MATHEMATICS (201) - MCQS

S.NO	QUESTIONS	A	B	C	D	ANS
1	Any measure indicating the centre of a set of data, arranged in an increasing or decreasing order of magnitude, is called a measure of	Skewness	Symmetry	Central tendency	Dispersion	C
2	Scores that differ greatly from the measures of central tendency are called:	Raw scores	The best scores	Extreme scores	Z-scores	C
3	The measure of central tendency listed below is:	The raw score	The mean	The range	Standard deviation	B
4	The total of all the observations divided by the number of observations is called:	Arithmetic mean	Geometric mean	Median	Harmonic mean	A
5	While computing the arithmetic mean of a frequency distribution, the each value of a class is considered equal to:	Class mark	Lower limit	Upper limit	Lower class boundary	B
6	The sum of the squares fo the deviations about mean is:	Zero	Maximum	Minimum	All of the above	C
7	For a certain distribution, if $\sum(X-20) = 25$, $\sum(X-25) = 0$, and $\sum(X-35) = -25$, then is equal to:	20	25	-25	35	B
8	The sum of the squares of the deviations of the values of a variable is least when the deviations are measured from	Harmonic mean	Geometric mean	Median	Arithmetic mean	D
9	If $X_1, X_2, X_3, \dots X_n$, be **n** observations having arithmetic mean and if $Y = 4X \pm 2$, then is equal to:	$4X$	4	4 ± 2	4 ± 2	C
10	If =100 and $Y = 2X - 200$, then mean of Y values will be:	0	2	100	200	A
11	If the arithmetic mean of 20 values is 10, then sum of these 20 values is:	10	20	200	20 + 10	C
12	Ten families have an average of 2 boys. How many boys do they have together?	2	10	12	20	D
13	If the arithmetic mean of the two numbers X_1 and X_2 is 5 if $X_1 = 3$, then X_2 is:	3	5	7	10	C
14	We must arrange the data before calculating:	Mean	Median	Mode	Geometric mean	B
15	The lower and upper quartiles of a symmetrical distribution are 40 and 60 respectively. The value of median is:	40	50	60	(60 – 40) / 2	B
16	If in a discrete series 75% values are greater than 50, then:	$Q_1 = 50$	$Q_1 < 50$	$Q1 > 50$	$Q_1 \neq 50$	A
17	Suitable average for averaging the shoe sizes for children is	Mean	Mode	Median	Geometric mean	B
18	A measurement that corresponds to largest frequency in a set of data is called:	Mean	Median	Mode	Percentile	C
19	Which of the following average cannot be calculated for the observations 2, 2, 4, 4, 6, 6, 8, 8, 10, 10 ?	Mean	Median	Mode	All of the above	C

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20	What have been constructed from OR problems and methods for solving the models that are available in many cases?	Scientific models	Algorithms	Mathematical models	None of these	C
21	Which of the following is not the phase of OR methodology?	Formulating a problem	Constructing a model	Establishing controls	Controlling the environment	D
22	Operations research is the application of_____methods to arrive at the optimal solutions to the problems.	Economical	Scientific	Both A and B	Artistic	B
23	In operations research, the _____ are prepared for situations.	Mathematical models	Physical models diagrammatic	Diagrammatic models	Both B and C	A
24	OR can evaluate only the effects of_____.	Personnel factors	Financial factors	Numeric and quantifiable factors	Both A and B	C
25	Which technique is used in finding a solution for optimizing a given objective, such as profit maximization or cost reduction under certain constraints?	Qualing theory	Waiting Line	Both A and B	Linear Programming	D
26	By constructing models, the problems in libraries increase and cannot be solved.	TRUE	FALSE			B
27	A solution can be extracted from a model either by	Conducting experiments on it	Mathematical analysis	Both A and B	Diversified Technique	C
28	The main limitation of operations research is that it often ignores the human element in the production process.	TRUE	FALSE			A
29	Feasible solution satisfies	Only constraints	only non-negative	Both A and B	A, B and optimal solution	C
30	What is the objective function in linear programming problems?	A constraint for available resource	An objective for research and development of a company	A linear function in an optimization problem	A set of non-negativity conditions	C
31	What is merits & demerits of mean ?					
32	Write the formula for mode for group data.					
33	What is the relation between mean , mediam & mode .					
34	ExplianKarl Person's Methods					
35	Write short notes on Assignment Problems.					