1.
Find the mode and median of the 9 consecutive number
12,7,8,14,21,23,27,7,11

(A)
12,9
(B)
7,9
(C)
7,12
(D)
11,9
Answer: “7,12”

2.
When the Mean of a number is 18, what is the Mean of the sampling distribution?

(A)
21
(B)
18
(C)
27
(D)
23
Answer: “18”

3.
If the probability of hitting an object is 0.8, find the variance

(A)
0.18
(B)
0.16
(C)
0.14
(D)
0.12
Answer: “0.16”

4.
Find the variance of the given data set: 3,9,5,6,7

(A)
1
(B)
2
(C)
3
(D)
4
Answer: “4”

5.
Find the mean, mode and median of the given sets of data: 5,8,12,17,12,14,6,8, 12, and 10

(A)
11,12,10
(B)
10,12,13
(C)
11,12,13
(D)
10,12,11
Answer: “10,12,11”

6.
Find the mean mode and median of the messages received on 7 consecutive days 7,13,5,9,6,5,10

(A)
7,8,9
(B)
8,9,9
(C)
8,8,9
(D)
6,8,9

Answer: “8,9,9”

7.
Which of the following measures of central tendency is affected by extreme values in the data set?

(A)
Mean
(B)
Median
(C)
Mode
(D)
Range
Answer: “Mean”

8.
The interquartile range (IQR) is a measure of:

(A)
Variability
(B)
Central tendency
(C)
Skewness
(D)
Spread of data
Answer: “Spread of data”

9.
Mode is the value of x where f(x) is a maximum if X is continuous.

(A)
TRUE
(B)
FALSE
(C)
True and False
(D)
none

Answer: “TRUE”

10.
E (XY)=E (X)E (Y) if x and y are independent.

(A)
TRUE
(B)
FALSE
(C)
TRUE AND FALSE
(D)
none
Answer: “TRUE”

11.
The random variables X and Y have variances 0.2 and 0.5 respectively.Let Z= 5X-2Y. The variance of Z is?

(A)
3
(B)
4
(C)
5
(D)
7
Answer: “7”

12.
In a dice roll, what is the probability of getting an even number?

(A)
44958
(B)
44986
(C)
45078
(D)
44987

Answer: “45078”

13.
The number of students present in a classroom is an example of a:

(A)
Continuous random variable
(B)
Discrete random variable
(C)
Deterministic variable
(D)
Constant variable
Answer: “Discrete random variable”

14.
The probability distribution function (PDF) gives the probability of a random variable:

(A)
Taking on a specific value
(B)
Being greater than a specific value
(C)
Being less than or equal to a specific value
(D)
Falling within a specific range
Answer: “Taking on a specific value”

15.
The kurtosis of a random variable measures its:

(A)
Symmetry
(B)
Dispersion
(C)
Skewness
(D)
Shape of the distribution

Answer: “Shape of the distribution”

16.
Which of the following is true about a leptokurtic distribution?

(A)
It has a high peak and heavy tails
(B)
It has a low peak and light tails
(C)
It has a symmetric distribution
(D)
It has a mean of zero
Answer: “It has a high peak and heavy tails”

17.
Which of the following is an example of compressed data:

(A)
Histogram
(B)
Ungrouped data
(C)
Frequency distribution
(D)
Tabulation
Answer: “Frequency distribution”

18.
Which of the following represents the number of times an observation occurs in a data set?

(A)
Frequency
(B)
Mean
(C)
Median
(D)
Mode

Answer: “Frequency”

19.
A frequency distribution is used to:

(A)
Represent data in a tabular form
(B)
Calculate the mean of a data set
(C)
Find the range of a data set
(D)
Determine the standard deviation of a data set
Answer: “Represent data in a tabular form”

20.
In a cumulative frequency distribution, each entry represents:

(A)
The sum of the frequencies up to that class
(B)
The mean of the data in that class
(C)
The median of the data in that class
(D)
The mode of the data in that class
Answer: “The sum of the frequencies up to that class”

