DE-2916
First Year B. Sc. (Sem. I) Examination
March / April - 2016
Statistics : Paper - 101
(New Course)

Time : 2 Hours] [Total Marks : 50

**Súkshma / Instructions :**

(1) Fill up strictly the details of signs on your answer book.

- **Name of the Examination:** F. Y. B. Sc. (Sem. I)
- **Name of the Subject:** STATISTICS : PAPER - 101 (NEW)
- **Student’s Signature:**

(2) There are 50 questions, each question carries one (1) mark and all are compulsory.

(3) Read the question carefully before selecting the correct option.

(4) Statistical and logarithmic tables will be supplied on request.

(5) Use of non-programmable scientific calculator is allowed.

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**O.M.R. Sheet** barrva aṣẹ-ẹni agbẹ-ẹni sùnṣẹjẹẹsẹ aṣẹbẹ

**Important instructions to fill up O.M.R. Sheet**
are given on back side of the provided O.M.R. Sheet.
1. The method of collecting Secondary data is ““:
(A) Direct inquiry
(B) Indirect inquiry
(C) Method of questionnaire
(D) None of these

2. The sources of primary data is :
(A) Government publications
(B) Semi government publications
(C) International publications
(D) None of these

3. The data collected from census reports is known as
(A) Primary data
(B) Secondary data
(C) Both Primary data and Secondary data
(D) None of these
4. Mailed questionnaire method of enquiry can be adopted if respondents:
   (A) Are uneducated
   (B) Have high income
   (C) Are educated
   (D) Are known

5. A characteristic under study whose measure changes from unit to unit is called
   (A) An attribute
   (B) A sample
   (C) A variable
   (D) None of these

6. Data about marks of 100 students is:
   (A) Numerical data
   (B) Qualitative data
   (C) Both Numerical data and Qualitative data
   (D) None of these
7. A sociological research is carried out to study the marital status of different socio-economic groups. Which of the following statements is correct?
   (A) Numerical data
   (B) Qualitative data
   (C) Both numerical and qualitative data
   (D) None of these

8. Which of the following would you consider as a variable?
   (A) Habit
   (B) Honesty
   (C) Number of accidents
   (D) None of these

9. Which of the following would you consider as an attribute?
   (A) Age
   (B) Weight
   (C) Poverty
   (D) None of these

10. Which method is more useful when the field of inquiry is not very large?
    (A) Direct inquiry
    (B) Indirect inquiry
    (C) Direct inquiry and Indirect inquiry both
    (D) None of these
11 Which method is used to collect the information in Census?

(A) Method of questionnaire by post
(B) Method of questionnaire by telephone
(C) Method of questionnaire by enumerator
(D) None of these

12 Which point is not proper for preparing a good questionnaire?

(A) Personal questions should be asked in questionnaire
(B) The language of the questions should be easy and simple
(C) The questions should be short and clear
(D) The questions should be arranged logically.

13 In which method data are originally collected?

(A) Primary method
(B) Secondary method
(C) All of these
(D) None of these
14 आजक नीर्मित माहिती अने आवश्यकता काळी ............. वाहे.

(A) नीर्मित माहिती
(B) जोडा माहिती
(C) नीर्मित माहिती अने जोडा माहिती बंगे
(D) आवश्यकता अभावाची नसीनी

Today's primary data will tomorrow's ______________.

(A) Primary methods
(B) Secondary method
(C) Primary methods and Secondary method both
(D) None of these

15 कर अंक रीतिमाने प्रतिफळ दर सौदी नीबो लोण छे ?

(A) ऑनलाइन
(B) व्यक्तिगत
(C) शोध द्वारा
(D) टपांच द्वारा

Which one of these methods has the lowest response rate ?

(A) Online
(B) Personal
(C) Phone
(D) Postal

16 धर्म माटे कर भागन काय व्यवस्थापित छे ?

(A) नामांकनी
(B) मुख्यांकनी
(C) मुख्यांकनी
(D) क्षेत्रांकनी

Which scale is used to measure religion ?

