

MCQ Bank
Statistics 2nd Paper
Chapter 01: Introduction to Probability
Abdullah Al Mahmud

1. Mutually exclusive events are
 - (a) always independent
 - (b) always dependent
 - (c) the relationship cannot be determined
 - (d) dependent or independent, depending on scenario
 2. $P(A \cup B) = P(A) + P(B)$ is true for
 - (a) independent events
 - (b) dependent events
 - (c) mutually exclusive events
 - (d) complementary events
 3. If a coin is tossed n times, how many outcomes are generated?
 - (a) n
 - (b) n^2
 - (c) 2^n
 - (d) $2n$
- Answer the next two questions according to the information below**
 $P(A) = \frac{1}{8}, P(A|B) = \frac{1}{4}$, and $P(B|A) = \frac{1}{6}$
4. $P(A \cap B) = ?$
 - (a) $\frac{1}{48}$
 - (b) $\frac{1}{24}$
 - (c) $\frac{1}{32}$
 - (d) 1
 5. A card is drawn at random from a well-shuffled deck of 52 cards. What is the probability that the drawn card is not a Queen?
 - (a) $\frac{1}{52}$
 - (b) $\frac{4}{52}$
 - (c) $\frac{1}{13}$
 - (d) $\frac{12}{13}$
 6. $P(A \cap \bar{B}) = ?$
 - (a) $P(A) - P(A \cap B)$
 - (b) $P(B) - P(A \cap B)$
 - (c) $P(A) - P(A \cup B)$
 - (d) $P(B) - P(A \cup B)$
 7. If a neutral coin is tossed 5 times, what is the probability that there would be at least 2 heads?
 - (a) 0.81
 - (b) 0.5
 - (c) 0.31
 - (d) 0.16

Answer Key: (Correction required for 4 thru last)

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|----------------------------------|-----------------------|-----------------------------|
| 1. (b) always dependent | 4. (a) $\frac{1}{48}$ | 6. (a) $P(A) - P(A \cap B)$ |
| 2. (c) mutually exclusive events | | |
| 3. (c) 2^n | 5. (a) $\frac{1}{52}$ | 7. (a) 0.81 |