothesis", can refer to any of these meanings of the term "hypothesis".**

Q5) What is the scope of business research in today's scenario?

Business Research is described as the systematic and objective procedure for producing information for help in making business decisions. Business research should be objective, which means that the information found needs to be detached and impersonal instead of biased. Research facilitates the managerial decision process for all aspects of a business.By lowering the uncertainty of decisions, it cuts down on the risk of making incorrect decisions. Research should be an aid to managerial judgment but not a replacement for it.

Scope of Business Research Includes the Following Areas

(i) Production Management: The research performs an important function in product development, diversification, introducing a new product, product improvement, process technologies, choosing a site, new investment etc.Personnel Management: Research works well for job redesign, organization restructuring, development of motivational strategies and organizational development.

(ii) Marketing Management: Research performs an important part in choice and size of target market, the consumer behavior with regards to attitudes, life style, and influences of the target market. It is the primary tool in determining price policy, selection of channel of distribution and development of sales strategies, product mix, promotional strategies, etc.

(iii) Financial Management: Research can be useful for portfolio management, distribution of dividend, capital raising, hedging and looking after fluctuations in foreign currency and product cycles.

(iv) Materials Management: It is utilized in choosing the supplier, making the decisions relevant to make or buy as well as in selecting negotiation strategies.

(v) General Management: It contributes greatly in developing the standards, objectives, long-term goals, and growth strategies.

To perform well in a complex environment, you will have to be equipped with an understanding of scientific methods and a way of integrating them into decision making. You will have to understand what good research means and how to conduct it. Since the complexity of the business environment has amplified, there is a commensurate rise in the number and power of the instruments to carry out research. There is certainly more knowledge in all areas of management.

We now have started to develop much better theories. The computer has provided us a quantum leap in the capability to take care of difficulties. New techniques of quantitative analysis utilize this power. Communication and measurement techniques have also been improved. These developments reinforce each other and are having a substantial impact on business management.

Business research assists decision makers shift from intuitive information gathering to organized and objective study. Even though researchers in different functional fields may examine different phenomena, they are comparable to each other simply because they make use of similar research techniques. Research is the fountain of knowledge for the sake of knowledge and it is a crucial source of providing guidelines for solving various business issues. Thus, we can say that the scope of business research is enormous.

Q6) What is the process of research? How many steps are involved in the process?

Research Process involves identifying, locating, assessing, and analyzing the information you need to support your research question, and then developing and expressing your ideas. These are the same skills you need any time you write a report, proposal, or put together a presentation.

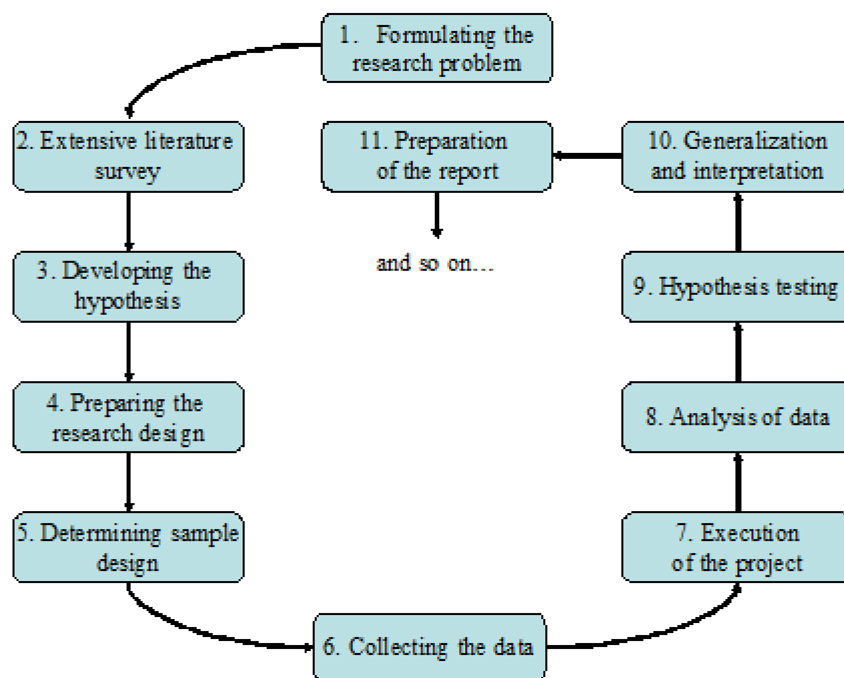
Library research involves the step-by-step process used to gather information in order to write your paper, create a presentation, or complete a project. As you progress from one step

to the next, it is often necessary to rethink, revise, add additional material or even adjust your topic. Much will depend on what you discover during your research.

The research process can be broken down into seven steps, making it more manageable and easier to understand. This module will give you an idea of what's involved at each step in order to give you a better overall picture of where you are in your research, where you will be going, and what to expect at each step.

Steps involved in Research Process in Research Methodology

At times, the first step determines the nature of the last step to be undertaken.If subsequent procedures have not been taken into account in the early stages, serious difficulties may arise which may even prevent the completion of the study. One should remember that the various steps involved in a research process are not mutually exclusive; nor they are separate and distinct.



They do not necessarily follow each other in any specific order and the researcher has to be constantly anticipating at each step in the research process the requirements of the subsequent steps. However, the following order concerning various steps provides a useful procedural guideline regarding the research process:

- Formulating the research problem.
- Extensive literature survey.
- Developing the hypothesis.
- Preparing the research design.
- Determining sample design.
- Collecting the data.
- Execution of the project.
- Analysis of data.
- Hypothesis testing.
- Generalizations and interpretation, and
- Preparation of the report or presentation of the results, i.e., formal write-up of conclusions reached.

