

F.Y.B.SC. SEM – I (2014 COURSE) : SUMMER - 2018

SUBJECT : STATISTICS : DESCRIPTIVE STATISTICS – I (S – 11)

Day : **Friday**
Date : **20/04/2018**

S-2018-0683

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

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	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70
Frequency	6	12	18	15	20	9	3

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

Class	15 – 25	25 – 35	35 – 45	45 – 55	55 – 65
Frequency	5	10	15	13	7

- c) Describe the scope of statistics in Industry 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	15 – 20	20 – 25	25 – 30	30 – 35	35 – 40
Frequency	12	18	20	16	7

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

	Boys	Girls
Size	72	68
Mean Height (in inches)	68	61
S.D.	9	6

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

- a) What is skewness? Explain the types of skewness.
b) Find coefficient of skewness and kurtosis from the given information and interpret it.
 $\mu_2 = 16, \mu_3 = -64, \mu_4 = 162$
c) From the following class frequencies compute the remaining class frequencies:
 $N = 10, (A) = 40, (B) = 39, (AB) = 38$.

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

- a) Find median of the data: 51, 55, 65, 63, 52, 55, 60.
- b) Define variable.
- c) Explain the term sample.
- d) If $(AB) = 300, (A\beta) = 550$. Obtain (A) .
- e) For a skewed distribution the mean and mode are 40 and 32.6 respectively. Find median.
- f) If $Q_1 = 11, Q_2 = 15, Q_3 = 31$, then compute quartile deviation.
- g) Find the geometric mean of 5, 9, 11, 15, 20 and 0.