

Roll No



**PRESIDENCY UNIVERSITY  
BENGALURU**

**SCHOOL OF INFORMATION SCIENCE  
MID TERM EXAMINATION - APR 2023**

Semester : Semester II - 2022

Course Code : MAT1006

Course Name : Sem II - MAT1006 - Statistical Methods and Techniques

Program : BCA&amp;BCG

Date : 12-APR-2023

Time : 9.30AM - 11.00AM

Max Marks : 50

Weightage : 25%

**Instructions:**

- (i) Read all questions carefully and answer accordingly.  
 (ii) Question paper consists of 3 parts.  
 (iii) Scientific and non-programmable calculator are permitted.  
 (iv) Do not write any information on the question paper other than Roll Number.

**PART A****ANSWER ALL THE QUESTIONS****(5 X 2 = 10M)**

- State the formula for computation of arithmetic mean for a grouped data distribution. (CO1) [Knowledge]
- Identify the mode for the following data  

X	25	35	45	55	65	75	85
F	10	12	17	22	16	15	11

(CO1) [Knowledge]
- Daily wages in Rs. of 7 workers are as follows (Rs.) : 12, 8, 9, 10, 7, 14, 15. Recognize range. (CO1) [Knowledge]
- Discuss the result or average of the distribution: Mode is 11 , median is 13. (CO2) [Knowledge]
- Theoretically, the value of Karl Pearson's coefficient of skewness varies between \_\_\_\_\_. (CO2) [Knowledge]

**PART B****ANSWER ALL THE QUESTIONS****(4 X 5 = 20M)**

- Discuss A.M. for the following data,  

AGE GROUP	0 - 20	20 - 40	40 - 60	60 - 80	80 - 100
FREQUENCY	4	8	10	15	20

(CO1) [Comprehension]

7. Discuss co-efficiency of quartile deviation.

X	10	20	30	40	50
F	5	7	9	10	8

(CO1) [Comprehension]

8. For a moderately skewed distribution, AM = 112, Mode = 110 and s.d. = 40. Discuss Median.

(CO2) [Comprehension]

9. Discuss the Absolute skewness for the following data 7,6,7,8,9 .

(CO2) [Comprehension]

### PART C

#### ANSWER ALL THE QUESTIONS

(2 X 10 = 20M)

10. Compute standard deviation for the following data

MARKS	5	15	25	35
NO.OF STUDENTS	5	8	5	16

(CO1) [Application]

11. Compute the coefficient of skewness 3,5,8,5,9.

(CO2) [Application]