

**BBA-I-B****BUSINESS MATHEMATICS (103)**

S.NO.	NAME	ENROLL.NO.	TOPICS
1	MADHUMITA SARBABHOM	9526966	In how many ways can 4 boys and 3 girls be seated in a row so that (i) all the girls sit together (ii) no two girls sit together.
2	MANAV CHHABRA	9512442	How many words can be formed from the letters of the word TRIANGLE so that (i) the vowels always come together? (ii) the vowels never come together?
3	MANISH SINGH RAWAT	9526598	The letters of the word ZENITH are written in all possible orders and these words are written down as in a dictionary. Find the rank of the word ZENITH.
4	MANISHA CHOUDHARY	9525430	In how many ways can the letters of the word ARRANGE be arranged? If the two R's do not occur together, then how many arrangements can be made? If besides two R's. the two A's also do not occur together, how many permutations will be made?
5	MANSI	9527240	Variance Analysis & its types.
6	MAYANK GULATI	9518194	Linear Differential Equations.
7	MOHIT KUMAR	9522885	Homogeneous Differential Equations.
8	MUSKAN GROVER	9504387	Geometrical Interpretation of Definite Integral.
9	MUSKAN JHA	9524847	Integration by Partial Fractions Method.
10	MUSKAN SAHNI	95267254	Integration by Parts Method.
11	NAITIK SHARMA	9515442	Integration by Substitution Method.
12	NAKUL SOLANKI	9528560	Definite & Indefinit Integral.
13	NAKUL YADAV	9524330	Lagrange Multipliers.

14	NEHA GANDASS	9511470	The Utility Function.
15	NIKHIL PHALDAKOTI	9511820	The Production Function.
16	NILESH PANDEY	9525753	Demand Analysis.
17	NISHANT PANGHAL	9503381	Homogeneous Functions & Euler's Theorem.
18	NISHANT SHARMA	9519638	Partial Derivatives (First order & Second Order).
19	PARAS VIG	9515221	Price Elasticity of Demand.
20	PARTH MALHOTRA	9526838	First Derivative Test & Second Derivative Test.
21	PARUL GODARA	9529561	Increasing & Decreasing Functions.
22	PRABAL BHARDWAJ	9517693	Successive Differentiation.
23	PRADEEP SINGHAL	9519735	Implicit Differentiation.
24	PRADYUMN	9507064	Derivatives of Logarithmic and Exponential Functions.
25	PRATEEK SHARMA	9529583	Chain Rule.
26	PRATEEK TAYAL	9501993	Product and Quotient Rules.
27	PRATHAM SEHRAWAT	9518506	Differentiability and Continuity.
28	PRINCE YADAV	9527316	By considering the particulars as mentioned, fixed cost 1.5 Lakh, variable cost Rs.150 per unit, selling price Rs. 350 per unit. Find cost function, revenue function, profit function, break even point.
29	PULKIT SHARMA	9506997	Explain Integration and method of integration with example.
30	RAHUL DUDEJA	9503122	A box contains 7 red , 6 white and 4 blue balls . How many selection of three balls can be made so that a) none is red and b.) one of each colour

31	RAHUL KATARIA	9517547	Explain Learning Curve and write its applications.
32	RAHUL KUMAR SINGH	9528963	Consumers' and Producers' Surplus.
33	RAHUL SINGH	9501580	Conditions of Maxima and Minima.
34	RAJAN WADHWA	9515261	Explain Cost function, Revenue function and Profit function.
35	RAVI YADAV	9505312	The Leontief Input-Output Model.
36	RHYTHM	9505442	Properties of Scalar Multiplication(with example of each).
37	RIDHIMA	9500808	Gauss-Jordan Elimination Method.
38	RISHU KUMAR SHAHI	9516045	Cramer's Rule/Determinant Method.
39	RIYA PANDEY	9523597	Matrix Inverse Method.
40	ROHIT GUPTA	9528778	Row Echelon form of a Matrix & Rank of Matrix.
41	ROHIT KUMAR YADAV	9500366	Properties of Addition of Matrices(with example of each).
42	SACHIN KUMAR	9509733	Elementary Transformations.
43	SACHIN VISHVAKARMA	9502103	Transpose, Adjoint & Inverse of Matrix.
44	SAGAR	9517111	Explain Determinant, Minors & Cofactors with examples.
45	SAMIR KHAN	9511803	Properties of Matrix Multiplication along with the examples.
46	SAURAV MONDAL	9527987	Different types of Matrices(with examples).
47	SAURAV YADAV	9503235	Explain the Principle of Mathematical Induction. Using PMI prove that : $1.2+2.2^2+3.2^3+\dots+n.2^n=(n-1)2^{n+1}+2$ for all natural numbers n.

