2018

2nd Semester

STATISTICS

(Honours)

PAPER-CAP

(Practical)

Full Marks: 20

Time: 2 Hours

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

- 1. The life (in hours) of electronic tubes of a certain type is supposed to be normally distributed with $\mu = 155$ hr and $\sigma = 10$ hr. What is the probability that the life of a tube will be
 - (a) between 136 hr and 174 hr?
 - (b) between 117 hr and 193 hr?
 - (c) less than 117 hr?
 - (d) more than 193 hr?

If a sample of 200 tubes is taken, how many are expected to be in each of the above groups?

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

Rainfall (mm)	Days
0 - 2	9
2 - 4	19
4 – 6	37
6 - 8	17
8 - 10	11
10 and above	7

Fit a gamma distribution with shape parameter p and rate parameter α .

- 3. Laboratory Note Book.
- 4. Viva-Voce.