1. **Formulating the research problem**: There are two types of research problems, vi., those which relate to states of nature and those which relate to relationships between variables. At thievery outset the researcher must single out the problem he wants to study, i.e., he must decide the general area of interest or aspect of a subject-matter that he would like to inquire into. Initially the problem may be stated in a broad general way and then the ambiguities, if any, relating to the problem be resolved. Then, the feasibility of a particular solution has to be considered before a

   working formulation of the problem can be set up. The formulation of a general topic into a specific research problem, thus, constitutes the first step in a scientific enquiry. Essentially two steps are involved in formulating the research problem, vi., understanding the problem thoroughly, and rephrasing the same into meaningful terms from an analytical point of view.

2. **Extensive literature survey:** Once the problem is formulated, a brief summary of it should be written down. It is compulsory for a research worker writing a thesis for a Ph.D. degree to write synopsis of the topic and submit it to the necessary Committee or the Research Board for approval.At this juncture the researcher should undertake extensive literature survey connected with the problem.

   For this purpose, the abstracting and indexing journals and published or unpublished bibliographies are the first place to go to. Academic journals, conference proceedings, government reports, books etc., must be tapped depending on the nature of the problem. In

this process, it should be remembered that one source will lead to another. The earlier studies, if any, which are similar to the study in and should be carefully studied. A good library will be a great help to the researcher at this stage.

3. **Development of working hypotheses:** After extensive literature survey, researcher should state in clear terms the working hypothesis or hypotheses. Working hypothesis is tentative assumption made in order to draw out and test its logical or empirical consequences. As such the manner in which research hypotheses are developed is particularly important since they provide the focal point for research.
4. **Preparing the research design:** The research problem having been formulated in clear cut terms, the researcher will be required to prepare a research design, i.e., he will have to state the conceptual structure within which research would be conducted. The preparation of such a design facilitates research to be as efficient as possible yielding maximal information.

   In other words, the function of research design is to provide for the collection of relevant evidence with minimal expenditure of effort, time and money. But how all these can be achieved depends mainly on the research purpose. Research purposes may be grouped into four categories, vi.,

- Exploration,
- Description,
- Diagnosis, and
- Experimentation

5. **Determining sample design:** All the items under consideration in any field of inquiry constitute 'universe' or 'population'. A complete enumeration of all the items in the 'population' is known asa census inquiry. It can be presumed that in such an inquiry when all the items are covered no element of chance is left and highest accuracy is obtained. But in practice this may not be true.Even the slightest element of bias in such an inquiry will get larger and larger as the number of observations increases. Moreover, there is no way of checking the element of bias or its extent except through are survey or use of sample checks. Besides, this type of inquiry involves a great deal of time, money and energy. Not only this, census inquiry is not possible in practice under many circumstances. For instance, blood testing is done only on sample basis. Hence, quite often we select only a few items from the universe for our study purposes. The items so selected constitute what is technically called

sample.The researcher must decide the way of selecting a sample or what is popularly known as the sample design. In other words, a sample design is a definite plan determined before any data are actually collected for obtaining a sample from a given population. Thus, the plan to select 12 of a city's 200 drugstores in a certain way constitutes a sample design. Samples can be either probability samples or non-probability samples.With probability samples each element has a known probability of being included in the sample but the non-probability samples do not allow the researcher to determine this probability. Probability samples are those based on simple random sampling, systematic sampling, stratified sampling, cluster/area sampling whereas non-probability samples are those based on convenience sampling, judgment sampling and quota sampling techniques.

6. **Collecting the data:** In dealing with any real life problem it is often found that data at hand are inadequate, and hence, it becomes necessary to collect data that are appropriate. There are severing always of collecting the appropriate data which differ considerably in context of money costs, time and other resources at the disposal of the researcher.Primary data can be collected either through experiment or through survey. If the researcher conducts an experiment, he observes some quantitative measurements, or the data, with the help of which he examines the truth contained in his hypothesis.

7. **Execution of the project:** Execution of the project is a very important step in the research process. If the execution of the project proceeds on correct lines, the data to be collected would be adequate and dependable. The researcher should see that the project is executed in a systematic manner and in time. If the survey is to be conducted by means of structured questionnaires, data can be readily machine-processed. In such a situation, questions as well as the possible answers may be coded. If the data are to be collected through interviewers, arrangements should be made for proper selection and training of the interviewers.
8. **Analysis of data:** After the data have been collected, the researcher turns to the task of analyzing them. The analysis of data requires a number of closely related operations such as establishment of categories, the application of these categories to raw data through coding, tabulation and then drawing statistical inferences. The unwieldy data should necessarily be condensed into a few manageable groups and tables for further analysis. Thus, researcher should classify the raw data into some purposeful and usable categories. Coding operation is usually done at this stage through which the categories of data are transformed into symbols that may be tabulated and counted.

