2019

B.Sc.

2nd Semester Examination

STATISTICS (Honours)

Paper - C4P

[Practical]

Full Marks : 20   Time : 3 Hours

The figu res in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.

Answer *all* questions.

1. The weights of 150 students are given below :

Weight (kg)	45-50	50-55	55-60	60-65	65-70	70-75	75-80	Total
No. of students	4	15	35	50	29	11	6	150

Fit a normal distribution to the above data.   5

[Turn Over]

2. The results of a particular examination are as follows :

Result	Percentage of Students
Passed with distinction	15%
Passed with out distinction	42%
Failed	43%

It is known that a condidate fails if he obtains less than 40% marks while he must obtain at least 75% marks in order to puss with distinction. Determine the mean and standard deviation of the distribution of marks assuming it to be normal. 6

3. Life of an elctric bulb manucactural by a certain company is assumed to be exponentially distribution with mean 200 hours. Bulbs, nine in number are bought.

   (i) What is the chance that no bulb will get extinct before 100 hours ? 2

   (ii) What is the probability that at least one bubls will get extinct after 200 hours ? 2

4. Practical Note Book 2

5. Viva-voce 3

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STATISTICS (Honours)

Paper - GE-2P

[Practical]

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in their own words as far as practicable.

Answer *all* questions.

1. The rainfall (in mm) in a certain city for 100 days was recorded as follows :

Rainfall (in mm)	Days
0-2	9
2-4	19
4-6	37
6-8	11
8-10	7

[Turn Over]

Fit a normal distribution to the data. Comment on the nature of fit of the distribution. 8

2. The number of defective products contained in a lot is binomially distributed with parameters $n = 50$ and $p = 0.6$. Calculate the probabilities that a lot

   (i) Contains no defective product. 2

   (ii) Contains exactly one defective product. 2

   (iii) Contains no more than two defective products. 3

3. Practical Note book. 2

4. Viva Voce. 3

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