

1.

Synonyms of ADVICE

(a)

council

(b)

counsel

(c)

practice

(d)

proposal

Answer: "counsel"

2.

Synonyms of MISERABLE

(a)

object

(b)

obstruct

(c)

abject

(d)

abstract

Answer: "abject"

3.

Synonyms of UNLAWFUL

(a)

elicit

(b)

draw

(c)

litigation

(d)

illicit

Answer: "illicit"

4.

Synonyms of HAUGHTY

(a)

imperial

(b)

arrogant

(c)

adamant

(d)

empire

Answer: "empire"

5.

Synonym of SOLILOQUY

(a)

figure of speech

(b)

isolated position

(c)

historical incident

(d)

monologue

Answer: "monologue"

6.

Antonyms of IMPLICATE

(a)

appease

(b)

exonerate

(c)

adore

(d)

advocate

Answer: "exonerate"

7.

Antonyms of VACILLATING

(a)

fascinating

(b)

fanaticism

(c)

indolence

(d)

resolute

Answer: "resolute"

8.

Antonym of RECKLESS

(a)

modest

(b)

awkward

(c)

celebrated

(d)

cautious

Answer: "cautious"

9.

Antonym of INSULT

(a)

humiliation

(b)

credulity

(c)

degradation

(d)

honour

Answer: "credulity"

10.

Choose the correct meaning of an idom/ phrase - To turn over a new leaf :

(a)

To change completely one's course of action

(b)

To shift attention to new problems

(c)

To cover up one's faults by wearing new marks

(d)

To change the old habits and adopt new ones

Answer: "To change the old habits and adopt new ones"

11.

Choose the correct meaning of an idiom/ phrase - To wrangle over an ass's shadow :

(a)

To act in a foolish way

(b)

To quarrel over trifles

(c)

To waste time on petty things

(d)

To do something funny

Answer: "To quarrel over trifles"

12.

Choose the correct spelling of the given word.

(a)

Efflorascence

(b)

Efflorescence

(c)

Efllorascence

(d)

Eflorescence

Answer: "Efflorescence"

13.

Choose the correct spelling of the given word.

(a)

Aliennate

(b)

Allienate

(c)

Alienate

(d)

Alienate

Answer: "Alienate"

14.

Choose the correct alternative form - The match having ended in a draw, the first prize was shared.....

(a)

between Usha and I

(b)

by Usha and

(c)

by Usha and me

(d)

among me and Usha.

Answer: "between Usha and I"

15.

Choose the correct alternative form - It is not time for the cinema to begin?

(a)

so far, is it?

(b)

yet, isn't it?

(c)

already, is it?

(d)

before, isn't it?

Answer: "already, is it?"

Direction (16 to 20)

As I stepped out of the train I felt unusually solitary since I was the only passenger to alight. I was accustomed to arriving in the summer, when holiday-makers throng coastal resorts and this was my first visit when the season was over. My destination was a little village which was eight miles by road. It took only a few minutes for me to come to the foot of the cliff path. When I reached the top I had left all signs of habitation behind me. I was surprised to notice that the sky was already a flame with the sunset. It seemed to be getting dark amazingly quickly. I was at a loss to account for the exceptionally early end of daylight since I did not think I had walked unduly slowly. Then I recollected that on previous visits I had walked in high summer and how it was October.

All at once it was night. The track was grassy and even in daylight sghowed up hardly at all. I was terrified of hurtling over the edge of the cliff to the rocks below. I felt my feet squelching and sticking in something soggy. Then I bumped into a little clump of trees that loomed up in front of me. I climbed up the nearest trunk and managed to find a tolerablely comfortable fork to sit on. The waiting was spent by my attempts to identify the little stirrings and noises of animal life that I could hear. I grew colder and colder and managed to sleep only in uneasy fitful starts. At last when the moon came up I was on my way again.

16

The writer felt unusually solitary because

(a)

he was feeling very lonely without his family.

(b)

he was missing the company of other holiday-makers.

(c)

his destination was a little village eight miles away.

(d)

there was no one to meet him.

Answer: "he was missing the company of other holiday-makers."

17

"I left all signs of habitation behind me." This means that he

(a)

came to a place where there were very few houses.

(b)

was in front of a large collection of cottages.

(c)

had come very far from places where people lived.