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9. **Hypothesis-testing:** After analyzing the data as stated above, the researcher is in a position to test the hypotheses, if any, he had formulated earlier. Do the facts support the hypotheses or they happen to be contrary? This is the usual question which should be answered while testing hypotheses .Various tests, such as Chi square test, t-test, F-test, have been developed by statisticians for the purpose. The hypotheses may be tested through the use of one or more of such tests, depending upon the nature and object of research inquiry. Hypothesis -testing will result in either accepting the hypothesis or in rejecting it. If the researcher had no hypotheses to start with, generalizations established on the basis of data may be stated as hypotheses to be tested by subsequent researches in times to come.
10. **Generalizations and interpretation:** If a hypothesis is tested and upheld several times, it maybe possible for the researcher to arrive at generalization, i.e., to build a theory. As a matter of fact,the real value of research lies in its ability to arrive at certain generalizations. If the researcher had no hypothesis to start with, he might seek to explain his findings on the basis of some theory. It is known as interpretation. The process of interpretation may quite often trigger off new questions which in turn may lead to further researches.
11. **Preparation of the report or the thesis:** Finally, the researcher has to prepare the report of what has been done.

Q7) Explain in detail the first step of research process.

The first stage is to develop a clear and precise understanding of the research problem, to permit effective conduct of the research process. It is very important to analyse the problems to conduct the research effectively. In this scenario, a veteran market researcher wants to enter into the business of operating a coffee shop and the problem is to identify the potential market and to find the appropriate outlet and product mix for the products and services of the business. The determination of product line and the price to be charged for the product is the identified problem. At the same time, the business is also facing problems with the positioning of the shop in the relevant market

Q8) How the researcher chooses the research methods to be selected in his research?

Basic Research is the research to find the basic knowledge or to refine the basic knowledge. Basic research is also called pure research and fundamental research.basic purpose of this research is to expand the knowledge.Basic research can be descriptive, explanatory or exploratory. Mostly basic research is the explanatory research.Basic research creates new

ideas, new principles, new theories that are not immediately applied in the practical life. But later this basic research helps in applied research where scientist uses this basic research to utilize it in the practical life.

Field Studies

Field studies involve collecting data outside of an experimental or lab setting. This type of data collection is most often done in natural settings or environments and can be done in a variety of ways for various disciplines. Field studies are known to be expensive and timely; however, the amount and diversity of the data collected can be invaluable.Field studies collect original or unconventional data via face-to-face interviews, surveys, or direct observation. This research technique is usually treated as an initial form of research because the data collected is specific only to the purpose for which it was gathered. Therefore, it is not applicable to the general public.

Methods of Field Research

Field research is typically conducted in 5 distinctive methods. They are:

(i) Direct Observation

In this method, the data is collected via an observational method or subjects in a natural environment. In this method, the behavior or outcome of situation is not interfered in any way by the researcher. The advantage of direct observation is that it offers contextual data on people, situations, interactions and the surroundings. This method of field research is widely used in a public setting or environment but not in a private environment as it raises an ethical dilemma.

(ii) Participant Observation

In this method of field research, the researcher is deeply involved in the research process, not just purely as an observer, but also as a participant. This method too is conducted in a natural environment but the only difference is the researcher gets involved in the discussions and can mould the direction of the discussions. In this method, researchers live in a comfortable

environment with the participants of the research, to make them comfortable and open up to in-depth discussions.

(iii) Ethnography

Ethnography is an expanded observation of social research and social perspective and the cultural values of an entire social setting. In ethnography, entire communities are observed objectively. For example, if a researcher would like to understand how an Amazon tribe lives their life and operates, he/she may chose to observe them or live amongst them and silently observe their day-to-day behavior.

(iv) Qualitative Interviews

Qualitative interviews are close-ended questions that are asked directly to the research subjects. The qualitative interviews could be either informal and conversational, semi-structured, standardized and open-ended or a mix of all the above three. This provides a wealth of data to the researcher that they can sort through. This also helps collect relational data. This method of field research can use a mix of one-on-one interviews, focus groups and text analysis.

(v) Case Study

A case study research is an in-depth analysis of a person, situation or event. This method may look difficult to operate, however, it is one of the simplest ways of conducting research as it involves a deep dive and thorough understanding the data collection methods and inferring the data.

Steps in Conducting Field Research

Due to the nature of field research, the magnitude of timelines and costs involved, field research can be very tough to plan, implement and measure. Some basic steps in the management of field research are:

1. **Build the Right Team:** To be able to conduct field research, having the right team is important. The role of the researcher and any ancillary team members is very important and

defining the tasks they have to carry out with defined relevant milestones is important. It is important that the upper management too is vested in the field research for its success.

2. **Recruiting People for the Study:** The success of the field research depends on the people that the study is being conducted on. Using sampling methods, it is important to derive the people that will be a part of the study.
3. **Data Collection Methodology:** As spoken in length about above, data collection methods for field research are varied. They could be a mix of surveys, interviews, case studies and observation. All these methods have to be chalked out and the milestones for each method too have to be chalked out at the outset. For example, in the case of a survey, the survey design is important that it is created and tested even before the research begins.
4. **Site Visit:** A site visit is important to the success of the field research and it is always conducted outside of traditional locations and in the actual natural environment of the respondent/s. Hence, planning a site visit along with the methods of data collection is important.
5. **Data Analysis:** Analysis of the data that is collected is important to validate the premise of the field research and decide the outcome of the field research.
6. **Communicating Results:** Once the data is analyzed, it is important to communicate the results to the stakeholders of the research so that it could be auctioned upon.

Q9) Write short note on EXISTING DATA BASED RESEARCH.

Many research questions can be answered quickly and efficiently using data or specimens that have already been collected. There are three general approaches to using these existing resources. **Secondary data analysis** is the use of existing data to investigate research questions other than the main ones for which the data were originally gathered. **Ancillary studies** add one or more measurements to a study, often in a subset of the participants, to answer a separate research question. **Systematic reviews** combine the results of multiple previous studies of a given research question, often including calculation of a summary estimate of effect that has greater precision than the individual study estimates. Making creative use of existing data and specimens is a fast and effective way for new investigators with limited resources to begin to answer important research questions, gain valuable experience in a research area, and sometimes have a publishable finding in a short time frame.