21.
The cumulative frequency curve is obtained by plotting the cumulative frequencies against the:

(A)
Lower boundaries of the classes
(B)
Upper boundaries of the classes
(C)
Midpoints of the classes
(D)
Relative frequencies of the classes

Answer: “Upper boundaries of the classes”

22.
The frequency curve is obtained by smoothing the:

(A)
Histogram
(B)
Frequency polygon
(C)
Bar diagram
(D)
Line diagram
Answer: “Frequency polygon”

23.
The cumulative frequency curve is a graphical representation of the:

(A)
Cumulative frequency distribution
(B)
Frequency distribution of ungrouped data
(C)
Relative frequency distribution of grouped data
(D)
Median of the data set
Answer: “Cumulative frequency distribution”

24.
The point where the cumulative frequency curve ends is equal to the:

(A)
Sum of all frequencies in the data set
(B)
Mean of the data set
(C)
Median of the data set
(D)
Mode of the data set
Answer: “Sum of all frequencies in the data set”

25.
Which of the following is not a disadvantage of using mean?

(A)
It is affected by extreme values
(B)
It cannot be computed in grouped data with open-ended class intervals
(C)
It does not possess the desired algebraic property
(D)
None of these
Answer: “It does not possess the desired algebraic property”

26.
The two methods of finding mode in a discrete series are _____.

(A)
Grouping method and ascending method
(B)
Table method and midpoint method
(C)
Grouping method and inspecting method
(D)
Grouping and not inspecting method
Answer: “Grouping method and inspecting method”

27.
When the values in a series do not have equal importance, we calculate the _____.

(A)
Mode
(B)
Weighted mean
(C)
Arithmetic mean
(D)
Calculating arithmetic mode
Answer: “Weighted mean”

28.
Which one of the following statements best describes the mode measure?

(A)
It gives us the most common score in a data set, which will change if you rearrange the scores in any order.
(B)
It gives us the most common score in a data set, which will not change if you rearrange the scores in any order.
(C)
It is always greater than or equal to the mean of a data set.
(D)
None of these
Answer: “It is always greater than or equal to the mean of a data set”

29.
Which one of the following statements best describes the range measure?

(A)
It gives us the highest and lowest scores in a data set.
(B)
It gives us the lowest and highest scores in a data set.
(C)
It is always greater than or equal to the mean of a data set.
(D)
cant say
Answer: “It gives us the lowest and highest scores in a data set”

30.
The mean is calculated by:

(A)
Adding all the values and dividing by the number of values
(B)
Finding the middle value of the data set
(C)
Counting the number of times each value occurs in the data set
(D)
Subtracting the smallest value from the largest value

Answer: “Adding all the values and dividing by the number of values”

31.
Which of the following measures is most affected by extreme values in a data set?

(A)
Mean
(B)
Median
(C)
Mode
(D)
Range
Answer: “Mean”

32.
The mode is the value that:

(A)
Appears most frequently in the data set
(B)
Divides the data set into two equal halves
(C)
Represents the middle value in the data set
(D)
Is the difference between the largest and smallest values
Answer: “Appears most frequently in the data set”

33.
"Regression analysis was applied to return rates of sparrowhawk colonies. Regression analysis was used to study the relationship between return rate (x: % of birds that return to the colony in a given year) and immigration rate (y: % of new adults that join the colony per year).
The following regression equation was obtained.
! = 31.9 – 0.34x Based on the above estimated regression equation, if the return rate were to decrease by 10% the rate of immigration to the colony would:"

(A)

increase by 34%
(B)
increase by 3.4%
(C)
decrease by 0.34%
(D)
decrease by 3.4%
Answer: “increase by 3.4%”

34.
"In least squares regression, which of the following is not a required assumption about the error term ε?"

