



- Notes :
1. Solve all questions.
 2. Selecting multiple answers for the same questions is considered incorrect and no marks will be awarded.
 3. All question carry equal marks.

1. Solve the following MCQs any ten.

- 1) If $P(E) = 0.07$ then $P(E^c) = ?$ 2
 - a) 0.3
 - b) 0.03
 - c) 0.93
 - d) 0.093
- 2) Suppose a number x is chosen from the numbers $-2, -1, 0, 1, 2$. What is the probability of getting $x^2 > 0$? 2
 - a) $1/5$
 - b) $2/3$
 - c) $3/5$
 - d) $4/5$
- 3) In class, 30% of students study Hindi, 45% study Maths, and 15% study both Hindi and Maths. If a student is randomly selected, what is the probability that he/she study Hindi or Maths? 2
 - a) $1/5$
 - b) $3/5$
 - c) $2/5$
 - d) $2/7$
- 4) If $P(A) = 5/13, P(B) = 7/13$ and $P(A \cap B) = 3/13$ then $P(A|B) = ?$ 2
 - a) $2/7$
 - b) $3/5$
 - c) $3/7$
 - d) $1/7$
- 5) Find $P(E/F)$, where E : no tail appears, F : no head appears, when two coins are tossed in the air. 2
 - a) 0
 - b) $1/2$
 - c) 1
 - d) None
- 6) If A and B are two independent events, then the probability of occurrence of at least one of A and B is given by: 2
 - a) $1 + P(A^c)P(B^c)$
 - b) $1 - P(A^c)P(B^c)$
 - c) $1 - P(A^c) + P(B^c)$
 - d) $P(A^c)P(B^c)$
- 7) If X represents the outcome when a fair die is rolled then $E[X] =$ 2
 - a) $2/7$
 - b) $7/2$
 - c) $3/7$
 - d) $7/3$