ADVANTAGES AND DISADVANTAGES

The main **advantages** of studies using existing data are speed and economy. A research question that might otherwise require much time and money to investigate can sometimes be answered **rapidly** and **inexpensively**.

Studies using existing data or specimens also have **disadvantages**. The selection of the population to study, which data to collect, the quality of data gathered, and how variables were measured and recorded are all predetermined. The existing data may have been collected from a population that is not ideal (e.g., men only rather than men and women), the measurement approach may not be what the investigator would prefer (history of hypertension, a dichotomous historical variable, in place of actual blood pressure), and the quality of the data may be poor (frequent missing or incorrect values). Important confounders and outcomes may not have been measured or recorded.

Q10) What do you understand by longitudinal studies?

Longitudinal studies employ continuous or repeated measures to follow particular individuals over prolonged periods of time—often years or decades. They are generally observational in nature, with quantitative and/or qualitative data being collected on any combination of exposures and outcomes, without any external influenced being applied. This study type is particularly useful for evaluating the relationship between risk factors and the development of disease, and the outcomes of treatments over different lengths of time. Similarly, because data is collected for given individuals within a predefined group, appropriate statistical testing may be employed to analyze change over time for the group as a whole, or for particular individuals.

In contrast, cross-sectional analysis is another study type that may analyze multiple variables at a given instance, but provides no information with regards to the influence of time on the variables measured—being static by its very nature. It is thus generally less valid for examining cause-and-effect relationships. Nonetheless, cross-sectional studies require less time to be set up, and may be considered for preliminary evaluations of association prior to embarking on cumbersome longitudinal-type studies.

Longitudinal study designs

Longitudinal research may take numerous different forms. They are generally observational, however, may also be experimental. Some of these are briefly discussed below:

(i) Repeated cross-sectional studies where study participants are largely or entirely different on each sampling occasion;

(ii) Prospective studies where the same participants are followed over a period of time. These may include:

- Cohort panels wherein some or all individuals in a defined population with similar exposures or outcomes are considered over time;
- Representative panels where data is regularly collected for a random sample of a population;
- Linked panels wherein data collected for other purposes is tapped and linked to form individual-specific datasets.

(iii) Retrospective studies are designed after at least some participants have already experienced events that are of relevance; with data for potential exposures in the identified cohort being collected and examined retrospectively.

Advantages of Longitudinal Study

Longitudinal cohort studies, particularly when conducted prospectively in their pure form, offer numerous benefits. These include:

(i) The ability to identify and relate events to particular exposures, and to further define these exposures with regards to presence, timing and chronicity;

(ii) Establishing sequence of events;

(iii) Following change over time in particular individuals within the cohort;

(iv) Excluding recall bias in participants, by collecting data prospectively and prior to knowledge of a possible subsequent event occurring, and;

(v) Ability to correct for the "cohort effect"—that is allowing for analysis of the individual time components of cohort (range of birth dates), period (current time), and age (at point of measurement)—and to account for the impact of each individually.

Disadvantages of Longitudinal Study

Numerous challenges are implicit in the study design; particularly by virtue of this occurring over protracted time periods. We briefly consider the below:

(i) Incomplete and interrupted follow-up of individuals, and attrition with loss to follow-up over time; with notable threats to the representative nature of the dynamic sample if potentially resulting from a particular exposure or occurrence that is of relevance;

(ii) Difficulty in separation of the reciprocal impact of exposure and outcome, in view of the potentiation of one by the other; and particularly wherein the induction period between exposure and occurrence is prolonged;

(iii) The potential for inaccuracy in conclusion if adopting statistical techniques that fail to account for the intra-individual correlation of measures, and;

(iv) Generally-increased temporal and financial demands associated with this approach.

Longitudinal methods may provide a more comprehensive approach to research, that allows an understanding of the degree and direction of change over time. One should carefully consider the cost and time implications of embarking on such a project, whilst ensuring complete and proven clarity in design and process, particularly in view of the protracted nature of such an Endeavour; and noting the peculiarities for consideration at the interpretation stage

Q11) What are different measurement scales used in research?

Measurement scale, in statistical analysis, the type of information provided by numbers. Each of the four scales (i.e., nominal, ordinal, interval, and ratio) provides a different type of information. Measurement refers to the assignment of numbers in a meaningful way, and understanding measurement scales is important to interpreting the numbers assigned to people, objects, and events.

Nominal Scales

In nominal scales, numbers, such as driver's license numbers and product serial numbers, are used to name or identify people, objects, or events. Gender is an example of a nominal measurement in which a number (e.g., 1) is used to label one gender, such as males, and a different number (e.g., 2) is used for the other gender, females. Numbers do not mean that one gender is better or worse than the other; they simply are used to classify persons. In fact, any other numbers could be used, because they do not represent an amount or a quality. It is impossible to use word names with certain statistical techniques, but numerals can be used in coding systems. For example, fire departments may wish to examine the relationship between gender (where male = 1, female = 2) and performance on physical-ability tests (with numerical scores indicating ability).

Ordinal Scales

In ordinal scales, numbers represent rank order and indicate the order of quality or quantity, but they do not provide an amount of quantity or degree of quality. Usually, the number 1 means that the person (or object or event) is better than the person labeled 2; person 2 is better than person 3, and so forth—for example, to rank order persons in terms of potential for promotion, with the person assigned the 1 rating having more potential than the person assigned a rating of 2. Such ordinal scaling does not, however, indicate how much more potential the leader has over the person assigned a rating of 2, and there may be very little difference between 1 and 2 here. When ordinal measurement is used (rather than interval measurement), certain statistical techniques are applicable (e.g., Spearman's rank correlation).

