DMPT Make up Quiz Name:
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Roll No:

Marks:15

## Answer all questions. Each carries 5 marks

- 1. Given that X has the Geometric distribution with (20, 0.45). Calculate P(X<19), E[5X+5], Var[5X-5].
- 2. A box contains 8 items of which 2 are defective. A person draws 3 items from the box. If X denotes the number of defective items. Find the probability mass function and  $F_x(1)$
- 3. The probability of getting wrong telephone calls in a day is given by e<sup>-10</sup>. Determine the probability that you get more than 2 wrong calls in a day.