48	SHEKHAR SHARMA	9523228	A man has 7 relatives, 4 of them are ladies and 3 gentlemen. His wife has also 7 relatives, 3 of them are ladies and 4 gentlemen. In how many ways can they invite a dinner party of 3 ladies and 3 gentlemen so that there are 3 of man's relative and 3 of wife's relatives?
49	SHIVAM	9512008	A committee of 6 is chosen from 10 men and 7 women so as to contain at least 3 men and 2 women. In how many different ways can this be done if two particular women refuse to serve on the same committee?
50	SHIVAM SHARMA	9521583	How many different words can be formed with the letters of the word LOGARITHMS so that: (i) the letter L always occupies the first place, (ii) the letters L and S occupy, respectively, the first and the last place, (iii) the vowels are always together, (iv) the vowels always occupy even places. (v) the letters T, H, M are never together.
51	SHUBHAM SEHRAWAT	9519090	Explain Permutation and Combination with examples. Also explain Restricted & Circular Permutation in detail.
52	SHWETA YADAV	9506018	Explain the Fundamental Principle of Counting with examples.
53	SIDHANT DEV KANWAR	9512908	Show the Representation of Terms in G.P.(three, four & five terms) with examples of each.
54	SMARTH CHAWLA	9529098	Explain all the properties of Geometric Progressions along with examples.
55	SOHIT	9504335	Find the 14 arithmetic means which can be inserted between 5 and 8 and show that their sum is 14 times the arithmetic mean between 5 and 8.
56	SOURABH SHARMA	9511052	The ratio between the sums of n terms of two arithmetic progressions is $(7n+1):(4n+27)$ . Find the ratio of their 11th terms.

57	SREELAKSHMI	9518416	Show that the sum of all odd numbers between 2 and 1000 which are divisible by 3 is 83,667 and of those not divisible by 3 is 1,66,332.
58	SUGREEV KUMAR	9507242	Show the Representation of Terms in A.P.(three, four & five terms) with examples of each.
59	SUMIT KUMAR CHOUDHARY	9514043	Explain all the properties of Arithmetic Progressions along with examples.
60	TANNU JANGRA	9509570	If x, y, z be respectively the pth, qth and rth terms of an A.P., show that : $x(q-r) + y(r-p) + z(p-q) = 0$ .
61	TARUN SEHRAWAT	9503976	In how many ways can 4 boys and 3 girls be seated in a row so that (i) all the girls sit together (ii) no two girls sit together.
62	TUSHAR SINGH	9505717	How many words can be formed from the letters of the word TRIANGLE so that (i) the vowels always come together? (ii) the vowels never come together?
63	TWINKLE	9505415	The letters of the word ZENITH are written in all possible orders and these words are written down as in a dictionary. Find the rank of the word ZENITH.
64	UJJWAL SHOKEEN	9519740	In how many ways can the letters of the word ARRANGE be arranged? If the two R's do not occur together, then how many arrangements can be made? If besides two R's. the two A's also do not occur together, how many permutations will be made?
65	UTKARSH PANDEY	9507610	Variance Analysis & its types.
66	VARUN RANA	9502532	Linear Differential Equations.
67	VICKY	9508307	Homogeneous Differential Equations.
68	VIKAS	9529992	Geometrical Interpretation of Definite Integral.
69	VINAYAK YADAV	9527787	Integration by Partial Fractions Method.

70	VISHAL GAHLOT	9513298	Explain Permutation and Combination with examples. Also explain Restricted & Circular Permutation in detail.
71	VISHAL RANA	9505744	Explain the Fundamental Principle of Counting with examples.
72	YAGYASOOT	9523491	Show the Representation of Terms in G.P.(three, four & five terms) with examples of each.
73	YAKSHANSH	9526576	Explain all the properties of Geometric Progressions along with examples.
74	YASH	9519573	Find the 14 arithmetic means which can be inserted between 5 and 8 and show that their sum is 14 times the arithmetic mean between 5 and 8.
75	YATIN KUMAR	9525070	The ratio between the sums of n terms of two arithmetic progressions is $(7n+1):(4n+27)$ . Find the ratio of their 11th terms.
76	YOGESH KATARIA	9515036	Show that the sum of all odd numbers between 2 and 1000 which are divisible by 3 is 83,667 and of those not divisible by 3 is 1,66,332.
77	YOGESH RANA	9509522	Show the Representation of Terms in A.P.(three, four & five terms) with examples of each.
78	YUKTA ARYA	9529675	Integration by Substitution Method.
79	MAYANK MAURYA	42051401718	Definite & Indefinit Integral.
80	NEERAJ CHOUHAN	41590101718	Lagrange Multipliers.
81	LAKSHAY SEJWAL	46890101718	The Utility Function.