

CUET PG 2026 Statistics Question Paper

Time Allowed :1 Hour 30 Minutes	Maximum Marks :300	Total Questions :75
---------------------------------	--------------------	---------------------

General Instructions

Read the following instructions very carefully and strictly follow them:

- The Question Paper consists of 75 Multiple Choice Questions (MCQs).
- Total marks for the exam is 300.
- The total duration is 90 minutes; a timer on the screen will display the remaining time, and the exam will automatically submit when the time reaches zero.
- For every correct answer, 4 marks (+4) will be awarded to the candidate, and a 1 mark (-1) will be deducted for every incorrect answer.
- Question papers are available in both English and Hindi.

1. If $P(A) = 0.4$, $P(B) = 0.5$, and A and B are independent events, what is the value of $P(A \cup B)$?

- (A) 0.60
- (B) 0.65
- (C) 0.70
- (D) 0.75

2. For a Poisson distribution where the mean is 4, what is the value of the third central moment?

- (A) 4
- (B) 8
- (C) 16
- (D) 64

3. Which property of an estimator is satisfied if its expected value equals the population parameter?

- (A) Consistency
- (B) Efficiency
- (C) Unbiasedness
- (D) Sufficiency

4. If a matrix A has eigenvalues 2 and 3, what are the eigenvalues of the matrix A^2 ?

- (A) 2, 3
 - (B) 4, 9
 - (C) 5, 6
 - (D) 8, 27
-

5. In a Normal distribution, what percentage of data falls within two standard deviations of the mean?

- (A) 68%
 - (B) 95%
 - (C) 99.7%
 - (D) 90%
-

6. What is the rank of a 3×3 identity matrix added to a 3×3 null matrix?

- (A) 0
 - (B) 1
 - (C) 2
 - (D) 3
-

7. In Simple Random Sampling Without Replacement (SRSWOR), what is the probability of selecting a specific unit at the second draw?

- (A) $\frac{1}{N}$
 - (B) $\frac{1}{N-1}$
 - (C) $\frac{2}{N}$
 - (D) $\frac{1}{N^2}$
-

8. If the correlation coefficient between X and Y is 0.8, what is the coefficient of determination?

- (A) 0.64
 - (B) 0.80
 - (C) 0.16
 - (D) 1.60
-

9. A bag contains 5 red and 7 blue balls. If two balls are drawn at random, what is the probability that both are red?

- (A) $\frac{5}{66}$
- (B) $\frac{10}{66}$

- (C) $\frac{5}{33}$
(D) $\frac{25}{66}$
-

10. Which test is most appropriate for testing the significance of the difference between two small sample means?

- (A) Z-test
(B) t-test
(C) Chi-square test
(D) F-test
-

11. If the null hypothesis H_0 is rejected when it is actually true, what type of error has been committed?

- (A) Type I Error
(B) Type II Error
(C) Sampling Error
(D) Standard Error
-

12. What is the value of the integral $\int_{-\infty}^{\infty} e^{-x^2} dx$?

- (A) $\sqrt{\pi}$
(B) π
(C) 1
(D) $\frac{\sqrt{\pi}}{2}$
-

13. In a negatively skewed distribution, what is the correct relationship between the Mean, Median, and Mode?

- (A) Mean > Median > Mode
(B) Mean < Median < Mode
(C) Mean = Median = Mode
(D) Mode < Median < Mean
-

14. Find the limit of $\left(1 + \frac{1}{n}\right)^n$ as $n \rightarrow \infty$.

- (A) 1
(B) e
(C) 0
(D) 2
-

15. What is the degree of freedom for a Chi-square test used in a 3×4 contingency table?

- (A) 6
 - (B) 8
 - (C) 9
 - (D) 12
-