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

MBA I Year I Semester (R16) Supplementary Examinations JUNE 2016 STATISTICS FOR MANAGEMENT

(For Students admitted in 2016 only)

Time: 3 hours Max. Marks:60

SECTION - A

(Answer all Five Units $5 \times 10 = 50 \text{ Marks}$)

UNIT-I

- 1 a. Define statistics. Discuss the types of statistics.
 - b. Explain the relation of statistics with other disciplines.

OR

- 2 a. Discuss the applications of statistics.
 - b. Explain origin and development of statistics.

UNIT-II

- a. Measures of dispersion and skewness are complimentary to one another in understanding a frequency distribution." Elucidate the statement.
 - b. Why is the standard deviation the most widely used measure of dispersion? Explain.

OR

4 a. Calculate Mean Diviation coefficient from the following data and interpret the result

X	20	35	15	40	10	35	30	25	45	30
Y	25	30	20	35	20	25	25	35	35	30

UNIT-III

- 5 a. Define tabulation. Discuss the different types of tabulation.
 - b. What are the different types of graphs? Explain the importance of graphs in managerial decision making.

OR

6 a. The following are the figures of sales of two firms A&B for the years 2008 to 2015.present the data graphically?

Year	Sales Firm A	Sales Firm B
	('ooo units)	('ooo units)
2008	200	2000
2009	300	3000
2010	400	4000
2011	500	5000
2012	600	6000
2013	700	7000
2014	800	8000
2015	900	9000

b. Describe the methods of data collection.

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UNIT-IV

7 Calculate the rank coefficient of correlation from the following data and comment:

		88						
Y	120	134	150	115	110	140	142	100

OR

To determine whether there is really a relationship between employee's performance in the company's training program and his success in the job, a sample of 400 cases were taken and the following results were obtained. Test at 1% l.o.s whether the performance in the training program and success in the job are independent and the table is as given below. (Chi Square test for Independency of attributes).

	Performance i	Performance in training program							
	Below Avg. Avg. Above Avg.								
Poor	23	60	29						
Average	28	79	60						
Very good	9	49	63						

UNIT-V

9 a. Elobarate the objectives and components of time series analysis.

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b. Distinguish between correlation and regression.

OR

Fit a trend line through free hand curve for the below data

Year	2006	07	08	09	10	11	12	13	14	2015	101/4
Expenditure (in '000	10	8	5	15	16	44	49	51	55	62	10M
Rs)											

SECTION - B

(Compulsory Question)

 $1 \times 10 = 10 \text{ Marks}$

11 Case study:

Given are the following price-quantity data of fish, with price quoted in Rs per kg and production in qtls.

Year	2010	2011	2012	2013	2014	2015
Price	15	17	16	18	22	20
Production	500	550	480	610	650	600

Construct:

- (a) the price index for each year taking price of 2010 as base,
- (b) the quantity index for each year taking quantity of 2010 as base.

*** END ***