2018

CBCS

1st Semester

STATISTICS

(Honours)

PAPER—C2P

(Practical)

Full Marks : 20

Time :

The figures in the right-hand margin indicate full marks.

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

Probability and Probability Distribution Lab.

Answer *all* questions.

1. When the first proof of a book containing 250 pages was read, the following distribution of misprints was obtained :

No. of misprints per page	0	1	2	3	4	5	6 or more
Frequency	139	76	28	4	2	1	0

Fit a poisson distribution to the above data.   5

2. In a doll factory, machines M_1, M_2 and M_3 manufacture respectively 45%, 25% and 30% of total output. Of these outputs, 6%, 8% and 3% are defectives. A doll is chosen at random from the produce and found to be defective what is the probability that it was manufactured by M_1 ?

5

3. Calls come to the customer care centre of a mobile company at an average rate of 3 calls per minute. Assuming that the number of incoming calls follow a Poisson distribution, find the probability that

   (a) no calls come in a certain minute.

   (b) 3 or more calls come in a 15 second time interval.

2+3

4. Laboratory Notebook. 2

5. Viva-voce. 3

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