

Roll No.

--	--	--	--	--	--	--	--	--	--	--	--

Total No. of Pages : 03

Total No. of Questions : 17

MBA (2018 Batch) (Sem.-1)
QUANTITATIVE TECHNIQUES
Subject Code : MBA-103-18
Paper ID : [75404]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A contains EIGHT questions carrying TWO marks each and students has to attempt ALL questions.
2. SECTIONS-B consists of FOUR Subsections : Units-I, II, III & IV. Each Subsection contains TWO questions each carrying EIGHT marks each and student has to attempt any ONE question from each Subsection.
3. SECTION-C is COMPULSORY carrying TWELVE marks.

SECTION-A

1. Define Statistics.
2. What are the properties of standard deviation?
3. What are characteristics of a good measure of central tendency?
4. Define rank correlation coefficient. How is it determined?
5. Distinguish between correlation and regression.
6. Define probability.
7. What is Normal Distribution?
8. What is the difference between PERT and CPM?

SECTION-B\

UNIT-I

9. Calculate median from the following frequency distribution.

Marks:	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50
Frequency:	7	15	24	31	42	30	26	15	10

10. Calculate Karl Pearson's Coefficient of skewness :

X:	12.5	17.5	22.5	27.5	32.5	37.5	42.5	47.5
f:	28	42	54	108	129	61	45	33

UNIT-II

11. Find out coefficient of correlation between X and Y

X:	17	18	19	19	20	20	21	21	22	23
Y:	12	16	14	11	15	19	22	16	15	20

12. What is a scatter Diagram? What are the merits and limitations of scatter diagram?

UNIT-III

13. The following data shows the number of seeds germinated out of 10 on a damp filter of 80 sets of seeds. Fit a binominal distribution to the data :

X:	0	1	2	3	4	5	6	7	8	9	10
f:	6	20	28	12	8	6	0	0	0	0	0

14. Three dogs A, B and C are in a dog show race. A is twice as likely to win as B and B is twice as likely to win as C. what are the respective probability of winning the race?

UNIT-IV

15. What is North West Corner Rule? Explain how to solve a transportation problem using North West Corner rule.
16. Describe Hungarian method in assignment problem.

SECTION-C

17. A project consists of 6 activities, The activities and their time estimation are shown below :

Activity	Time Weeks		
	Optimistic Time (t_o)	Most Likely time (t_m)	Pessimistic time (t_p)
1-2	9	12	21
1-3	6	12	18
2-4	1	1.5	5
3-4	4	8.5	10
2-5	10	14	24
4-5	1	2	3

- a) Draw the network diagram.
- b) Determine Critical path and calculate event slack.