(A)
The expected value of the error term is one.
(B)
The variance of the error term is the same for all values of x.
(C)
The values of the error term are independent.
(D)
The error term is normally distributed
Answer: “The expected value of the error term is one”

35.
Larger values of r 2 (R2) imply that the observations are more closely grouped about the

(A)
average value of the independent variables
(B)
average value of the dependent variable
(C)
least squares line
(D)
origin
Answer: “least squares line”

36.
If the coefficient of determination is 0.81, the correlation coefficient
(A)

is 0.6561
(B)
could be either + 0.9 or - 0.9
(C)
must be positive
(D)
must be negative
Answer: “could be either + 0.9 or - 0.9”

37.
"Regression analysis was applied between $ sales (y) and $ advertising (x) across all the branches of a major international corporation. The following regression function was obtained
! = 5000 + 7.25x If the advertising budgets of two branches of the corporation differ by $30,000, then what will be the predicted difference in their sales?"

(A)
$217,500
(B)
$222,500
(C)
$5000
(D)
$7.25
Answer: “$217,500”

38.
If the values of two variables move in the opposite direction, _____

(A)
The correlation is said to be linear
(B)
The correlation is said to be non-linear
(C)
The correlation is said to be positive
(D)
The correlation is said to be negative
Answer: “The correlation is said to be negative”

39.

Which of the following statements is true about the arithmetic mean of two regression coefficients?

(A)
It is less than the correlation coefficient
(B)
It is equal to the correlation coefficient
(C)
It is greater than or equal to the correlation coefficient
(D)
It is greater than the correlation coefficient
Answer: "It is greater than the correlation coefficient"

40.
How many AR and MA terms should be included for the time series by looking at the above ACF and PACF plots?

(A)
AR (1) MA(0)
(B)
AR(0)MA(1)
(C)
AR(2)MA(1)
(D)
AR(1)MA(2)
Answer: "AR(0)MA(1)"

41.
Consider the following AR(1) model with the disturbances having zero mean and unit variance. yt = 0.4 + 0.2yt-1 + ut. The (unconditional) variance of y will be given by ?

(A)
1.5
(B)
1.04
(C)
0.5
(D)
2

Answer: “1.04”

42.
Second differencing in time series can help to eliminate which trend?

(A)
Quadratic Trend
(B)
Linear Trend
(C)
All
(D)
None
Answer: “Quadratic Trend”
43.
BIC penalizes complex models more strongly than the AI

(A)
TRUE
(B)
FALSE
(C)
Maybe
(D)
None
Answer: “TRUE”

44.
In a time-series forecasting problem, if the seasonal indices for quarters 1, 2, and 3 are 0.80, 0.90, and 0.95 respectively. What can you say about the seasonal index of quarter 4?

(A)
It will be less than 1
(B)
It will be greater than 1
(C)
It will be equal to 1
(D)
Seasonality does not exist

Answer: “It will be greater than 1”

45.
A _____ is a sequence of observations over a certain perio(D)

(A)
Theano
(B)
Scikit
(C)
Time series
(D)
Tensor
Answer: “Time series”

46.
A time series has _____ components.

(A)
1
(B)
2
(C)
3
(D)
4
Answer: “4”

47.
Which of the following is the square root of the mean square error?

(A)
AMSQ
(B)
RMSE
(C)
AMSE
(D)
RMES
Answer: “RMSE”

48.
Mean Absolute Error is the average of absolute difference between?

(A)
normal values and true values
(B)
predicted values and imaginary values
(C)
predicted values and true values
(D)
imaginary values and true values
Answer: “predicted values and true values”

49.
Noise is the error in the observations added due to environmental factors.

(A)
Yes
(B)
No
(C)
Can be yes or no
(D)
Cannot say
Answer: “Yes”

50.

Company A produces 10% defective products, Company B produces 20% defective products, and Company C produces 5% defective products. If choosing a company is an equally likely event, then find the probability that the product chosen is defective.

