**PRACTICE TEST-3**

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| 1. | A large chain retailer purchases a certain kind of electronic device from a manufacturer. The manufacturer indicates that the defective rate of the device is 3%. The inspector randomly picks 20 items from a shipment. What is the probability that there will be at least one defective item among these 20? |
| 2. | A random sample committee of size 3 is selected from 4 doctors and 3 nurses. Estimate the probability that the committee has at least 2 doctors. |
| 3. | During a laboratory experiment, the average number of radioactive particles passing through a counter in 1 millisecond is 4.Using Poissions distribution compute the probability that at least one particles enter the counter in a given millisecond? |
| 4. | Suppose X follows a continuous uniform distribution from 1 to 5. Determine the conditional probability . |
| 5. | On average, the author of a text book makes two typing errors per page. Compute the probability that on the next page the author will make 4 or more errors |