

F.Y.B.SC. SEM – I (2014 COURSE) : WINTER - 2017
SUBJECT : STATISTICS : DESCRIPTIVE STATISTICS – I (S – 11)

Day : Wednesday
 Date : 01/11/2017

Time : 12.00 NOON TO 02.00 PM
 Max. Marks : 40

W-2017-0591

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Use of statistical tables and **CALCULATOR** is allowed.

Q.1 Attempt **ANY TWO** of the following: **[10]**

- a) Draw less than cumulative frequency curve for the following frequency distribution. Also find median graphically.

Class	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70	70 – 80
Frequency	24	20	27	14	15	10

- b) Find mean and mode from the data given below:

Class	15 – 25	25 – 35	35 – 45	45 – 55	55 – 65
Frequency	6	7	14	8	5

- c) Describe the scope of statistics in Medical Sciences and Economics.

Q.2 Attempt **ANY TWO** of the following: **[10]**

- a) Compute coefficient of range and coefficient of quartile deviation for the following frequency distribution.

Class	45 – 50	50 – 55	55 – 60	60 – 65	65 – 70
Frequency	18	22	26	17	13

- b) Write a note on simple random sampling.
 c) Find combined S.D. from the following data:

	Company A	Company B
No. of workers	200	300
Mean	61	70
S.D.	8	9

Q.3 Attempt **ANY TWO** of the following: **[10]**

- a) What is kurtosis? With the help of suitable diagram, explain the types of kurtosis.
 b) Find coefficient of skewness and kurtosis from the given information and interpret it.
 $\mu_2 = 14.75, \mu_3 = 39.75, \mu_4 = 142.31$.
 c) From the following class frequencies compute the remaining class frequencies:
 $N = 200, (A) = 40, (B) = 50, (AB) = 10$.

Q.4 Attempt **ANY FIVE** of the following: **[10]**

- a) Find mode of the data: 65, 56, 65, 63, 52, 55, 60.
- b) Define attribute.
- c) Explain the term population.
- d) If $(AB) = 250, (A\beta) = 80, (\alpha B) = 90, (\alpha\beta) = 580$. Obtain N.
- e) For a skewed distribution the mean and mode are 12 and 11 respectively. Find median.
- f) If $Q_1 = 44.09, Q_2 = 50.05, Q_3 = 56.30$, then compute quartile deviation.
- g) Find the geometric mean of 2, 8.