(A)
0.11
(B)
0.21

(C)
0.22
(D)
0.12
Answer: “0.12”

51.
A problem in mathematics is given to three students A, B, and (C) If the probability of A solving the problem is 1/2 and B not solving it is 1/4. The whole probability of the problem being solved is 63/64. What is the probability of solving it?

(A)
44958
(B)
45145
(C)
23377
(D)
45139
Answer: “45139”

52.
Which of the following is a table with all possible values of a random variable and its corresponding probabilities?

(A)
Probability Density Function
(B)
Probability Mass Function
(C)
Probability Distribution
(D)
Cumulative distribution function
Answer: “Probability Distribution”

53.
Find the Expectation of a Hypergeometric Distribution such that the probability that a 4-trial hypergeometric experiment results in exactly 2 successes, when the population consists of 16 items.

(A)
44986
(B)
45139
(C)
45017
(D)
44958
Answer: “44958”

54.
What is the probability of a sure event?

(A)
1
(B)
0
(C)
45017
(D)
44958
Answer: “1”

55.
If P(C) = 5/13, P(D) = 7/13, and P(C∩D) = 3/13, evaluate P(C|D).

(A)
45109
(B)
45049
(C)
45110
(D)
45108
Answer: “45110”

56.
Consider Jack draws 3 cards from a pack of 52 cards. What is the probability of getting no kings?

(A)
0.8726
(B)
0.7862
(C)
0.8762
(D)
0.7826
Answer: “0.8762”

57.
Which of the following cannot be the value of probability?

(A)
44958
(B)
0
(C)
-1
(D)
1
Answer: “1”

58.
Which test is used to check the adequacy of an index number?

(A)
The time reversal test
(B)
The factor reversal test
(C)
The link relative test
(D)
The weighted average test
Answer: “The factor reversal test”

59.
What is base shifting in index number construction?

(A)
Adjusting the base year to a more recent year
(B)
Changing the weighting scheme of the index
(C)
Combining two different index numbers
(D)
Adding a new component to the index
Answer: “Adjusting the base year to a more recent year”

60.
What is splicing in index number construction?

(A)
Combining two different index numbers at a specific point in time
(B)
Removing outliers from the data
(C)
Adjusting the weights of the index components
(D)
Deflating the index to account for inflation
Answer: “Combining two different index numbers at a specific point in time”

61.
Synonym of ANALOGY

(A)
Difference
(B)
Comparison
(C)
Addition
(D)
Deletion
Answer: “Comparison”

62.
Synonym of ALLURE

(A)

Extol
(B)
Excite
(C)
Entice
(D)
Elicit
Answer: “Entice”

63.
Synonym of VOCIFEROUS

(A)
violent
(B)
loud
(C)
Secret
(D)
true
Answer: “loud”

64.
Synonym of FICTIONAL

(A)
genuine
(B)
authentic
(C)
fanciful
(D)
real
Answer: “fanciful”

65.
Synonym of STUPEFY

(A)
lie

(B)
make dull
(C)
talk nonsense
(D)
overread
Answer: “make dull”

66.
Antonyms of BENEVOLENCE

(A)
contempt
(B)
malevolence
(C)
hatred
(D)
Derision
Answer: “malevolence”

67.
Antonyms of KNACK

(A)
dullness
(B)
balance
(C)
talent

(D)

dexterity
Answer: “dullness”

68.
Antonyms of CELIBATE

(A)

profligate
(B)
reprobate
(C)
extravagant
(D)
prodigal
Answer: “reprobate”

69.
Antonyms of DITHER

(A)
cry
(B)
refer
(C)
decide
(D)
defer
Answer: “decide”

70.
Choose the correct meaning of an idiom/ phrase - To talk through one’s hat :

(A)
To speak fluently
(B)
To talk nonsense
(C)
To talk wisdom
(D)
To speak at random
Answer: “To talk nonsense”

71.
Choose the correct meaning of an idiom/ phrase - To snap one’s fingers :

(A)
To speak abruptly

(B)
To accept immediately
(C)
To grasp eagerly
(D)
To become contemptuous of
Answer: “To become contemptuous of”