(A) Nominal
(B) Ratio
(C) Interval
(D) Ordinal
17. Which correction do you have in your examination?
(A) Correction in the examination
(B) Correction in the examination, placed after the examination
(C) Any one of the above examinations
(D) None of the above

Whether classification is done first or tabulation?
(A) Classification follows tabulation
(B) Classification precedes tabulation
(C) Both are done simultaneously
(D) No criterion

18. Which correction does the chart have?
(A) Each correction due to the chart
(B) Any correction due to the chart
(C) Any correction according to the chart
(D) Any correction according to the chart

A complex table represents:
(A) Only one factor or variable
(B) Always two factors or variables
(C) Two or more number of factors or variables
(D) All of these

19. To any of the above corrections, the following questions arise:
(A) Change
(B) Correction
(C) Change in the next question
(D) Change in the next question

An arrangement of data in rows and columns is known as:
(A) Classification
(B) Tabulation
(C) Classification and tabulation
(D) None of these

20. If the upper limit of a class is 22.5, then the lower limit of the class is:
(A) 30
(B) 15
(C) 37.5
(D) 7.5
21 यदि अपर्णूपत माध्यम अंक वर्गाँ में अव्यक्त न हो तो आवर्ती माध्यमों ने कहेंगे:
(A) एक वर्गीय माध्यम
(B) द्विवर्ग माध्यम
(C) एक वर्गीय माध्यम अने द्विवर्ग माध्यम बने
(D) आपसी अर्थशास्त्र अभिकल्प नहीं

If the raw data give observations on one variable, then such data are called:
(A) Univariate data
(B) Bivariate data
(C) Both Univariate data and Bivariate data
(D) None of these

22 1-2, 3-4, 5-6, ............ वर्गों की वर्गविभाजन छ.
For the class 1 - 2, 3 - 4, 5 - 6,..... the class length is:
(A) 0.5
(B) 0
(C) 1
(D) 2

23 9-19, 19-29, 29-39, ............ वर्गों छे:
(A) विभाजक वर्गों
(B) अव्यक्त वर्गों
(C) विभाजक वर्गों अने अव्यक्त वर्गों बने
(D) आपसी अर्थशास्त्र अभिकल्प नहीं

The classes 9-19, 19-29, 29-39,..... are:
(A) Exclusive class
(B) Inclusive class
(C) Both Exclusive class and Inclusive class
(D) None of these

24 उच्चतम मूल्यपदक तेनु पुनरार्पण दशनेवली वर्गीय संख्याने कहे छे:
(A) निबंध
(B) अव्यक्तन
(C) संख्यार्थी आवृत्ति
(D) आवृत्ति

The number of repeated observations of a variate value is called its:
(A) Sample
(B) Observation
(C) Cumulative frequency
(D) Frequency
25. Given the following frequency distribution, find original frequency of the class 45-55:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative frequency</td>
<td>5</td>
<td>15</td>
<td>27</td>
<td>41</td>
<td>48</td>
<td>52</td>
</tr>
</tbody>
</table>

(A) 7  
(B) 17  
(C) 14  
(D) 41

26. A series of data with exclusive classes along with the corresponding frequencies is called:

(A) Cumulative frequency distribution  
(B) Continuous frequency distribution  
(C) Discrete frequency distribution  
(D) None of these

27. The difference between upper boundary point and lower boundary point of a class is known as:

(A) Upper class limit  
(B) Lower class limit  
(C) Class interval  
(D) Mid-value
28. नीचे आयुर्वित्तिया मित्तरणे करे छे:

<table>
<thead>
<tr>
<th>वर्ग</th>
<th>0-30</th>
<th>0-20</th>
<th>0-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>आयुर्वित्ति</td>
<td>27</td>
<td>18</td>
<td>5</td>
</tr>
</tbody>
</table>

(A) ‘श्री ओश्रा’ प्रकारसुं संत्वती आयुर्वित्ति मित्तरणा
(B) ‘श्री शशि’ प्रकारसुं संत्वती आयुर्वित्ति मित्तरणा
(C) असेवत परस्पर आयुर्वित्ति मित्तरणा
(D) सट्टत आयुर्वित्ति मित्तरणा

The following frequency distribution

<table>
<thead>
<tr>
<th>Class</th>
<th>0-30</th>
<th>0-20</th>
<th>0-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>27</td>
<td>18</td>
<td>5</td>
</tr>
</tbody>
</table>

is classified as

(A) Cumulative distribution in less than type
(B) Cumulative distribution in more than type
(C) Discrete frequency distribution
(D) Continuous frequency distribution

29. आयुर्वित्ति मित्तरणी कोइ शक्य?

