SET-1

Fill in the Blanks

Choose appropriate word/term and fill in the blank:

1. Size of class interval depends upon _____ of the series. (range/variables)

2. _____ is known by adding up the upper limit and lower limit values and dividing the total by 2. (Range/Mid-value)

3. Classification based on time period is called _____ classification. (spatial/chronological)

4. When the lower limit of the first class interval is missing, we have an _____ series. (open-end/exclusive)

5. _____ series is the series in which the frequencies are continuously added corresponding to each class interval in the series. (Cumulative frequency/Mid-values frequency)

6. The difference between upper and lower limit of class interval gives us _____ of the class interval. (magnitude/frequency)

7. _____ series is useful only when values are in complete numbers. (Individual/Continuous)

8. _____ is the number of times an item repeats itself in the series. (Class frequency/Frequency)

9. _____ classification is called classification according to dichotomy. (Simple/Manifold)

10. In case of _____ series, the upper limit of one class interval is the lower limit of the next class interval. (inclusive/exclusive)

SET-2

Multiple Choice

Choose the correct option:

1. **Grouping of related facts into different classes is called:**
   (a) classification
   (b) class
   (c) class interval
   (d) class limit

2. **Classification of data based on locational difference is called:**
   (a) spatial classification
   (b) geographical classification
   (c) locational classification
   (d) both (a) and (b)

3. **Classification should be _____ .**
   (a) elastic
   (b) inelastic
   (c) perfectly elastic
   (d) perfectly inelastic

4. **Which of the following is a characteristic of a good classification?**
   (a) Comprehensiveness
   (b) Clarity and homogeneity
   (c) Suitability
   (d) All of these

5. **The series in which items are listed singly is called _____ .**
   (a) individual series
   (b) discrete series
   (c) frequency distribution
   (d) frequency array

6. **Classification of data based on more than one characteristic is called:**
   (a) spatial classification
   (b) simple classification
   (c) manifold classification
   (d) chronological classification

7. _____ **is the average value of the upper and lower limits.**
   (a) Range
   (b) Cumulative frequency
   (c) Mid-value
   (d) Magnitude

8. **An/A** _____ **series is that series which includes all items upto its upper limit.**
   (a) inclusive
   (b) exclusive
   (c) open-end
   (d) cumulative frequency

9. **Magnitude of a Class Interval =**
   (a) Upper limit + Lower limit
   (b) Upper limit – Lower limit
   (c) Upper limit × Lower limit
   (d) Upper limit ÷ Lower limit

10. **Bivariate series refers to a series of statistical data with:**
    (a) one variable
    (b) two variables
    (c) more than two variables
    (d) none of these

11. **The number of times an item repeats itself corresponding to a range of value is called:**
    (a) frequency
    (b) class frequency
    (c) attribute
    (d) variable

12. **The method of counting and marking of tally bars is called:**
    (a) four and cross
    (b) four across
    (c) grouping
    (d) none of these

13. **According to tally bar method, which of the following tally bars indicates the frequency of five?**
    (a) |||||
    (b) ℕℕ
    (c) ℕ|
    (d) || |||

14. **Every time an item occurs, a** _____ **is marked against that item.**
    (a) tally bar
    (b) frequency
    (c) magnitude
    (d) none of these

15. **Every class interval has:**
    (a) only one limit
    (b) two limits
    (c) three limits
    (d) four limits

16. **The mid-value of class interval 10–20 is** _____ .
    (a) 5
    (b) 10
    (c) 15
    (d) 20

17. **If the class is given as: 5–10, 10–15, 15–20, etc., what is magnitude of class interval?**
    (a) 5
    (b) 10
    (c) 15
    (d) 20

18. **Arrange the following series in an ascending order: 3, 10, 4, 6, 9, 5.**
    (a) 10, 9, 6, 5, 4, 3
    (b) 6, 9, 10, 3, 4, 5
    (c) 3, 4, 5, 6, 9, 10
    (d) 4, 5, 6, 3, 10, 9

19. **Arrange the following series in a descending order: 7, 2, 15, 11, 16, 19.**
    (a) 2, 7, 11, 15, 16, 19
    (b) 19, 16, 15, 11, 7, 2
    (c) 15, 16, 19, 11, 7, 2
    (d) 7, 2, 19, 16, 15, 11

20. **Statistical calculations in classified data are based on:**   [NCERT]
    (a) the actual values of observations
    (b) the upper class limits
    (c) the lower class limits
    (d) the class mid-points

SET-3

True or False

State whether the following statements are True or False:

