

**PUNE VIDYARTHI GRIHA'S  
COLLEGE OF SCIENCE & TECHNOLOGY**

**FYBSC CS Sem - I  
Examination JAN 2020**

**Subject :- Descriptive Statistics and introduction to Probability**

**Note:1. Attempt any 40 from given 50 Question**

**Total 60 Marks**

**2. Each correct question Carry 1.5 marks**

**Time:- 1 hour**

1. Measures of Central tendency is divided into \_\_\_\_\_ types
  - a) 2
  - b) 3
  - c) 4
  - d) 5
2. The ratio of summation of all objects to the total number of observation is called .....
  - a) mean
  - b) median
  - c) probability
  - d) mode
3. \_\_\_\_\_ is the mid value of arranged data
  - a) Mean
  - b) Median
  - c) Mode
  - d) Percentile
4. \_\_\_\_\_ is the value of the highest frequency
  - a) Mean
  - b) Median
  - c) Mode
  - d) mean deviation
5. Quartile divide the series into \_\_\_\_\_ parts
  - a) 2
  - b) 3
  - c) 4
  - d) 5
6.  $(Q_3 - Q_1)/2 =$  \_\_\_\_\_
  - a) Quartile deviation
  - b) Range
  - c) mean deviation
  - d) mode
7. Suppose there are 9 observation in arranged data then median will be \_\_\_\_\_ observation
  - a) 4
  - b) 5
  - c) 6
  - d) 7
8. Find arithmetic mean of the following question:  $X = 18, 20, 22, 24, 26, 28, 30, 32$

F= 2,5,12,17,14,6,3,1

- a) 3.33
  - b) 25.4
  - c) 30.6
  - d) 13.5
9. There are \_\_\_\_\_ types of measure of dispersion
- a) 1
  - b) 2
  - c) 3
  - d) 4
10. Measure of spread or scatter of data is called .....
- a) measure of dispersion
  - b) measure of Central tendency
  - c) range
  - d) coefficient of range
11.  $\frac{Q_3 - Q_1}{Q_3 + Q_1}$  is \_\_\_\_\_
- a) coefficient of Quartile deviation
  - b) coefficient of Mean deviation
  - c) coefficient of standard deviation
  - d) coefficient of mode
12. Ungrouped frequency distribution can be divided into \_\_\_\_\_ types
- a) 1
  - b) 2
  - c) 3
  - d) 0
13. .... is represented in the form of rectangle.
- a) frequency polygon
  - b) frequency curve
  - c) table
  - d) histogram
14. choose correct source
- a) data - information - facts - knowledge
  - b) facts - information - knowledge - data
  - c) knowledge - data - information - facts
  - d) information - data - facts - knowledge
15. .... is table that display frequency, number of times a specific value or variable is repeated in excess
- a) range
  - b) coefficient of range
  - c) frequency distribution
  - d) classification
16. .... is the graphical representation in which both ends of the curve are join to the the x-axis.
- a) frequency polygon
  - b) frequency curve
  - c) table
  - d) histogram

17. To construct frequency curve variable along ..... and frequency along ..... .
- x axis and y axis
  - y axis and x axis
  - z axis and y axis
  - x axis and z axis
18. If the value of any regression coefficient is zero, then two variables are:
- Qualitative
  - Correlation
  - Dependent
  - Independent
19. The straight line graph of the linear equation  $Y = a + bX$  , slope will be upward if:
- $b = 0$
  - $b < 0$
  - $b > 0$
  - $b \neq 0$
20. The correlation coefficient lies between:
- 0 or 1
  - 2 or +2
  - 1 or +1
  - 1 or 2
21. The purpose of simple linear regression analysis is to:
- Predict one variable from another variable
  - Replace points on a scatter diagram by a straight-line
  - Measure the degree to which two variables are linearly associated
  - Obtain the expected value of the independent random variable for a given value of the dependent variable
22. If x and y both decrease then the co relation is \_\_\_\_\_
- linear
  - Positive
  - Negative
  - Perfect
- 1) If the points on the scatter diagram show no tendency either to increase together or decrease together the value of r will be close to:
- 1
  - +1
  - 0.5
  - 0
23. Moment is denoted by:
- $\Gamma$
  - B
  - $\mu$
  - $\alpha$
24. \_\_\_\_\_ gives the idea about the flatness or peakness of curve
- Skewness
  - Kurtosis
  - Mean