(d)

had just passed a remote village.

Answer: "had come very far from places where people lived."

18

I became darker than the writer expected because

(a)

the nights are shorter in autumn than in summer.

(b)

the nights are longer in October than mid summer.

(c)

the train arrived later than usual.

(d)

he had walked unduly slowly.

Answer: "the nights are longer in October than mid summer."

19

The writer found it difficult to keep to the path because of

(a)

the darkness and narrowness of the path.

(b)

poor visibility and grassy track.

(c)

the darkness and his slow pace.

(d)

poor visibility and dew on grass.

Answer: "poor visibility and dew on grass."

20

When he settled himself on the fork of the tree the writer

(a)

had a sound sleep.

(b)

was disturbed by noises of animals.

(c)

was too afraid to sleep.

(d)

tried to sleep but without much success.

Answer: "tried to sleep but without much success."

21

The Paithan (Jayakwadi) Hydro-electric project, completed with the help of Japan, is on the river.

(A)

Ganga

(B)

Cauvery

(C)

Godavari

(D)

Narmada

Answer: "Godavari"

22

The percentage of irrigated land in India is about.

(A)

45

(B)

65

(C)

35

(D)

25

Answer: "35"

23

The southernmost point of peninsular India, that is, Kanyakumari, is

(A)

north of Tropic of Cancer

(B)

south of the Equator

(C)

south of the Capricorn

(D)

north of the Equator

Answer: "north of the Equator"

24

The pass located at the southern end of the Nilgiri Hills in south India is called

(A)

the Palghat gap

(B)

the Bhorghat pass

(C)

the Thalgat pass

(D)

the Bolan pass

Answer: "the Palghat gap"

25.

Which of the following factors are responsible for the rapid growth of sugar production in south India as compared to north India?

I.Higher per acre field of sugarcane

II.Higher sucrose content of sugarcane

III.Lower labour cost

IV.Longer crushing period

(A)

I and II

(B)

I, II and III

(C)

I, III and IV

(D)

I, II and IV

Answer: "I, II and IV"

26

India's first National Film Museum opens in

(A)

Delhi

(B)

Mumbai

(C)

Hyderabad

(D)

Kolkata

Answer: "Mumbai"

27

Who is the new Union Home Secretary?

(A)

Rajiv Gauba

(B)

Sanjay Mitra

(C)

Subash Chandra

(D)

Ajay Kumar Bhalla

Answer: "Rajiv Gauba"

28

The boundaries of the plates of the earth's crust are the weak zones known as _____ zones.

(A)

Cosmic

(B)

Seismic

(C)

Formic

(D)

Anaemic

Answer: "Seismic"

29

Who becomes fastest Indian to reach 100 ODI wickets?

(A)

Ajit Agarkar

(B)

Ravichandran Ashwin

(C)

Jasprit Bumrah

(D)

Mohammed Shami

Answer: "Mohammed Shami"

30

Which prominent personality has been conferred the Vatican's 'Lamp of Peace of Saint Francis' award?

(A)

Narendra Modi

(B)

Muhammad Yunus

(C)

Sachin Tendulkar

(D)

A.R. Rahman

Answer: "Muhammad Yunus"

31

If in a code GONE is written as ILPB then how may CRIB be written in that code?

(A)

EUKY

(B)

EKUY

(C)

EYUK

(D)

EOKY

Answer: "EOKY"

32

One morning, Ketan walked towards the sun. After some time he turned left and again to his left. Which direction is he facing?

(A)

North

(B)

South

(C)

East

(D)

West

Answer: "West"

33

If India is coded as 27924 and cricket is coded as 1621835 then DIRT will be coded as _____ .

(A)

9878

(B)

9825

(C)

9165

(D)

9265

Answer: "9265"

34

If 'Aman' = 4, 'Shivam' = 6, 'Science' = 7, Then 'Bhim' = ?

(A)

4

(B)

3

(C)

6

(D)

5

Answer: "4"

35

If "A" denotes "added to", "B" denotes "divided by", "C" denotes "multiplied by" and "D" denotes "subtracted from", then $87 \text{ B } 3 \text{ C } 4 \text{ A } 4 \text{ D } 50 = ?$

(A)

65

(B)

75

(C)

70

(D)

80

Answer: "70"

36

In a certain code language "feel free to fly" = "4l 4e 2o 3y". "Why the statement" = "3y 3e 9t" then "Media" is coded as _____ .