1. Data is divided on the basis of existence or absence of a quality under manifold classification. (True/False)

2. Series with data on expenditure of households as well as their income is a bivariate series. (True/False)

3. Data on expenditure of 20 BPL families on education is an example of univariate frequency distribution. (True/False)

4. The average of the upper limit and lower limit of a class gives the range. (True/False)

5. Mid-values frequency series can be converted to the simple frequency series. (True/False)

6. Cumulative frequency can be expressed only on the basis of the lower-class limits of the class intervals. (True/False)

7. Univariate frequency distribution is based on univariate sample data which offers only one type of information related to the area of study. (True/False)

8. In the case of inclusive series, the value of the upper limit of class interval is not included in that class. (True/False)

9. A mass of data in its crude form is called raw data. (True/False)

10. Variables and attributes are one and the same thing. (True/False)

SET-4

True-False Alternatives

In the following questions (1-5), two statements are given. Read the statements carefully and choose the correct alternative among those given below:

Alternatives:

(a) Both the statements are true
(b) Both the statements are false
(c) Statement 1 is true and Statement 2 is false
(d) Statement 2 is true and Statement 1 is false

1. **Statement 1 :** Classification should be elastic.
   Statement 2 : There should be a scope for change in the classification, depending on the change of purpose or objective of the study.

2. **Statement 1 :** Discrete variables assume values in fractions like 2.4, 4.6, etc.
   Statement 2 : Continuous variables are those variables which do not increase in jumps.

3. **Statement 1 :** The colour of human hair may change overtime, so statistically speaking it is a variable.
   Statement 2 : Anything that changes overtime is called a variable.

4. **Statement 1 :** In Statistics, only that change of an object is taken as a variable which can be numerically expressed.
   Statement 2 : Change in IQ level of a student of class XI can be considered as a variable.

5. **Statement 1 :** Every time an item occurs, a tally bar (|) is marked against that item.
   Statement 2 : Each tally bar signifies 'one' occurrence of that item.

SET-5

Choose the Correct Pair of Statements/Identify the Correct Sequence of Alternatives

1. From the set of statements given in Column I and Column II, choose the correct pair of statements:

Column I	Column II
A. Method of organisation of data	(i) Classification of data
B. Quantitative classification	(ii) Classification by attributes
C. Continuous variable	(iii) Increase in jumps
D. Frequency distribution	(iv) Series without class interval

Alternatives:

(a) A—(i)

(b) B—(ii)

(c) C—(iii)

(d) D—(iv)

2. Identify the correct sequence of alternatives given in Column II by matching them with respective items in Column I:

Column I	Column II
A. Univariate	(i) Extreme values of a class
B. Series	(ii) Series which includes all items up to its upper limit
C. Class limits	(iii) Data presented in a specific order
D. Inclusive series	(iv) Series of statistical data with one variable

Alternatives:

(a) A—(iii), B—(iv), C—(ii), D—(i)

(b) A—(iv), B—(iii), C—(i), D—(ii)

(c) A—(ii), B—(i), C—(iv), D—(iii)

(d) A—(iv), B—(iii), C—(ii), D—(i)

SET-6

Assertion and Reasoning

In the following questions (1-5), a statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct alternative among those given below:

Alternatives:

(a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)

(b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)

(c) Assertion (A) is true but Reason (R) is false

(d) Assertion (A) is false but Reason (R) is true

1. **Assertion (A) :** Variables are different from attributes.

   Reason (R) : Attributes cannot be expressed numerically.

2. **Assertion (A) :** Age is continuous variable.

   Reason (R) : Age changes in a range of values and assumes values in fractions.

3. **Assertion (A) :** Classification based on locational differences is called spatial classification.

   Reason (R) : Classification based on time is called chronological classification.

4. **Assertion (A)** : In case of a discrete variable, data is expressed in fractions.
   Reason (R) : In frequency distribution, items of the series cannot be exactly measured.
5. **Assertion (A)** : Cumulative frequency is the frequency of a class.
   Reason (R) : The extreme values of a class are called limits.

ANSWERS

SET-1

1. range
2. Mid-value
3. chronological
4. open-end
5. cumulative frequency
6. magnitude
7. Individual
8. Frequency
9. Simple
10. exclusive

SET-2

1. (a) 2. (d) 3. (a) 4. (d) 5. (a) 6. (c) 7. (c) 8. (a) 9. (b) 10. (b)
11. (b) 12. (a) 13. (b) 14. (a) 15. (b) 16. (c) 17. (a) 18. (c) 19. (b) 20. (d)

SET-3

1. False 2. True 3. True 4. False 5. True 6. False 7. True 8. False 9. True 10. False

SET-4

1. (a) 2. (d) 3. (d) 4. (c) 5. (a)

SET-5

1. (a) 2. (b)

SET-6

1. (a) 2. (a) 3. (b) 4. (d) 5. (d)