Interval Scale

In interval scales, numbers form a continuum and provide information about the amount of difference, but the scale lacks a true zero. The differences between adjacent numbers are equal or known. If zero is used, it simply serves as a reference point on the scale but does not indicate the complete absence of the characteristic being measured. The Fahrenheit and Celsius temperature scales are examples of interval measurement. In those scales, 0 °F and 0 °C do not indicate an absence of temperature.

Ratio Scales

Ratio scales have all of the characteristics of interval scales as well as a true zero, which refers to complete absence of the characteristic being measured. Physical characteristics of persons and objects can be measured with ratio scales, and, thus, height and weight are examples of ratio measurement. A score of 0 means there is complete absence of height or weight. A person who is 1.2 metres (4 feet) tall is two-thirds as tall as a 1.8-metre- (6-foot-) tall person. Similarly, a person weighing 45.4 kg (100 pounds) is two-thirds as heavy as a person who weighs 68 kg (150 pounds).

Q12) What are unidimensional and multidimensional scales?

"Unidimensionality" is used to describe a specific type of measurement scale. A unidimensional measurement scale has only one ("uni") dimension. In other words, it can be represented by a single number line. Some examples of simple, unidimensional scales:

- Height of people.
- Weight of cars.
- IQ.
- Volume of liquid.

Unidimensionality can also refer to measuring a single ability, attribute, construct, or skill. For example, a unidimensional mathematical test would be designed to measure *only* mathematical ability (and not, say, grasp of English grammar, knowledge of sports, or other non-mathematical subjects or concepts).

Some concepts (like height or weight) are obviously unidimensional. Others can be forced into a unidimensional status by narrowing the idea into a single, measurable construct. For example, self-worth is a psychological concept that has many layers of complexity and can be different for different situations (at home, at a party, at work, at your wedding). However, you can narrow the concept by making a simple line that has "low self worth" on the left and "high self worth" on the right.

Multidimensional scaling is a visual representation of distances or dissimilarities between sets of objects. "Objects" can be colors, faces, map coordinates, political persuasion, or any kind of real or conceptual stimuli (Kruskal and Wish, 1978). Objects that are more similar (or

have shorter distances) are closer together on the graph than objects that are less similar (or have longer distances). As well as interpreting dissimilarities as distances on a graph, MDS can also serve as a dimension reduction technique for high-dimensional data (Buja et. al, 2007).

The term scaling comes from psychometrics, where abstract concepts ("objects") are assigned numbers according to a rule (Trochim, 2006). For example, you may want to quantify a person's attitude to global warming. You could assign a "1" to "doesn't believe in global warming", a 10 to "firmly believes in global warming" and a scale of 2 to 9 for attitudes in between. You can also think of "scaling" as the fact that you're essentially scaling down the data (i.e. making it simpler by creating lower-dimensional data). Data that is scaled down in dimension keeps similar properties. For example, two data points that are close together in high-dimensional space will also be close together in low-dimensional space (Martinez, 2005). The "multidimensional" part is due to the fact that you aren't limited to two dimensional graphs or data. Three-dimensional, four-dimensional and higher plots are possible.

Q13) What is rating scale and ranking scale? Explain in detail.

RATING SCALE

Rating scale is defined as a closed-ended survey question used to represent respondent feedback in a comparative form for specific particular features/products/services. It is one of the most established question types for online and offline surveys where survey respondents are expected to rate an attribute or feature. Rating scale is a variant of the popular multiple-choice question which is widely used to gather information that provides relative information about a specific topic.

Researchers use a rating scale in research when they intend to associate a qualitative measure with the various aspects of a product or feature. Generally, this scale is used to evaluate the performance of a product or service, employee skills, customer service performances, processes followed for a particular goal etc. Rating scale survey question can be compared to a checkbox question but rating scale provides more information than merely Yes/No.

Types of Rating Scale

Broadly speaking, rating scales can be divided into two categories: Ordinal and Interval Scales.

An ordinal scale is a scale the depicts the answer options in an ordered manner. The difference between the two answer option may not be calculable but the answer options will always be in a certain innate order. Parameters such as attitude or feedback can be presented using an ordinal scale.

An interval scale is a scale where not only is the order of the answer variables established but the magnitude of difference between each answer variable is also calculable. Absolute or true zero value is not present in an interval scale. Temperature in Celsius or Fahrenheit is the most popular example of an interval scale. Net Promoter Score, Likert Scale, Bipolar Matrix Table are some of the most effective types of interval scale.

There are four primary types of rating scales which can be suitably used in an online survey:

- Graphic Rating Scale
- Numerical Rating Scale
- Descriptive Rating Scale
- Comparative Rating Scale

(i) Graphic Rating Scale: Graphic rating scale indicates the answer options on a scale of 1-3, 1-5, etc. Likert Scale is a popular graphic rating scale example. Respondents can select a particular option on a line or scale to depict rating. This rating scale is often implemented by HR managers to conduct employee evaluation.5 point likert scale for satisfaction

(ii) Numerical Rating Scale: Numerical rating scale has numbers as answer options and not each number corresponds to a characteristic or meaning. For instance, a Visual Analog Scale or a Semantic Differential Scale can be presented using a numerical rating scale

(iii) Descriptive Rating Scale: In a descriptive rating scale, each answer option is elaborately explained for the respondents. A numerical value is not always related to the answer options in the descriptive rating scale. There are certain surveys, for example, a

customer satisfaction survey, which needs to describe all the answer options in detail so that every customer has thoroughly explained information about what is expected from the survey.

