

# SCHOOL OF PLANNING AND ARCHITECTURE, VIJAYAWADA

SEMESTER END EXAMINATIONS (REGULAR),  
NOVEMBER-2015

B.Planning, I YEAR I SEMESTER

**BPLN105: QUANTITATIVE METHODS FOR PLANNING**

Maximum Marks – 50

Time – 2.00 Hours

- a) Answer any Two questions out of 1 to 4 questions.  
b) Question No.5 is compulsory and answer any four out of six sub-questions.

- Q1. Calculate the median, mode, mean, standard deviation and co-efficient of variation for the following data: (15M)

Class Interval	Frequency
0-50	7
50-100	10
100-150	15
150-200	45
200-250	95
250-300	125
300-350	150
350-400	170
400-450	175

- Q2. Describe the Probability and Non-probability sampling with (15M) examples.
- Q3. Calculate Spearman Rank Co-relation Co-efficient between (15M) the male and female Annual Income

Male Annual income	Female Annual income
1,00,000	80,000
2,00,000	80,000
3,00,000	2,70,000
3,00,000	2,90,000
4,00,000	3,80,000
5,00,000	4,50,000
7,00,000	5,50,000

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Q4. Compute two regression equations from the following data: (15M)

Income monthly (in Rs.)	Expenditure on housing (in Rs)
1.5 lakh	75,000
1.25 lakh	62,000
1 lakh	50,000
75,000	37,000
50,000	25,000
25,000	12,500

Find the expenditure on housing when the Income is Rs.2,00,000.

Q5. Write short notes on the following: (4x5=20M)

- Methods of data collection.
- Types of Random Variable.
- Probability Density function.
- Bi-variable frequency distribution.
- Histogram & frequency polygon.
- Determination of class interval.