- d) Median
25. If  $r > 0$  then the correlation is \_\_\_\_\_
- a) linear
  - b) Positive
  - c) Negative
  - d) Perfect
26. The independent variable is also called:
- a) Regressor
  - b) Regressand
  - c) Predictand
  - d) Estimated
27. In the regression equation  $X = a + bY$ , the X is called:
- a) Independent variable
  - b) Dependent variable
  - c) Qualitative variable
  - d) None of the above
28. In the regression equation  $Y = a + bX$ , a is called:
- a) X-intercept
  - b) Y-intercept
  - c) Dependent variable
  - d) None of the above
29. The purpose of simple linear regression analysis is to:
- a) Predict one variable from another variable
  - b) Replace points on a scatter diagram by a straight-line
  - c) Measure the degree to which two variables are linearly associated
  - d) Obtain the expected value of the independent random variable for a given value of the dependent variable
30. The range of regression coefficient is:
- a) -1 to +1
  - b) 0 to 1
  - c)  $-\infty$  to  $+\infty$
  - d) 0 to  $\infty$
31. If the value of regression coefficient is zero, then the two variable are called:
- a) Independent
  - b) Dependent
  - c) Both (a) and (b)
  - d) Difficult to tell
32. percentile calculation in which data is divided into 4 equal parts is known to be
- a) decile
  - b) tercidile
  - c) quartile
  - d) pectedile
33. The graph  represents the relationship that is.:

- a) Linear positive
  - b) Linear negative
  - c) Non-linear
  - Curvilinear
34. The probability of all possible outcomes of a random experiment is always equal to:
- (a) One**
  - (b) Zero
  - (c) Infinity
  - (d) All of the above
35. For a statistical experiment every possible outcome is called
- a) Sample
  - b) Sample point
  - c) Value
  - d) Probability
36. The probability of appearing both tail when two coins are tossed is \_\_\_\_\_
- a) 1
  - b)  $\frac{1}{2}$
  - c)  $\frac{1}{4}$
  - d) 4
37. Any subset of sample space of experiment is called
- a) Event
  - b) Subset
  - c) Sample
  - d) Values
38. The events having no experimental outcomes in common is called:
- (a) Equally likely events
  - (b) Exhaustive events
  - (c) Mutually exclusive events**
  - (d) Independent events
39. The probability associated with the reduced sample space is called:
- (a) Conditional probability**
  - (b) Statistical probability
  - (c) Mathematical probability
  - (d) Subjective probability
40. If A and B are two independent events, then:
- (a)  $P(A/B) = P(A)$
  - (b)  $P(A) = P(B)$
  - (c)  $P(A) < P(B)$
  - (d)  $P(A/B) = P(B/A)$
41. If three candidates are selected to attend a course from the ten candidates, the number of ways of selecting the candidates is an example of:
- (a) Combination**
  - (b) Permutation
  - (c) Reduced sample space
  - (d) moment
42. The probability based on the concept of relative frequency is called:
- a) Empirical probability
  - b) Statistical probability
  - c) Both (a) and (b)**

- d) Neither (a) nor (b)
43. The probability of an event cannot be:
- a) Equal to zero
  - b) Greater than zero
  - c) Equal to one
  - d) Less than zero**
44. If an event contains more than one sample points, it is called a:
- a) Simple event
  - b) Compound event**
  - c) Impossible event
  - d) Certain event
45. When the occurrence of one event has no effect on the probability of the occurrence of another event, the events are called:
- a) Independent**
  - b) Dependent
  - c) Mutually exclusive
  - d) Equally likely
46. Two events A and B are called mutually exclusive if:
- a)  $A \cup B = \Phi$
  - b)  $A \cap B = \Phi$**
  - c)  $A \cap B = S$
  - d)  $A \cap B = 1$
47. Which of the following cannot be taken as probability of an event?
- a) 0
  - b) 0.5
  - c) 1
  - d) -1**
48. The value of  $4!$  Is \_\_\_\_
- a) 12
  - b) 15
  - c) 20
  - d) 25**
49. A graphical device used to list all possibilities of a sequence of outcomes in systematic way is called:
- a) Probability histogram
  - b) Venn diagram
  - c) Pie diagram
  - d) Tree diagram**
50. A random experiment contains:
- a) At least one outcome
  - b) At least two outcomes**
  - c) At most one outcome
  - d) At most two outcomes