







- Q:-27 The probability of an event happening is  $1/3$ . The probability of it not happening is?  
A)  $-12$                       B)  $0$                       C)  $2/3$                       D)  $3$
- Q:-28 Which of the following could never be described by the binomial distribution?  
A) The number of defective items produced by an assembly process.  
B) The amount of water used daily by a single household.  
C) The number of people in a class who can answer a particular question correctly.  
D) All of these.
- Q:-29 Standard deviation of the binomial distribution depends upon;  
A) Probability of success.                      B) Number of trials  
C) Both (A) and (B) above                      D) None of these
- Q:-30  $\text{Var}(X)$  is equal to:  
A)  $E(X^2)$                       B)  $[E(X)]^2$   
C)  $E(X^2) - [E(X)]^2$                       D)  $E(X^2) + [E(X)]^2$
- Q:-31 The expectation of the product of two independent variable is equal to:  
A)  $E(X) \cdot E(Y)$     B)  $E(X) + E(Y)$     C)  $E(X \cdot Y)$     D)  $E(XY)$
- Q:-32 If  $X$  has binomial distribution with parameter  $p$  and  $n$  then  $X/n$  has the variance  
A)  $Npq$                       B)  $n^2pq$                       C)  $pq/n$                       D)  $pq/n^2$
- Q:-33 A binomial distribution may be approximated by a Poisson distribution if:  
A)  $n$  is large and  $p$  is large                      B)  $n$  is small and  $p$  is large  
C)  $n$  is small and  $p$  is small                      D) none of these
- Q:-34 The probability that a continuous random variable assumes a single value is:  
A) Less than one                      B) Greater than zero  
C) Equal to zero                      D) Between zero and one
- Q:-35 Which of the following is not a characteristic of normal distribution?  
A) The total area under the curve is equal to one.  
B) The curve is symmetric about the mean.  
C) The value of the mean is always greater than the value of the standard deviation.  
D) The two tails of the curve extend indefinitely.
- Q:-37 The mean of the hypergeometric distribution are:  
A)  $nk/N$                       B)  $Nk/n$                       C)  $Nn/K$                       D)  $(n + k)/N$
- Q:-38 The hypergeometric distribution has:  
A) one parameter                      B) two parameters  
C) three parameters                      D) four parameters
- Q:-38 The standard deviation of a sampling distribution is called\_\_\_\_\_.  
A) Sampling error                      B) Sample error  
C) Standard error                      D) Simple error

- Q:-39 A good way to get a small standard error is to use a \_\_\_\_\_.
- A) Repeated sampling                      B) Small sample  
C) Large sample                                D) Large population
- Q:-40 To test whether or not two population variances are equal, the appropriate distribution is:
- A) Z distribution                                B) Chi-square distribution  
C) F distribution                                 D) t distribution
- Q:-41 The type of sampling in which each member of the population selected for the sample is returned to the population before the next member is selected is called,
- A) Sampling without replacement        B) Sampling with replacement  
C) Simple random sampling                D) Systematic sampling
- Q:-42 A binomial random variable X has  $n = 16$  and  $p = 0.75$ . The standardized value corresponding  $X = 8$  is:
- A) 1.33                      B) -2.31                      C) -1.33                      D) -0.33
- Q:-43 A method used to make the decision about population the basis of sample.
- A) Statistical interference                      B) Statistical inference  
C) Statistical impliance                        D) Descriptive Statistics
- Q:-44 Two types of errors associated with hypothesis testing are Type I and Type II. Type II error is committed when:
- A) We reject the null hypothesis whilst the alternative hypothesis is true.  
B) We reject a null hypothesis when it is true.  
C) We accept a null hypothesis when it is not true.  
D) We accept a null hypothesis when it is true.
- Q:-45 In testing hypothesis, the hypothesis which is be tested is called.
- A) The alternative hypothesis.                B) The null hypothesis  
C) Composite hypothesis                        D) None of these
- Q:-46 Confidence coefficient or level of confidence is denoted by:
- A)  $1 - \beta$                       B)  $1 - \alpha$                       C)  $\alpha$                       D)  $\beta$
- Q:-47 Most of the area under the normal curve with parameters  $\mu$  and  $\sigma$  lies between:
- A)  $-0.5 + 0.5$                       B)  $-\sigma$  and  $+\sigma$                       C)  $-2\sigma$  and  $+2\sigma$                       D)  $-3\sigma$  and  $+3\sigma$
- Q:-48 List of all the units of the population is called:
- A) Random sampling                              B) bias  
C) Sampling frame                                D) probability sampling
- Q:-49 Any calculation on the sample data is called:
- A) Parameter                      B) Statistics                      C) Statistic                      D) Error
- Q:-50 A continuous random variable is a random variable that can:
- A) Assess only countable values.  
B) Assess any value in one or more intervals.  
C) Have no random sample.  
D) Assume no continuous random frequency.