(iv) Comparative Rating Scale: Comparative rating scale, as the name suggests, expects respondents to answer a particular question in terms of comparison, i.e. on the basis of relative measurement or keeping other organizations/products/features as a reference.

RANKING SCALE

A ranking scale is a survey question tool that measures people's preferences by asking them to rank their views on a list of related items. Using these scales can help your business establish what matters and what doesn't matter to either external or internal stakeholders. You could use ranking scale questions to evaluate customer satisfaction or to assess ways to motivate your employees, for example. Ranking scales can be a source of useful information, but they do have some disadvantages.

Businesses typically use ranking scales when they want to establish preferences or levels of importance in a group of items. A respondent completing a scale with five items, for example, will assign a number 1 through 5 to each individual one. Typically, the number 1 goes to the item that is most important to the respondent; the number 5 goes to the one that is of least importance. In some cases, scales do not force respondents to rank all items, asking them to choose their top three out of the five, for example. Online surveys may remove the need to key in numbers, allowing respondents to drag and drop items into order.

Advantages of Ranking Scales

Ranking scales give you an insight into what matters to your respondents. Each response to an item has an individual value, giving results that you can easily average and rank numerically. This can be a valuable business tool, as it gives a statistical breakdown of your audience's preferences based on what you need to know. If you are making business decisions and have various options to choose from, data from a ranking scale might give you a clearer insight into how to satisfy your audience based on what is important to them.

Q14)How do a researcher selects a sample? Explain the steps involved in selecting the sample.

An operational sampling process can be divided into seven steps as given below:

1.Defining the Target Population:

Defining the population of interest, for business research, is the first step in sampling process. In general, target population is defined in terms of element, sampling unit, extent, and time frame. The definition should be in line with the objectives of the research study. For ex, if a kitchen appliances firm wants to conduct a survey to ascertain the demand for its micro ovens, it may define the population as 'all women above the age of 20 who cook (assuming that very few men cook)'. However this definition is too broad and will include every household in the country, in the population that is to be covered by the survey. Therefore the definition can be further refined and defined at the sampling unit level, that, all women above the age 20, who cook and whose monthly household income exceeds Rs.20,000. This reduces the target population size and makes the research more focused. The population definition can be refined further by specifying the area from where the researcher has to draw his sample, that is, households located in Hyderabad.Awell defined population reduces the probability of including the respondents who do not fit the research objective of the company. For ex, if the population is defined as all women above the age of 20, the researcher may end up taking the opinions of a large number of women who cannot afford to buy a micro oven.

2.Specifying the Sampling Frame:

Once the definition of the population is clear a researcher should decide on the sampling frame. A sampling frame is the list of elements from which the sample may be drawn. Continuing with the micro oven ex, an ideal sampling frame would be a database that contains all the households that have a monthly income above Rs.20,000. However, in practice it is difficult to get an exhaustive sampling frame that exactly fits the requirements of a particular research. In general, researchers use easily available sampling frames like telephone directories and lists of credit card and mobile phone users. Various private players provide databases developed along various demographic and economic variables. Sometimes, maps and aerial pictures are also used as sampling frames. Whatever may be the case, an ideal sampling frame is one that entire population and lists the names of its elements only

once.A sampling frame error pops up when the sampling frame does not accurately represent the total population or when some elements of the population are missing another drawback in the sampling frame is over –representation. A telephone directory can be over represented by names/household that have two or more connections.

3.Specifying the Sampling Unit:

A sampling unit is a basic unit that contains a single element or a group of elements of the population to be sampled. In this case, a household becomes a sampling unit and all women above the age of 20 years living in that particular house become the sampling elements. If it is possible to identify the exact target audience of the business research, every individual element would be a sampling unit. This would present a case of primary sampling unit. However, a convenient and better means of sampling would be to select households as the sampling unit and interview all females above 20 years, who cook. This would present a case of secondary sampling unit.

4.Selection of the Sampling Method:

The sampling method outlines the way in which the sample units are to be selected. The choice of the sampling method is influenced by the objectives of the business research, availability of financial resources, time constraints, and the nature of the problem to be investigated. All sampling methods can be grouped under two distinct heads, that is, probability and non-probability sampling.

5. Determination of Sample Size:

The sample size plays a crucial role in the sampling process. There are various ways of classifying the techniques used in determining the sample size. A couple those hold primary importance and are worth mentioning are whether the technique deals with fixed or sequential sampling and whether its logic is based on traditional or Bayesian methods. In non-probability sampling procedures, the allocation of budget, thumb rules and number of sub groups to be analyzed, importance of the decision, number of variables, nature of analysis, incidence rates, and completion rates play a major role in sample size determination. In the case of probability sampling, however, formulas are used to calculate the sample size after the levels of acceptable error and level of confidence are specified. The details of the

various techniques used to determine the sample size will be explained at the end of the chapter.

6. Specifying the Sampling Plan:

In this step, the specifications and decisions regarding the implementation of the research process are outlined. Suppose, blocks in a city are the sampling units and the households are the sampling elements. This step outlines the modus operandi of the sampling plan in identifying houses based on specified characteristics. It includes issues like how is the interviewer going to take a systematic sample of the houses. What should the interviewer do when a house is vacant? What is the recontact procedure for respondents who were unavailable? All these and many other questions need to be answered for the smooth functioning of the research process. These are guide lines that would help the researcher in every step of the process. As the interviewers and their co-workers will be on field duty of most of the time, a proper specification of the sampling plans would make their work easy and they would not have to revert to their seniors when faced with operational problems.