(A)

5m

(B)

5e

(C)

5a

(D)

4a

Answer: "5a"

37

In the following question, select the odd word pair from the given alternatives.

(A)

Zinc – Metal

(B)

Aluminum – Metal

(C)

Crocodile – Water

(D)

Gold – Metal

Answer: “Crocodile – Water”

38

In a certain code language, “CAB” is written as “6” and “LEG” is written as “6”. How is “MAP” written in that code language?

(A)

6

(B)

4

(C)

3

(D)

8

Answer: "3"

39

If $11 \# 2 @ 6 = 78$ and $15 \# 4 @ 8 = 152$, then $17 \# 6 @ 7 = ?$

(A)

161

(B)

143

(C)

221

(D)

157

Answer: "161"

40

A series is given with one term missing. Choose the correct alternative from the given ones that will complete the series.

MN, PQ, TU, YZ, ?

(A)

YZ

(B)

AB

(C)

EF

(D)

EJ

Answer: "EF"

41

Calculate the range of the given sets of data 7,47,8,42,47,95,42,96,2

A.

6

B.

94

C.

71

D.

84

Answer: "94"

42

Find the mean deviation according to the Mean of the given data sets 7,47,8,42,47,95,42,96,3

A.

11

B.

111

C.

112

D.

113

Answer: "111"

43

The error of rejecting the null hypothesis when it is true is known as

A.

Type-I error

B.

Type-II error

C.

Type-III error

D.

Type-IV error

Answer: "Type-I error"

44

In a positively skewed distribution, the mean is _____ the median.

A.

Greater than

B.

Less than

C.

Equal to

D.

Unrelated to

Answer: "Greater than"

45

Which measure of dispersion describes the average deviation of each data point from the mean?

A.

Variance

B.

Standard deviation

C.

Range

D.

Coefficient of variation

Answer: "Standard deviation"

46

The cumulative distribution function (CDF) of a random variable X is given by:

A.

$$F(x) = P(X \leq x)$$

B.

$$F(x) = P(X \geq x)$$

C.

$$F(x) = P(X = x)$$

D.

$$F(x) = P(X > x)$$

Answer: "F(x) = P(X ≤ x) "

47

If random variable X follows binomial distribution with parameter n and p with mean 15 and variance 10, then the value of mode is

A.

47/3

B.

48/3

C.

49/3

D.

46/3

Answer: "46/3"

48

Which of the following is a random variable?

A.

5

B.

x^2

C.

π

D.

Number of heads in a coin toss

Answer: "Number of heads in a coin toss"

49

The exponential distribution is commonly used to model:

A.

Coin tosses

B.

Length of time between events

C.

Number of successes in a fixed interval

D.

Roll of a fair die

Answer: "Length of time between events"

50

Which of the following is true about the Poisson distribution?

A.

It is a discrete distribution

B.

It has a fixed range of values

C.

It is symmetric and bell-shaped

D.

It is used to model continuous variables

Answer: "It is a discrete distribution"

51

Which type of frequency distribution is used for data that can be divided into classes or intervals?

A.

Uni-variate frequency distribution

B.

Bi-variate frequency distribution

C.

Continuous frequency distribution

D.

Discrete frequency distribution

Answer: "Continuous frequency distribution"

52

A frequency polygon is obtained by:

A.

Joining the midpoints of the upper boundaries of each class in a histogram

B.

Joining the frequencies of each class in a bar diagram

C.

Joining the midpoints of the classes in a frequency distribution

D.

Joining the relative frequencies of each class in a pie diagram

Answer: "Joining the midpoints of the classes in a frequency distribution"

53

The total sum of all the frequencies in a frequency distribution is equal to:

A.

The mean of the data

B.

The median of the data

C.

The mode of the data

D.

The total number of observations in the data set

Answer: "The total number of observations in the data set"

54

Which of the following graphical representations is used to represent a frequency distribution using rectangles?

A.

Bar diagram

B.

Pie diagram

C.

Line diagram

D.

Histogram

Answer: "Histogram"

55

In a histogram, the area of each rectangle represents:

A.

The mean of the data in that class

B.

The median of the data in that class

C.

The mode of the data in that class

D.

