U.G. 1st Semester Examination - 2020
STATISTICS
[HONOURS]
Course Code : STAT-H-CC-P-2
(Probability and Probability Distributions I - Lab)
[PRACTICAL]

Full Marks : 25 (20+5)   Time : 2 Hours

The figures in the right-hand margin indicate marks.
Candidates are required to give their answers in their own words as far as practicable.

Notations and symbols have their usual meaning.

1. Suppose that the probability that a new born baby is a boy or a girl is ½ and ½. Further the probability that a new born baby is blue eyed is ¼ and black eyed ¾. What is the probability that a new born baby selected at random is a blue eyed girl? If 5 new born babies are selected at random, what is the probability that there will be exactly 3 blue eyed girls and 2 black eyed boys?   4

2. The number of defective bolts in each of 500 packets each containing 100 bolts are obtained:

No. of defectives	0	1	2	3	4	5	6	7	8	Total
No. of packets	54	160	130	92	37	22	4	0	1	500

Fit a Poisson distribution to the above data (round off the expected frequencies to nearest integers). Obtain an estimate of the Poisson mean.   6

3. Practical Note Book.   5

4. Viva-voce.   5

[*Internal Assessment : 5*]

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