72.
Choose the correct spelling of the given word

(A)
Forefiet
(B)
Forefeit
(C)
Forfeit
(D)
Forfiet
Answer: “Forfeit”

73.
Choose the correct spelling of the given word

(A)
Comemorate
(B)
Commemmorate
(C)
Momemmorate
(D)
Commemorate
Answer: “Commemorate”

74.
Choose the correct alternative form - If you are really not feeling well. you ..... a doctor.

(A)
should better see

(B)
may Sec
(C)
had better see
(D)
would rather see
Answer: “had better see”

75.
Choose the correct alternative form - If only I..... his address, I would most certainly have told you.

(A)
know
(B)
knew
(C)
had known
(D)
off
Answer: “had known”

It is sad that in country after country, progress should become synonymous with an assault on nature. We who are a part of nature and dependent on her for every need, speak constantly about 'exploiting' nature. When the highest mountain in the world was climbed in 1953, Jawaharlal Nehru objected to the phrase conquest of Everest' which he thought was arrogant. Is it surprising that this lack of consideration and the constant need to prove one's superiority should be projected on to our treatment of our fellowmen? I remember Edward Thompson, a British writer and a good friend of India, once telling Mr. Gandhi that wildlife was fast disappearing. Remarked Mr. Gandhi: ‘It is decreasing in the jungles but it is increasing in the towns’
On the one hand the rich look askance at our continuing poverty; on the other they warn us against their own methods. We do not wish to impoverish the environment any further and yet we cannot forget the grim poverty of large numbers of people. Are not poverty and need the great polluters? For instance, unless we are in a position to provide employment and purchasing power

for the daily necessities of the tribal people and those who live in and around our jungles, we cannot prevent them from combing the forest for food and livelihood, from poaching and from despoiling the vegetation.

76.

At the beginning of the passage, the writer expresses her opinion that in many countries progress is synonymous with

(A)
development.
(B)
utmost care for nature.
(C)
a balanced treatment of nature.
(D)
utmost cruelty to nature.
Answer: “utmost care for nature”

77.
In the passage the term 'exploiting' nature suggests

(A)
regretful Ness.
(B)
sarcasm.
(C)
destructive urge of man.
(D)
greed of man.
Answer: “sarcasm”

78.
Nehru objected to the phrase 'conquest of Everest' since

(A)
it carries a war-like connotation.
(B)
it sounds pompous and boastful.

(C)
it depicts Everest as a victim.
(D)
Everest is unconquerable.
Answer: “it sounds pompous and boastful”

79.
Gandhi's statement 'It is decreasing in the jungles but it is increasing in the towns.!'

(A)
Refers to wild animals' decrease in the jungle.
(B)
Refers to flora and fauna
(C)
Refers to man's selfishness.
(D)
Is a satirical comparison of man's callousness to the animals.
Answer: “Refers to man's selfishness”

80.
The writer is of opinion that tribal people can be prevented from combing forest for food

(A)
to provide employment
(B)
to increase purchasing power
(C)
by deterring them from poaching and despoiling vegetation
(D)
to provide employment and purchasing power for daily necessities
Answer: “to provide employment and purchasing power for daily necessities”

81.
The principal copper deposits of India lie in which of the following places?

(A)
Hazaribagh and Singbhum of Bihar
(B)

Khetri and Daribo areas of Rajasthan
(C)
Anantapur in Andhra Pradesh
(D)
Siwaliks in Uttar Pradesh and in Karnataka
Answer: “Hazaribagh and Singbhum of Bihar”

82.
Which of the following are true regarding Jhum cultivation in India?
I.It is largely practiced in Assam
II.It is referred to as 'slash and burn' technique
III.In it, the fertility is exhausted in a few years

(A)
I, II and III
(B)
II and III
(C)
I and II
(D)
I and III
Answer: “I, II and III”
83.
The Yarlung Zangbo River, in India, is known as

