

ICS Part 2 Statistics Chapter 10 Online Test

Sr	Questions	Answers Choice
1	The normal distribution is -----distribution.	A. positively skewed B. negatively skewed C. symmetrical D. peaked
2	The probability density function has ----- value for every value of x.	A. negative B. positive C. minimum D. maximum
3	Second moment about mean is also called	A. mean B. variance C. skewness D. standard deviation
4	In case of normal distribution maximum value of ordinate is	A. μ B. Zero
5	The moment coefficient of skewness is	A. β_1 B. β_2 C. γ_k D. γ_m
6	The moment Coefficient of kurtosis is	A. β_1 B. β_2 C. Zero D. γ_m
7	In case of normal distribution the area to the left of the mean and area to the right of the mean is	A. positive B. negative C. equal D. unequal
8	Normal distribution is	A. unimodal B. bimodal C. trimodal D. multimodal
9	The shape of the normal distribution is like	A. J. B. L C. bell D. circle
		A. $\gamma_m = 3$ B. $\gamma_m = 2$ C. $\gamma_m = 1$ D. $\gamma_m = 0$

- 10 The range of a normal distribution is
A. $-\infty$
B. 0
C. $-\infty$ to 0
D. 0 to ∞
- 11 Total probability under the normal curve is
A. 1
B. 0
C. -1
D. ∞
- 12 All odd order moments about mean are
A. unique
B. zero
C. different
D. one
- 13 Points of inflexion of normal curve are at
A. $\mu \pm \sigma$
B. $x = \mu \pm \sigma$
C. $\mu \pm 2\sigma$
D. $\mu = \sigma$
- 14 $P(|Z| > a) =$
A. $2\phi(a) - 1$
B. $\phi(a)$
C. $2\phi(-a)$
D. $\phi(1-a)$
- 15 $P(\mu - 2\sigma < X < \mu + 2\sigma) =$
A. 0.6827
B. 0.9545
C. 0.9973
D. 0.9827
- 16 In case of normal distribution maximum value of ordinate is
A. μ
B. Zero
C. μ^2
D. μ^3

- 17 In case of symmetrical distribution
A. $\mu - \sigma$
B. $\mu + \sigma$
C. $\mu - 2\sigma$
D. $\mu + 2\sigma$
- 18 Question Image
- 19 The total area under the normal curve is _____.
A. Zero
B. Equal
C. Unity
D. True
- 20 Normal distribution ranges from _____.
A. $1, 2, 3, \dots, \infty$
B. $-\infty$ to $+\infty$
C. $1, 2, 3, \dots, n$
D. None of these
- 21 The maximum ordinate of a normal curve is at $X = \dots$.
A. μ
B. σ
C. \bar{X}
D. S.D
- 22 The normal distribution is a _____.
A. Positive
B. Negative
C. Discrete
D. Continuous
- 23 The normal distribution is a bell shaped _____ distribution.
A. Discrete
B. Continuous
C. Symmetrical
D. Skewed
- 24 In normal distribution.
A. Mean > median > mode
B. Mean = median = mode
C. Mean < median < mode
D. None of these
- 25 The Quartile deviation (Q.D) of a normal distribution is _____.
A. $4/5\sigma$
B. $5/4\sigma$
C. $2/3\sigma$
D. None of these
- 26 The mean deviation (M.D) of a normal distribution is _____.
A. $4/5\sigma$
B. $5/4\sigma$
C. $2/3\sigma$
D. None of these
- 27 The point of inflection in normal distribution are _____.
A. $\mu - \sigma, \mu + \sigma$
B. $\mu - 2\sigma, \mu + 2\sigma$
C. μ, σ
D. None of these
- 28 If $X \sim N(50, 25)$, then $\sigma = \dots$.
A. 3
B. 5
C. 25
D. 50
- 29 The maximum ordinate of the standard normal Curve is at $Z = \dots$.
A. 1.96
B. 2.33
C. 1
D. 0
- 30 $\mu - 2\sigma$ to $= \mu + 2\sigma$ contains approximately _____ area.
A. 75%
B. 50%
C. 95.45%
D. 99.73%
- 31 For normal distribution mean always lies between.
A. Median and mode
B. Median and Q₁
C. Median and Q₃
D. None of these
- 32 In a normal distribution, $\dots = \mu + 0.64745 \sigma$
A. Q₁
B. Q₃
C. μ
D. σ
- 33 All odd ordered moments about mean are _____ in a normal distribution.
A. Zero
B. Unity
C. Positive
D. Negative
- 34 The normal distribution is represented as _____.
A. $N(\mu, \sigma^2)$
B. $N(n, p)$
C. $N(0, \sigma^2)$
D. None of these

35 In a normal distribution $\beta_1 = 0$ and $\beta_2 = \underline{\hspace{2cm}}$.

- A. 2
- B. 4
- C. 3
- D. 5