The frequency of the corresponding class

Answer: "The frequency of the corresponding class"

56

Consider a uni-variate frequency distribution. In this the classification of data is based upon:

A.

Two variables

B.

One variable

C.

Mean and median

D.

Range and standard deviation

Answer: "One variable"

57

Rectangular bars representing the frequencies of different classes is called:

A.

Bar diagram

B.

Pie diagram

C.

Line diagram

D.

Frequency polygon

Answer: "Bar diagram"

58

As a component of bar diagram, the height of each bar represents what?

A.

The mean of the data

B.

The median of the data

C.

The mode of the data

D.

The frequency of the corresponding class

Answer: "The frequency of the corresponding class"

59

To calculate the median, all the items of a series have to be arranged in a/an _____.

A.

Descending order

B.

Ascending order

C.

Ascending or descending order

D.

None of the all mentioned

Answer: "Ascending or descending order"

60

The values of extreme items do not influence the average for _____.

A.

Mean

B.

Mode

C.

Median

D.

Sigma

Answer: "Median"

61

The sum of deviations from the _____ is always zero.

A.

Median

B.

Mode

C.

Mean

D.

Sigma

Answer: "Mean"

62

Which one of the following statements best describes the standard deviation measure?

A.

It gives us the spread of a data set.

B.

It tells how much a data set is spread from its mean.

C.

It is always greater than or equal to the mean of a data set.

D.

It is always less than mean

Answer: "It is always greater than or equal to the mean of a data set."

63

What does it mean when the central tendency was stated as the median of samples?

A.

It means that the sample size is n , and the sample median represents a set of data points taken from this sample with replacement.

B.

It means that the sample size is n , averaged to determine central tendency.

C.

It tells how much a data set is spread from its mean.

D.

It is always greater than or equal to the mean of a data set.

Answer: "It means that the sample size is n , and the sample median represents a set of data points taken from this sample with replacement."

64

The range of a data set is:

A.

The difference between the mean and median

B.

The difference between the smallest and largest values

C.

The sum of all the values in the data set

D.

The number of times each value occurs in the data set

Answer: "The difference between the smallest and largest values"

65

Which of the following measures of dispersion is affected by outliers?

A.

Range

B.

Median

C.

Mode

D.

Mean absolute deviation

Answer: "Range"

66

The mean absolute deviation is calculated by:

A.

Taking the absolute difference between each value and the mean, and then finding the average

B.

Taking the absolute difference between the smallest and largest values

C.

Counting the number of times each value occurs in the data set

D.

Adding all the values and dividing by the number of values

Answer: "Taking the absolute difference between each value and the mean, and then finding the average"

67

In a regression analysis if $r^2 = 1$, then

A.

SSE must also be equal to one

B.

SSE must be equal to zero

C.

SSE can be any positive value

D.

SSE must be negative

Answer: "SSE must be equal to zero"

68

The coefficient of correlation

A.

is the square of the coefficient of determination

B.

is the square root of the coefficient of determination

C.

is the same as r-square

D.

can never be negative

Answer: "is the square root of the coefficient of determination"

69

"In regression analysis, the variable that is used to explain the change in the outcome of an experiment, or some natural process, is called"

A.

the x-variable

B.

the independent variable

C.

the predictor variable

D.

all are correct

Answer: "all are correct"

70

Suppose that you have carried out a regression analysis where the total variance in the response is 133452 and the correlation coefficient was 0.85. The residual sums of squares is:

A.

37032.92

B.

20017.8

C.

113434.2

D.

96419.07

Answer: "37032.92"

71

This question is related to questions 4 and 21 above. The relationship between number of beers consumed (x) and blood alcohol content (y) was studied in 16 male college students by using least squares regression. The following regression equation was obtained from this study: $\hat{y} = -0.0127 + 0.0180x$ Another guy, his name Dudley, has the regression equation written on a scrap of paper in his pocket. Dudley goes out drinking and has 4 beers. He calculates that he is under the legal limit (0.08) so he decides to drive to another bar. Unfortunately Dudley gets pulled over and confidently submits to a road-side blood alcohol test. He scores a blood alcohol of 0.085 and gets himself arrested. Obviously, Dudley skipped the lecture about residual variation. Dudley's residual is:

A.

0.005

B.

-0.005

C.