- Q:-64 What information is given by a value of the coefficient of determination?  
 A) Strength of relationship  
 B) Both strength and direction of relationship  
 C) Neither strength nor direction of relationship  
 D) Direction of relationship only
- Q:-65 For the regression equation  $\hat{Y} = 10 + 2X$ , the Y intercept is:  
 A) 10                      B) 2                      C) 0                      D) -2
- Q:-66 If  $(AB) < \frac{(A)(B)}{n}$ , the association between two attributes A and B is:  
 A) negative              B) positive              C) zero                      D) symmetrical
- Q:-67 Two attributes A and B are said to be positive, if:  
 A)  $(AB) = \frac{(A)(B)}{n}$                       B)  $(AB) \neq \frac{(A)(B)}{n}$   
 C)  $(AB) > \frac{(A)(B)}{n}$                       D)  $(AB) < \frac{(A)(B)}{n}$
- Q:-68 The shape of the chi-square distribution depends upon:  
 A) Parameters                      B) degrees of freedom  
 C) Number of cells                      D) standard deviation
- Q:-69 Chi-square curve ranges from:  
 A) - to +                      B) 0 to -                      C) - to 0                      D) 0 to 1
- Q:-70 The value of chi-square statistic is always:  
 A) negative                      B) zero  
 C) non-negative                      D) one

## Section II: English

**Choose the synonyms of the following words:**

- Q:-71 Ability  
 A) capability B) competence C) plenty D) failure
- Q:-72 Blame  
 A) pending B) delegation C) reproof D) censure
- Q:-73 Efficiency  
 A) haggle B) capability C) potency D) departure
- Q:-74 Excess  
 A) superfluity B) subsequent C) steer D) surplus
- Q:-75 Complex  
 A) complicated B) intricate C) disaster D) bid

**Choose the synonyms of the following words:**

- Q:-76 Lack  
 A) evasion B) deficiency C) scarcity D) silent
- Q:-77 Sin  
 A) crime B) vice C) wild D) dry
- Q:-78 Silly  
 A) campaign B) foolish C) peace D) tranquility
- Q:-79 Agreeable  
 A) conformable B) concur C) accede D) wages
- Q:-80 Decide  
 A) lobby B) resolve C) lie D) determine

**In the following questions, a related pair of words or phrase is followed by 4 lettered pair of words or phrase. Select the best answer.**

- Q:-81 Man is to run as bird is to \_\_\_\_\_.  
 A) run B) weak C) walk D) fly
- Q:-82 Masor: Wall::  
 A) Artist: easel B) Sculptor: mallet  
 C) Author: book D) Fisherman: trout
- Q:-83 Watch is to time as thermometer is to \_\_\_\_\_.

A) temperature B) heat C) mercury D) cover

Q:-84 Minister: Pulpit::

A) Doctor: patient B) Judge: bench  
C) Student: teacher D) Programmer: logic

Q:-85 Auger: Carpenter::

A) Cement: mason B) Apron: chef  
C) Awl: cobbler D) Studio: sculptor

Q:-86 Father is to son as mother is to \_\_\_\_\_.

A) Sister B) Aunt C) Mummy D) Daughter

Q:-87 Ring is to finger as watch is to \_\_\_\_\_.

A) Arm B) Wrist C) Foot D) Head

Q:-88 Elm: Tree

A) Whale: mammal B) Cart: horse  
C) Cloud: rain D) Painting: artist

Q:-89 Gullible: Duped::

A) Myopic: misled B) Careful: cautioned  
C) Cloud: rain D) Credible: cheated

Q:-90 Bed is to sleep as chair is to \_\_\_\_\_.

A) Sit B) Wood C) Seat D) Floor

**Choose the word which best completes each sentence.**

Q:-91 We lost confidence in Salim because he never \_\_\_\_\_ the grandiose promises he had made.

A) tired of B) delivered on C) retreated from D) forgot about

Q:-92 The driver suddenly applied the brakes when he saw a \_\_\_\_\_ truck ahead of him.

A) stationary B) moving C) static D) immobile

Q:-93 Knowledge is like a deep well fed by \_\_\_\_\_ springs, and your mind in the little bucket that you drop in it.

A) external B) perennial C) immortal D) inehaustible

Q:-94 Salma is much too \_\_\_\_\_ to have anything to do with that obnoxious affair.

A) noble B) proud C) happy D) difficult

Q:-95 there is no incentive for America to sign the treaty since there is every reason to \_\_\_\_\_ no other nation intends to honour its provisions.

A) regret B) inform C) believe D) occupy

Q:-96 A legislation was passed to punish brokers who \_\_\_\_\_ their clients funds.

A) defalcate      B) devastate      C) devour      D) embezzle

Q:-97 Normally an individual thunderstorm \_\_\_\_\_ about 45 minutes.

A) lasts      B) ends      C) remains      D) continues

Q:-98 The task seemed impossible but somehow Jalil \_\_\_\_\_ very skillfully in the end.

A) pulled it up      B) pulled it off  
C) pulled it away      D) pulled it out

Q:-99 The unruly behavior of the children \_\_\_\_\_ their parents.

A) aggrieved      B) impeached      C) incensed      D) tempered

Q:-100 We were amazed that a man who had been heretofore the most \_\_\_\_\_ of public speakers could, in a single speech, electrify an audience and bring them cheering.

A) Pedestrian      B) accomplished      C) masterful      D) auspicious