(A) असेवत
(B) सट्टत
(C) असेवत अने सट्टत बंबे
(D) आयुर्वित्ति असेवत नभे

A frequency distribution can be:

(A) Discrete
(B) Continuous
(C) Both Discrete and Continuous
(D) None of these

30. नीचे आयुर्वित्ति मध्यक्रमांको परथी, आयुर्वित्ति मित्तरणो अंतिम वर्ग:

For the mid-values given below, the last class of the frequency distribution is:

24, 34, 44, 54, 64, 74

(A) 75 – 85
(B) 70 – 80
(C) 69 – 79
(D) None of these
31  𝑡 0-19, 20-39, 40-49; वर्षां मधे, 20-39 वर्षांनु अधिकांब्रांजूद:

For the class 0-19, 20-39, 40-49; lower boundary point of the class 20-39 is:

(A) 19.95
(B) 19.05
(C) 19.50
(D) None of these

32  आयुष्टि वितरणां मधे किती बाने मूल्यही आयुष्टि:

(A) कमींच्या अंकस्वरूपी छो. 
(B) एक्सी. छो. 
(C) जुनी जुनी छो. 
(D) आपेक्षिकांची आंकपाता नाही 

In frequency distribution, frequency of each variate value :

(A) Has always same
(B) Has one
(C) Has varied
(D) None of these

33  बाने आयुष्टि कंमेश्च्या आयोज:

(A) टक्कामां
(B) अपूर्णाक्षमां
(C) पूर्णाक्षमां
(D) आपेक्षिकांची आंकपाता नाही 

Frequency of a variable is always :

(A) In percentage
(B) A fraction
(C) An integer
(D) None of these
34. Interval scale is used to measure
(A) Eye colour
(B) Name of book
(C) Temperature in Fahrenheit
(D) None of these

35. Which scale is used to measure money?
(A) Nominal
(B) Ratio
(C) Interval
(D) Ordinal

36. Which level of measurement is being used?
A film magazine lists the best 50 movies for the year 2015
(A) Ratio
(B) Nominal
(C) Interval
(D) Ordinal
23, 78, 68, 87, 71, 82, 73

Which stem and leaf plot correctly displays the data?

(A) 2 | 3, 8
    6 | 8
    7 | 1, 3
    8 | 7

(B) 2 | 3
    6 | 8
    7 | 1, 3, 8
    9 | 7

(C) 2 | 3
    6 | 8
    7 | 1, 3, 8
    8 | 2, 7

(D) 2 | 3
    6 | 8
    7 | 1, 7, 8
    8 | 7

Key: 23 means 2|3
38. Which diagram is drawn to compare sub data of the data in proper way?
(A) Bar diagram
(B) Multiple bar diagram
(C) Percentage divided bar diagram
(D) Simple dividend bar diagram

39. Which diagram is used when the difference is large for two or more types of data?
(A) Pie diagram
(B) Histogram
(C) Bar diagram
(D) None of these

40. Which unite is taken as measurement in bar diagram?
(A) Width
(B) Weight
(C) Both Width and Weight
(D) None of these
41. How much area does every degree shows in pie diagram?
   (A) 360°  (B) 90°  (C) 1/360°  (D) None of these

42. In percentage divided bar diagram, the length of bar is taken as:
   (A) 360%  (B) 50%  (C) 100%  (D) 200%

43. In classification, the process of arranging data in:
   (A) Different columns  (B) Different rows  (C) Different columns and rows  (D) None of these

44. Diagrams and graphs are tools of:
   (A) Collection of data  (B) Analysis of data  (C) Presentation of data  (D) None of these

45. Which diagram displays quartiles and range of a data set?
   (A) Stem and Leaf Plot  (B) Circle diagram  (C) Pie diagram  (D) Box plot

46. Which type of graph is obtained after joining the mid values of histogram by straight line?
   (A) Frequency Polygon  (B) Frequency Curve  (C) Cumulative Frequency Curve  (D) None of these
47. Which of the following is a one-dimensional diagram?
(A) Circle
(B) Pie-chart
(C) Cylinder
(D) None of these

48. With the help of ogive curve, one can determine:
(A) Mean
(B) Harmonic mean
(C) Median
(D) Geometric mean

49. Cumulative frequency polygon of discrete frequency distribution is of which type?
(A) S-shape
(B) U-shape
(C) Circle
(D) Staircase

50. Numbers printed on the T-shirt participants is an example of:
(A) Ratio
(B) Nominal
(C) Interval
(D) Ordinal