0.0257

D.

-0.0257

Answer: "0.0257"

72

Which of the following statements is true about the null hypothesis?

A.

Any wrong decision related to the null hypothesis results in two types of errors

B.

Any wrong decision related to the null hypothesis results in one type of an error

C.

Any wrong decision related to the null hypothesis results in four types of errors

D.

Any wrong decision related to the null hypothesis results in three types of errors

Answer: "Any wrong decision related to the null hypothesis results in two types of errors"

73

Which of the following statements is false about the regression line?

A.

A regression line is also known as the line of the average relationship

B.

A regression line is also known as the estimating equation

C.

A regression line is also known as the prediction equation

D.

A regression line is also known as the real equation

Answer: "A regression line is also known as the real equation"

74

Which of the following is true for white noise?

A.

Mean = 0

B.

Zero autocovariances

C.

Zero autocovariances except at lag zero

D.

All of these

Answer: "Zero autocovariances except at lag zero"

75

The figure below shows the estimated autocorrelation and partial autocorrelations of a time series of $n = 60$ observations. Based on these plots, we should.

A.

Transform the data by taking logs

B.

Difference the series to obtain stationary data

C.

Fit an MA(1) model to the time series

D.

None of all mentioned

Answer: "Difference the series to obtain stationary data"

76

Which of the following is not an example of a time series model?

A.

Naive approach

B.

Exponential smoothing

C.

Moving Average

D.

None of all mentioned

Answer: "None of all mentiond"

77

Level is the mean value around which the series varies.

A.

TRUE

B.

FALSE

C.

Maybe

D.

None of these

Answer: "TRUE"

78

_____ is a technique for smoothing univariate time-series by assigning exponentially decreasing weights to data over a time period.

A.

Walk Forward Validation

B.

Prophet Model

C.

LSTM Model

D.

Exponential Smoothing

Answer: "Exponential Smoothing"

79

Identify the language which is not context-free.

A.

$$L = \{i^m j^n R \mid i, j \in \{0,1\}^*\}$$

B.

$$L = \{a^n b^n \mid n \neq 0\}$$

C.

$$L = \{i^m j^n \mid i, j \in \{0,1\}^*\}$$

D.

$$L = \{a^n b^m c^m d^n \mid n, m \neq 0\}$$

Answer: "L = {a^n b^n | n ≠ 0}"

80

Grammars that can be translated to DFAs:

A.

Left linear grammar

B.

Right linear grammar

C.

Generic grammar

D.

All of these

Answer: "Right linear grammar"

81

The language accepted by a Pushdown Automata:

A.

Type0

B.

Type1

C.

Type2

D.

Type3

Answer: "Type2"

82

Which method compares the current time series values with a fixed base period?

A.

Ratio-to-Trend Method

B.

Ratio-to-Moving Method

C.

Link Relative Method

D.

Chain Link Method

Answer: "Link Relative Method"

83

What is the primary goal of methods of least squares?

A.

To minimize the sum of squared residuals

B.

To maximize the R-squared value

C.

To find the best-fit exponential curve

D.

To estimate the autoregressive parameter

Answer: "To minimize the sum of squared residuals"

84

Let there be two newly launched phones A and B. The probability that phone A has good battery life is 0.7 and the probability that phone B has a good battery life is 0.8. Then find the probability that a phone has good battery life.

A.

0.45

B.

0.85

C.

0.75

D.

0.65

Answer: "0.65"

85

Suppose box A contains 4 green and 5 black coins, and box B contains 6 green and 3 black coins. A coin is chosen at random from box A and placed in box B. Finally, a coin is chosen at random from among those now in box B. What is the probability a blue coin was transferred from box A to box B given that the coin chosen from box B is green?

A.

14/29

B.

15/29

C.

45206

D.

44958

Answer: "44958"

86

A programmer has a 95% chance of finding a bug every time she compiles his code, and it takes her three hours to rewrite the code every time she discovers a bug. Find the probability that she will finish her program by the end of her workday. (Assume that a workday is 9 hours)

A.

0.44

B.

0.76

C.

0.28

D.

0.37

Answer: "0.44"

87

In a Poisson Distribution, if 'n' is the number of trials and 'p' is the probability of success, then the mean value is given by?