Q15) What are the sources of secondary data?

Sources of secondary data are as follows:

1. Research institutes

Research institutes research various Problems and make information collected by the public. This type of data is usually reliable and can be used for research purpose.Research institutes like C.S.O, Indian Statistical Institute, and N.S.S.O publish data collected by them for public use.

2. Data collected by scholars

Scholars research various research problems and publish information collected by them. This source of information is also considered a useful source of secondary data.One most important benefit of data collected from scholar research and paper is that the data is valid and can be relied on.

3 Government Publications

Government Publication is one of the most reliable sources of secondary data. Countries conduct research on the population for different problems and make the information collected by the public for two reasons one is to make public aware of the prevailing problems in the nation and second to let researchers use this information for further research.It is easy to find secondary data related to finances, employment, sex ratio, investment, savings, expenditures, and health ratio, banking, agriculture statistics import, and export, etc.

4. International publications

Data published by international publications is collected by researching on a wider population. There are various international organizations such as World Bank, I.M.F, world health organization (W.H.O), world trade organization (W.T.O), United Nations organization, international labor organization, world meteorological organization, food, and agriculture organization, international bank and reconstruction and development, etc.These organizations publish data related to their organization. For example, World Bank publish information about the growth rate of different countries or the currency values and W.H.O shares information about the health status of the population of different countries and information related to the different diseases.Such information is very useful for the industries and businesses for import-export business.

5. Semi government Publications

Semi government organizations of a nation share information that they have collected through their work such as state boards and municipalities share information related to fields like education, death, and births in the state and also the information on sanitation, etc.This information is published regularly for awareness. The information collected by these departments is usually quite accurate and can be accessed easily.

6. Commercial services:

There are many organizations which charge for providing information such as published market research reports and other publications produced by them. The information provided by commercial services is accurate, latest, and sorted.Many market companies seek information like consumer information, media statistics. This information is used for business

purposes and future investment decisions. These organizations work to collect a wide range of content and make money by selling that data to interested parties.

7. Newspapers and magazines

There are many newspapers and magazines which are a useful, important, and reliable source of secondary data. The organizations which publish newspaper and magazines daily and are required to research different fields to provide information on them.They conduct surveys and publish them in their newspaper to increase the credibility, not the newspaper. Newspapers and magazines are the cheapest source of secondary data and can be availed easily.Popular examples of international magazines which can be used as a secondary source of information are the economist, money, frontline, Bloomberg business week, entrepreneur, the New Yorkers, Forbes, fast company, the wall street journal, and business world, etc.

Q16) What is hypothesis testing? What are the steps involved in hypothesis testing?

Hypothesis testing is an act in statistics whereby an analyst tests an assumption regarding a population parameter. The methodology employed by the analyst depends on the nature of the data used and the reason for the analysis.Hypothesis testing is used to assess the plausibility of a hypothesis by using sample data. Such data may come from a larger population, or from a data-generating process. The word "population" will be used for both of these cases in the following descriptions.In hypothesis testing, an analyst tests a statistical sample, with the goal of providing evidence on the plausibility of the null hypothesis.

Statistical analysts test a hypothesis by measuring and examining a random sample of the population being analyzed. All analysts use a random population sample to test two different hypotheses: the null hypothesis and the alternative hypothesis.

The null hypothesis is usually a hypothesis of equality between population parameters; e.g., a null hypothesis may state that the population mean return is equal to zero. The alternative hypothesis is effectively the opposite of a null hypothesis; e.g., the population mean return is not equal to zero. Thus, they are mutually exclusive, and only one can be true. However, one of the two hypotheses will always be true.

Four Steps of Hypothesis Testing

All hypotheses are tested using a four-step process:

1. The first step is for the analyst to state the two hypotheses so that only one can be right.
2. The next step is to formulate an analysis plan, which outlines how the data will be evaluated.
3. The third step is to carry out the plan and physically analyze the sample data.
4. The fourth and final step is to analyze the results and either reject the null hypothesis, or state that the null hypothesis is plausible, given the data.

Q17) What should be the formal structure of report writing?

Most reports include the following sections:

What goes in each section?

1. **Title**

- This should be short and precise. It should tell the reader of the nature of your research.
- Omit any unnecessary detail e.g. 'A study of….' is not necessary.

2. **Abstract**

The Abstract is a self-contained summary of the whole of your report. It will therefore be written last and is usually limited to one paragraph. It should contain:

- An outline of what you investigated (as stated in your title)
- Why you chose to look at that particular area with brief reference to prior research done in the field
- Your hypothesis (prediction of what the results will show)
- A brief summary of your method
- Your **main** findings and how these relate to your hypothesis
- A conclusion which may include a suggestion for further research

3. **Introduction**

The Introduction 'sets the scene' for your report; it does this in two ways:

- By introducing the reader in more detail to the subject area you are looking at
- Through presenting your objectives and hypotheses

Explain the background to the problem with reference to previous work conducted in the area (i.e. a literature review).Only include studies that have direct relevance to your research.

Briefly discuss the findings of other researchers and how these connect with your study.

Finally, state your aims or hypothesis.

4. **Method**

The Method section should describe every step of **how** you carried out your research in sufficient detail so that the reader understands what you did. Information on your experimental design, sampling methods, participants, and the overall procedure employed should be clearly specified.

