Falcon

MYMENSINGH GIRLS' CADET COLLEGE
SECOND TERM END EXAMINATION - 2025
CLASS: XII
MULTIPLE CHOICE QUESTIONS
STATISTICS
SECOND PAPER
[According to the Syllabus of 2026]
TIME – 25 minutes
FULL MARKS – 25

Subject Code: | 1 | **3** | 0 |

Set: **Ka**

[N.B. – Answer all the questions. Each question carries ONE mark. Block fully, with a black ball- point pen, the circle of the letter that stands for the correct/best answer in the "Answer sheet" for the Multiple Choice Questions Examination.]

Candidates are asked not to leave any mark or spot on the question paper.

1. **Which is an example of time series data?**
   (a) Number of calls received by a call center each month
   (b) Height of children at different ages
   (c) Tota salary of all employees at a company
   (d) Population of different countries in 2020

2. **Which can measure trend most precisely?**
   (a) Graphical method (b) Semi-average method
   (c) Moving average method (d) Quarter-average method

   Answer the next THREE questions based on the following information

Year	2016	2017	2018	2019	2020	2021	2022	2023
USD Exchange Rate	78.35	79.49	82.87	83.26	84.60	84.37	85.80	106.70

3. **What is the second value of semi-average method?**
   (a) 85.40 (b) 90.37 (c) 91.73 (d) 89.78

4. **What kind of a trend do the data have?**
   (a) Upward (b) Downward
   (c) Both upward & downward (d) No trend

5. **Which component of time series is visible in the later part of the data?**
   (a) Seasonal Variation (b) General Trend (c) Irregular Variation (d) Cyclic Variation

6. ${}^{n}p_{r} =$
   (a) $\frac{n!}{(n-r)!}$ (b) $\frac{n!}{(n+r)!}$ (c) $\frac{n!}{r!}$ (d) $\frac{n!}{(r-n)!}$

7. **The probability of two disjoint sets happening together is:**
   (a) 0.5 (b) 0 (c) 1 (d) $0 \leq x < 1$

8. $P(A \cap B) = P(A) \times P(B)$ **implies A & B are –**
   (a) Disjoint (b) Independent (c) Joint (d) Independent

9. **Tossing a die r times generates how many outcomes?**
   (a) $6 \times r$ (b) r^6 (c) 6^r (d) 2^r

   Answer the next three questions using the following information

   $P(C) = \frac{2}{5}, P(D) = \frac{3}{4} \& P(C \cup D) = \frac{9}{10}$

10. $P(C \cap D) =?$
    (a) $\frac{1}{10}$ (b) $\frac{1}{4}$ (c) $\frac{7}{20}$ (d) $\frac{4}{5}$

11. $P(C \cap \bar{D}) =?$
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12. **What is the probability that D occurs or C does not occur?**

(a) $\frac{17}{20}$ (b) $\frac{7}{10}$ (c) $\frac{3}{4}$ (d) $\frac{11}{20}$

Answer the next TWO questions based on the following information.

An urn contains 5 red, 7 blue, and 8 green balls.

13. **What is the probability that the ball drawn is red?**

(a) 0.26 (b) 0.25 (c) 0.2 (d) 0.4

14. **P(The ball drawn is not blue)–**

(a) $\frac{13}{20}$ (b) 0.5 (c) $\frac{7}{20}$ (d) $\frac{8}{20}$

15. **Which one is NOT an example of a continuous random variable –**

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16. **The properties of a discrete probability distribution table are–**

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