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**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
MBA I Year I Semester Regular & Supplementary Examinations January 2018
STATISTICS FOR MANAGEMENT**

Time: 3 hours

Max. Marks:60

SECTION – A

(Answer all Five Units 5 x 10 = 50 Marks)

UNIT-I

- 1 Define statistics. Explain objectives and scope of statistics. 10M

OR

- 2 Explain the applications of statistics. 10M

UNIT-II

- 3 Explain different Measures of Dispersion in detail. 10M

OR

- 4 Consider the following distribution. Compute mean, median and mode.

X	0-10	10-20	20-30	30-40	40-50
f	12	18	20	25	23

10M

UNIT-III

- 5 Discuss various methods and tools for data classification & tabulation. 10M

OR

- 6 Represent the following data by a histogram

Marks	No. of Students
0-10	8
10-20	12
20-30	22
30-40	35
40-50	40
50-60	60
60-70	52
70-80	40
80-90	30
90-100	5

10M

UNIT-IV

- 7 In a anti malaria campaign in a certain area, quinine was administrated to 1624 persons out of a total population of 6496. The number of fever cases is shown below:

Treatment	Fever	No fever	Total
Quinine	40	1584	1624
No Quinine	440	4432	4872
Total	480	6016	6496

Discuss the usefulness of quinine in cheking malaria by using chi-square test. 10M

OR

- 8 10 workers are selected at random from a large number of workers in a factory. The number of items produced by them on a certain day are found to be: 51, 52, 53, 55, 56, 57, 58, 59, 59, 60

In the light of these data, would it be appropriate to suggest that the mean of the number of items produced in the population is 58? (5% value of t for 9 d.f. is 2.262). 10M

UNIT-V

- 9 The following table shows the sales of the ABC company ltd.

Year	2010	2011	2012	2013	2014	2015	2016	2017
Sales (lakhs)	76	80	130	144	138	120	174	190

Fit a straight line trend by the method of least squares and estimate the sales of 2019? 10M

OR

- 10 a Explain the difference between correlation and regression 5M
 b Discuss the Characteristics and uses of index numbers in detail. 5M

SECTION – B

(Compulsory Question)

1 x 10 =10 Marks

- 11 Case study:

Caluculate Spearman’s coefficient of correlation between marks assigned to ten students by judges X and Y in a certain competitive test as shown below:

	1	2	3	4	5	6	7	8	9	10
Marks by judge X	52	53	42	60	45	41	37	38	25	27
Marks by judge Y	65	68	43	38	77	48	35	30	25	50

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