

B. Sc. BIOCHEMISTRY
Fifth Semester
BIostatistics
(BBC - 24)

Duration: 3Hrs.

Full Marks: 70

Part-A (Objective) =20
Part-B (Descriptive) =50

(PART-B: Descriptive)

Duration: 2 hrs. 40 mins.

Marks: 50

I. Answer any five of the following questions:

10×5=50

1. Give one definition of statistics which you think to be the best. Write a note on the scope and limitations of statistics. 2+4+4=10
2. What do you mean by qualitative and quantitative data. Distinguish between Primary and Secondary data. 4+ 6=10
3. Find AM and Median from the following series. 5+5=10

Marks	0-10	10-20	20-30	30-40	40-50
Frequency	7	5	8	38	42

4. a) The marks scored by 20 students in an examination are given below. 5+5=10
33, 19, 41, 58, 26, 35, 43, 18, 34, 31, 36, 23, 37, 37, 38, 51, 47, 27, 57, 19
Prepare a frequency distribution table for the above data.
- b) Represent the following data by a curve.

Marks	No. of Students
0 – 10	8
10 – 20	12
20 – 30	22
30 – 40	35
40 – 50	40

5. a) A test in algebra given to 400 high school children of whom 150 were boys and 250 were girls. The mean score of boys was 72 and that of girls was 73. Find the mean score of the combined group.

b) Calculate standard deviation from the following data:

$4+6=10$

Items	5	15	20	10	25
Frequency	5	8	15	16	6

6. What is correlation? Discuss positive, negative and zero correlation with the help of scatter diagram and examples. Calculate correlation co-efficient from the following data:

$1+4+5=10$

X	80	76	72	68	64	60
Y	73	59	66	45	52	38

7. a) One card is drawn from a standard pack of 52 cards. What is the probability that it is either a king or a queen card.
- b) A bag contains 10 black and 5 white balls. Two balls are drawn from the bag one after the other without replacement. What is the probability that both the drawn balls are black?

$5+5=10$

8. Write short note (any two)

$5+5=10$

- a) Skewness
- b) Regression
- c) Kurtosis
