

Q.P. Code – 13134

**First Semester B.Com.(N) Degree Examination,
October/November 2019**

(Revised New Scheme)

Commerce

Paper 1.6 – QUANTITATIVE ANALYSIS - I

Time : 3 Hours]

[Max. Marks : 80

Instructions to Candidates : Answers should be written in English only. Show necessary calculations in the answer.

SECTION – A

1. Answer any **TEN** sub-questions from the following. Each sub-question carries **2** marks : **(10 × 2 = 20)**
- (a) What is statistics?
 - (b) State any four functions of statistics.
 - (c) What do you mean by secondary data?
 - (d) Define averages.
 - (e) What is weighted arithmetic mean?
 - (f) If mean = 12, median = 12.33, find mode?
 - (g) What is harmonic mean?
 - (h) Name the various measures of dispersion.
 - (i) What is integers?
 - (j) Give the meaning of prime number.
 - (k) Give the meaning of rational number.
 - (l) How do you calculate common difference and common ratio?



SECTION – B

Answer any **THREE** questions from the following. Each question carries **5** marks : **(3 × 5 = 15)**

- 2. Briefly explain the limitations of statistics.
- 3. Distinguish between measures of central tendencies and dispersions.

Q.P. Code - 13134

4. Solve $\frac{3x-4}{5} - \frac{2x-3}{7} = \frac{x-4}{5} + 1$.
5. From the following data, find the missing frequency if the arithmetic mean is 15.38.

X: 10 12 14 16 18 20

Y: 3 7 ? 20 8 5

6. (a) Calculate HCF and LCM of 30 and 40.
(b) From the data given below calculate range and co-efficient of range :
Market value of share Rs. 240 300 360 400 230 480 520 530 490

SECTION - C

Answer any **THREE** questions from the following. Each question carries **15** marks : **(3 × 15 = 45)**

7. (a) From the following data calculate median :
- | | | | | | | | |
|-------------|-----|-----|-----|-----|-----|-----|-----|
| X more than | 232 | 234 | 236 | 238 | 240 | 242 | 244 |
| Frequency : | 800 | 762 | 650 | 500 | 480 | 460 | 300 |
- (b) Solve through formula methods $\frac{1}{x-2} = \frac{6}{x} - \frac{2}{x-1}$.
8. Calculate quartile deviation and its coefficient from the following data :
- | | | | | | | |
|-----|-------|-------|-------|-------|-------|-------|
| C-I | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 |
| F | 15 | 16 | 28 | 28 | 14 | 9 |
9. (a) Find the sum of all integers between 200 to 1000 which are divisible by 9.
(b) From the following data compute mean deviation from median and its coefficient.
- | | | | | | | |
|-------------------|------|-------|-------|-------|-------|-------|
| % of marks : | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
| No. of students : | 2 | 10 | 20 | 15 | 10 | 3 |
10. (a) The sum of 3 numbers in GP is 35 and their product is 1000. Find the numbers.
(b) From the data given below find out the value of mode :
- | | | | | | | |
|---------------------|-------|-------|-------|-------|-------|-------|
| Daily wages (Rs.) : | 13-17 | 18-22 | 23-27 | 28-32 | 33-37 | 38-42 |
| No. of workers : | 4 | 10 | 24 | 34 | 28 | 12 |

11. The following data relates to the wages of workers in Digan Factory and Gagan Factory. Which factory's wages are more variable?

Wages in Rs.	No. of Workers	
	Digan Factory	Gagan Factory
0-5	20	15
5-10	18	20
10-15	30	35
15-20	25	30
20-25	20	18
25-30	15	17

