

Reg. No:

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

**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)**

**MBA I Year I Semester Supplementary Examinations November-2020
BUSINESS STATISTICS FOR MANAGERS**

Time: 3 hours

Max. Marks: 60

SECTION – A

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

UNIT-I

1 Define statistics. Explain the various branches related to statistics. 10M

OR

2 a Explain the applications of statistics. 5M

b What are the limitations of statistics? 5M

UNIT-II

3 Explain Measures of Dispersion? Write about range, quartile deviation, Mean deviation, Standard deviation. 10M

OR

4 Find the Quartile Deviation for the data given below? 10M

X	0-10	10-20	20-30	30-40	40-50	50-60	60-70
F	7	8	12	15	6	4	3

UNIT-III

5 a Give a brief explanation about classification and tabulation of data 5M

b Explain different types of Graphs in data representation with examples. 5M

OR

6 a Draw less than and more than Ogives from the data given below 5M

Profits(rs lakhs)	No. of companies
10-20	6
20-30	8
30-40	12
40-50	18
50-60	25
60-70	16
70-80	8
80-90	5
90-100	2

b What are the methods and tools that are available for data classification and tabulation? 5M

UNIT-IV

- 7 a What is the Meaning of regression analysis? Explain its utilities. **5M**
 b How do you interpret the regression coefficients? **5M**

OR

- 8 Obtain the regression equations for the following? **10M**

X	8	10	9	7	8	9	6
Y	2	3	4	2	5	4	6

UNIT-V

- 9 Define Hypothesis? Explain the process of hypothesis testing? A sample of 400 individuals is found to have a mean height of 67.47 inches. Is it reasonable to regard the sample drawn from the large population with mean height 67.39 inches and standard deviation of 1.3 inches. Test at 1% level of significance **10M**

OR

- 10 The table given below shows the data obtained during outbreak of smallpox: **10M**

	Attacked	Not attacked
		Total
Vaccinated	31	469
Not vaccinated	185	1315

Test the effectiveness of vaccination in preventing the attack from smallpox. Test your result with the help of χ^2 at 5 per cent level of significance.

SECTION – B

(Compulsory Question)

1 x 10 = 10 Marks

11. In an anti malarial campaign, quinine was administered to 812 persons out of a total population of 3248. The number of fever cases is shown below.

Treatment	Fever	No fever
Quinine	20	792
No quinine	220	2216

***** END *****