A.

$$m = p$$

B.

$$m = np(1-p)$$

C.

$$m = (np)^2$$

D.

$$m = np$$

Answer: "m = (np)²"

88

If E and F are two events such that $P(E) = 0.2$, $P(F) = 0.6$, and $P(E/F) = 0.2$, then the value of $P(E/\sim F)$ is?

A.

0.8

B.

0.2

C.

44986

D.

0.5

Answer: "0.5"

89

What is the definition of probability?

A.

The study of random variables and their distributions.

B.

The likelihood of an event occurring.

C.

The analysis of data and drawing conclusions.

D.

The calculation of statistical measures.

Answer: "The likelihood of an event occurring."

90

What is the importance of probability in statistics?

A.

It allows for the analysis of data and drawing conclusions.

B.

It helps in making informed decisions in uncertain situations.

C.

It provides a framework for understanding random events.

D.

All of the mentioned.

Answer: "All of the mentioned."

91

What is the formula for calculating the Laspeyres price index?

A.

Laspeyres Price Index = (Current year prices / Base year prices) x 100

B.

Laspeyres Price Index = (Base year prices / Current year prices) x 100

C.

Laspeyres Price Index = (Current year quantities / Base year quantities) x 100

D.

Laspeyres Price Index = (Base year quantities / Current year quantities) x 100

Answer: "Laspeyres Price Index = (Current year prices / Base year prices) x 100"

92

What is the formula for calculating the Paasche price index?

A.

Paasche Price Index = (Current year prices / Base year prices) x 100

B.

Paasche Price Index = (Base year prices / Current year prices) x 100

C.

Paasche Price Index = (Current year quantities / Base year quantities) x 100

D.

Paasche Price Index = (Base year quantities / Current year quantities) x 100

Answer: "Paasche Price Index = (Base year prices / Current year prices) x 100"

93

Which method of index number construction uses a fixed set of weights based on a specific year?

A.

Simple Aggregative Method

B.

Weighted Aggregative Method

C.

Dutot's Method

D.

Fisher's Ideal Index Number

Answer: "Dutot's Method"

94

Which method of index number construction allows for changing weights over time?

A.

Simple Aggregative Method

B.

Weighted Aggregative Method

C.

Dutot's Method

D.

Fisher's Ideal Index Number

Answer: "Weighted Aggregative Method"

95

Which method of index number construction assigns equal weights to all items?

A.

Simple Aggregative Method

B.

Weighted Aggregative Method

C.

Dutot's Method

D.

Fisher's Ideal Index Number

Answer: "Simple Aggregative Method"

96

What is base shifting in the construction of index numbers?

A.

Changing the base year of an index number series to a different year

B.

Changing the method of calculation for an index number series

C.

Adjusting the weights of different items in an index number series

D.

Revising the formula used for calculating the index number

Answer: "Changing the base year of an index number series to a different year"

97

What is the formula for calculating the Laspeyres quantity index?

A.

Laspeyres Quantity Index = (Current year quantities / Base year quantities) x 100

B.

Laspeyres Quantity Index = (Base year quantities / Current year quantities) x 100

C.

Laspeyres Quantity Index = (Current year prices / Base year prices) x 100

D.

Laspeyres Quantity Index = (Base year prices / Current year prices) x 100

Answer: "Laspeyres Quantity Index = (Current year quantities / Base year quantities) x 100"

98

What is the formula for calculating the Paasche quantity index?

A.

Paasche Quantity Index = (Current year quantities / Base year quantities) x 100

B.

Paasche Quantity Index = (Base year quantities / Current year quantities) x 100

C.

Paasche Quantity Index = (Current year prices / Base year prices) x 100

D.

Paasche Quantity Index = (Base year prices / Current year prices) x 100

Answer: "Paasche Quantity Index = (Base year quantities / Current year quantities) x 100"

99

Which index number is commonly used to measure changes in the prices of goods and services at the retail level?

A.

Consumer Price Index (CPI)

B.

Producer Price Index (PPI)

C.

Wholesale Price Index (WPI)

D.

Gross Domestic Product (GDP) Deflator

Answer: "Consumer Price Index (CPI)"

100

Which test is used to verify the stability of an index number when the base year is changed?

A.

Time Reversal Test

B.

Factor Reversal Test

C.

Circular Test

D.

Link Relative Test

Answer: "Time Reversal Test"