Name: ----------ID: ----------

Q.No.1: - (2.5 points). Suppose that the amount of time one spends in a bank is exponentially distributed with mean 10 minutes. What is the probability that a customer will spend more than 15 minutes in the bank given that he is still in the bank after 10 minutes?

Q.No.2: - (2.5 points). Suppose that the number of inquiries arriving at a certain interactive system follows a Poisson distribution with an average arrival rate of 12 inquiries per minute. Find the probability of at least 2 inquiries arriving in a 10-second interval.

Q.No.3: - (2.5 points). Of 25 microprocessors available in the supply room, 10 have circuit board for a printer, 5 have circuit board for a modem, and 13 have neither type of board. Find the probability a randomly selected microprocessor have both circuit boards.

Q.No.4: - (2.5 points). One engineering firm enjoys 40% success rate in getting state government construction contracts. This month they have submitted bids on eight construction projects to be funded by the state government. The bids for different projects are assessed independently of each other. Find the probability that the firm will get more than one contracts.