(A)
Ganga
(B)
Indus
(C)
Brahmaputra
(D)
Mahanadi
Answer: “Brahmaputra”

84.
The Salal Project is on the river

(A)
Chenab

(B)
Jhelum
(C)
Ravi
(D)
Sutlej
Answer: “Chenab”

85.
The only zone in the country that produces gold is also rich in iron is

(A)
North-eastern zone
(B)
North-western zone
(C)
Southern zone
(D)
South-eastern zone
Answer: “Southern zone”

86.
Which one Bank is not one of the three Banks that will be merged to form the third largest Bank in India?

(A)
Punjab National Bank
(B)
Bank of Baroda
(C)
Indian Bank
(D)
Dena Bank
Answer: “Indian Bank”

87.
The 2019 Pravasi Bhartiya Divas will be held on which city

(A)
Varanasi

(B)
New Delhi
(C)
Ahmedabad
(D)
Surat
Answer: “Varanasi”

88.
What is the name of the India’s longest suspension bridge built in Leh by Indian Army?

(A)
Gagan Bridge
(B)
Maitri Bridge
(C)
Mahatma Bridge
(D)
Sardar Bridge
Answer: “Maitri Bridge”

89.
Which country launched the world’s first nation wise 5G mobile network?

(A)
Japan
(B)
Malaysia
(C)
South Korea
(D)
China
Answer: “South Korea”

90.
Which famous singer is awarded with Bharat Ratna award in the year 2019?

(A)
Manna Dey

(B)
Bhupen Hazarika
(C)
Asha Bhosle
(D)
Lata Mangeshkar
Answer: “Bhupen Hazarika”

91.
What comes next? January,February,April,July,November,April,?????

(A)
December
(B)
March
(C)
October
(D)
February
Answer: “October”

92.
In the following questions, a series is given with one term missing. Choose the correct alternative from the given ones that will complete the series.
AGMSY,CIOUA,EKQWC,?,IOUAG,KQWCI

(A)
GMSYE
(B)
FMSYE
(C)
GNSYD
(D)
FMYES
Answer: “GMSYE”

93.
Select the related word/letters/numbers from the given alternatives:
4 : 20 : : 8 : ?

(A)
74
(B)
70
(C)
72
(D)
78
Answer: “72”

94.
M is son of P, Q is the grand-daughter of O, who is the husband of P. How is M related to O?

(A)
Son
(B)
Daughter
(C)
Mother
(D)
Father
Answer: “Son”

95.
If “A” means “subtraction”, “B” means “division”, “C” means “addition” and “D” means “multiplication”, then 305 B 5 A 28 C 43 D 12 = _____

(A)
569
(B)
549
(C)
560
(D)
530
Answer: “549”

96.
Select the related word/number from the given alternatives:

CLOSE : DNRWJ : : OPEN : _____

(A)
PRHR
(B)
PRJQ
(C)
RPJB
(D)
RZWR
Answer: “PRHR”

97.
Select the word which can be formed from the word IMMEDIATELY.

(A)
DIALECT
(B)
LIMITED
(C)
DIAMETER
(D)
DICTATE
Answer: “LIMITED”

98.
Introducing a girl, Ankit says, “She is the sister of the son of my mother’s sister”. How is the girl related to Ankit?

(A)
Niece
(B)
Daughter
(C)
Sister
(D)
Cousin
Answer: “Cousin”

99.

It was Sunday on jan 2, 2006, what was the day of the week Jan 1, 2010 ?

(A)
Sunday
(B)
Thursday
(C)
Friday
(D)
Saturday
Answer: “Thursday”

100.
Neha walks 30m towards south, then turning to her right she walks 30m, then turning to her left, she walks 20m, again she turns to her left and walks 30m. How far is she from her initial position?

(A)
20 mtr
(B)
30 mtr
(C)
50 mtr
(D)
60 mtr
Answer: “50 mtr”