### **ANDHRA UNIVERSITY MODEL QUESTION PAPER** BBA(CBCS) – SECOND SEMESTER With effect from 2015-16 QUANTITATIVE METHODS FOR MANAGERS

Max.Marks: 75

#### SECTION - A

## Answer any Five question of the following.

 $5 \times 5 = 25 \text{ Marks}$ 

- Define Arithmetic mean in Individual Series 1)
- 2) Define Median in Discrete Series
- 3) Write the relationship between mean, medium and mode
- 4) Define Range
- Define Rank- Correlation 5)
- 6) **Define Covariance**
- 7)  $P.T (A \cup B) = (A - B) \cup B$
- Find the Sum of the Series 3+5+7+9... to 40 terms 8)

#### SECTION - B

# Answer the following questions:

 $5 \times 10 = 50 \text{ Marks}$ 

Write the property of Arithmetic mean? And calculate the Arithmetic mean for 9) the following data

Х	1	2	3	4	5	6	7
f	5	9	12	17	14	10	6

(OR)

Explain the median in continuous series and calculate the median for the following data.

C.I.	0-5	5-10	10-15	15-20	20-25	25-30
f	5	8	20	15	16	10

Explain any three type of measure of dispersion. 10)

(OR)

Calculate the mean deviation for the following data.

х	5	10	15	20	25	30
f	3	4	8	12	7	2

P.T the Rank correlation coefficient always lies between -1 and 1 i.e., -1  $\leq$ p $\leq$ 1 (OR)

Define Regression Coefficient. And write the properties of the Regression Coefficient.

12) A town has a total population of 50,000 out of it 28,000 read Economics Times and 23,000 read times of India, while 4,000 read both the papers indicate how many read neither economic times nor times of India.

(OR)

In a G.P. If the sum of three consecutive terms is 14 and their product is 64, find them.

13) Solve 3x - 2y + z = 20, x+2y-3z= 5, -x - y + z = 10 using the matrix inverse. (OR)

Solve 3x + 3y - z = 11, 2x-y+2z = 9, 4x+3y+2z = 24 by using Cramer's rule