This information is usually presented under the following sub-headings:

- **Objective**
- **Design**
- **Participants**
- **Procedure(s)**

5. **Results**

ISO 9001:2015 & 14001:2015

Your Results section should clearly convey your findings. These are what you will base your commentary on in the **Discussion** section, so the reader needs to be certain of what you found.

- Present data in a summarized form
- Raw data

Do not over-complicate the presentation and description of your results. Be clear and concise.

- **Describe** what the results were, don't offer interpretations of them
- Present them in a **logical order**
- Those that link most directly to your hypothesis should be given first

Presenting Data in Tables and Graphs

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- Do not present the same data in two or more ways i.e. use *either* a table or a graph, or just text.
- Remember that a graph should be understandable independently of any text, but you may accompany each with a description if necessary.
- Use clear and concise titles for each figure. Say which variables the graph or table compares.
- Describe what the graph or table shows, then check that this really *is* what it shows! If it isn't, you need to amend your figure, or your description.

Statistical Analysis

If you conducted a statistical analysis of your results:

- Say which test you used
- Show **how** your results were analyzed, laying out your calculations clearly (ensure you include the level of probability or significance p or P, and the number of observations made *n*)
- Clearly state the results of the analysis saying whether the result was statistically significant or not both as numbers and in words

6. **Discussion**

ISO 9001:2015 & 14001:2015

The Discussion section is the most important part of your report. It relates the findings of your study to the research that you talked about in your introduction, thereby placing your work in the wider context. The discussion helps the reader understand the relevance of your research to previous and further work in the field. This is your chance to discuss, analyze and interpret your results in relation to all the information you have collected.

The Discussion will probably be the longest section of your report and should contain the following:

- A summary of the **main results** of your study
- An **interpretation** of these results in relation to your aims, predictions or hypothesis, e.g. is your hypothesis supported or rejected?, and in relation to the findings of other research in the area
- Consideration of the broader **implications** of your findings. What do they suggest for future research in the area? If your results contradict previous findings what does this suggest about your work or the work of others? What should be studied next?
- A discussion of any **limitations** or problems with your research method or experimental design and practical suggestions of how these might be avoided if the study was conducted again
- Some carefully considered ideas for **further research** in the area that would help clarify or take forward your own findings

7. **Conclusions**

The Conclusion section briefly summarize the main issues arising from your report

8. **References**

- Give details of work by all other authors which you have referred to in your report
- Check a style handbook or journal articles for variations in referencing styles

9. **Appendices**

The Appendices contain material that is relevant to your report but would disrupt its flow if it was contained within the main body. For example: raw data and calculations; interview questions; a glossary of terms, or other information that the reader may find useful to refer to. All appendices should be clearly labelled and referred to where appropriate in the main text (e.g. ‘See Appendix A for an example questionnaire’).

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Q18) What is computerised data analysis?

Data analysis is a process of inspecting, cleansing, transforming, and modeling data with the goal of discovering useful information, informing conclusions, and supporting decision-making. Data analysis has multiple facets and approaches, encompassing diverse techniques under a variety of names, while being used in different business, science, and social science domains. In today's business, data analysis is playing a role in making decisions more scientific and helping the business achieve effective operation.

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Data mining is a particular data analysis technique that focuses on modeling and knowledge discovery for predictive rather than purely descriptive purposes, while business intelligence covers data analysis that relies heavily on aggregation, focusing mainly on business information. In statistical applications, data analysis can be divided into descriptive statistics, **exploratory data analysis (EDA), and confirmatory data analysis (CDA)**.

EDA focuses on discovering new features in the data while **CDA** focuses on confirming or falsifying existing hypotheses. Predictive analytics focuses on application of statistical models for predictive forecasting or classification, while text analytics applies statistical, linguistic, and structural techniques to extract and classify information from textual sources, a species of unstructured data. All of the above are varieties of data analysis.

Data integration is a precursor to data analysis,[according to whom?] and data analysis is closely linked[how?] to data visualization and data dissemination. The term data analysis is sometimes used as a synonym for data modeling

Q20) What are the advanced excel skills that you should know?

What exactly does it mean to have advanced skills in Microsoft Excel? In many job searches, you'll see it listed time and again, but rarely is the capability described in any detail. So if you have any background with the software, you may be considering whether you are okay to characterize your ability as "advanced." Moreover, you might wonder if you will be comfortable performing the Excel tasks the company expects from you.

In this article, we'll take a quick look at some of the most widely used advanced features of Excel. This should help you get an idea of where you feel confident and where you might

want to gain some training. You can also get started on learning today with an advanced Excel course online to make sure you are versed in the software.

Advanced functions

Functions are easy to create in Excel and, by design, they simplify and automate tasks that would otherwise be much more labour intensive. That said, there are a number of functions that, in practice, require some skill in order to solve complex problems. Part of the challenge for you is knowing when and how you can apply these and how to design them for your specific purpose. If this is a specific area you would like to work on, you can take an online course on advance formulas and functions in Excel. Here are some examples:

Logical functions:

- IF: Gives an output based on whether a condition is true or false for a given cell. Where the IF function really starts to come in handy is when it is nested within a larger formula. An example you will come across fairly regularly is a chain of IF functions that effectively creates an algorithm.
- OR and AND: Often used as components of a larger formula, the OR and AND functions determine the truth or falseness of any defined condition or all defined conditions, respectively.

Data Functions:

- VLookup: Searches a column within a range for a user-defined input and returns a corresponding value from another specified column in that range.
- HLookup: Searches rows in a range for a user defined input and returns a corresponding value for a defined row. This transposes the VLookup method but will have very different applications in daily use.