DE-2916
First Year B. Sc. (Sem. 1) Examination
March / April - 2016
Statistics : Paper - 101
(New Course)

Time : 2 Hours] [Total Marks : 50

सूचना / Instructions :

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

Name of the Examination:
F. Y. B. Sc. (Sem. 1)

Name of the Subject:
STATISTICS : PAPER - 101 (NEW)

Subject Code No.: 2 9 1 6 - Section No. (1, 2, .......) - Nil

(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.

O.M.R. Sheet बरबा अंगेनी अंगत्याची सूचनांतो आपेक्ष
O.M.R. Sheet-ला पात्र आपेक्ष नाही.

Important instructions to fill up O.M.R. Sheet are given on back side of the provided O.M.R. Sheet.
1. How much area does every degree shows in pie diagram?
   (A) 90°  (B) \( \frac{1}{360°} \)
   (C) None of these  (D) 360°

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

3. Classification is the process of arranging data in:
   (A) Different rows  (B) Different columns and rows
   (C) None of these  (D) Different columns

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

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

6. Which type of graph is obtained after joining the mid values of histogram by straight line?
   (A) Frequency Curve  (B) Cumulative Frequency Curve
   (C) None of these  (D) Frequency Polygon
7  नीवेदनांत्य त्वं अकामपी आकृति छ ?
(A) वृत्ताश आकृति
(B) गोलाकार
(C) आपेक्षासारी अकारक नदी
(D) लंबूड
Which of the following is a one-dimensional diagram ?
(A) Pie-chart
(B) Cylinder
(C) None of these
(D) Circle

8  आंशिकव वक्राँची आपणे शोधी माहिती शकतात:
(A) मध्यक
(B) गोलाकार मध्यक
(C) गुरुळीतर मध्यक
(D) मध्यक्ष
With the help of ogive curve, one can determine :
(A) Mean
(B) Harmonic mean
(C) Geometric mean
(D) Median

9  असंतत आवृत्ति वितरणांत्य शंभाणी आवृत्ति बहुकोष्ठकाच्या प्रकाराच्या छ ?
(A) ∪-आकाराने
(B) वृत्ताश
(C) दशक
(D) S-आकाराने
Cumulative frequency polygon of discrete frequency distribution is of which type ?
(A) ∪-shape
(B) Circle
(C) Staircase
(D) S-shape

10  शीर्ष शर्ट पर्यंत नंबरांमुळे पर्यंतता स्पर्शके माप्षन क्षाणां उत्कृष्टवर छ
(A) नामवली
(B) मध्यवर्तकशी
(C) क्षेत्रवली
(D) गुरुळीतरवली
Numbers printed on the T-shirt participants is an example of :
(A) Nominal
(B) Interval
(C) Ordinal
(D) Ratio
11 The method of collecting Secondary data is “:"
(A) Indirect inquiry
(B) Method of questionnaire
(C) None of these
(D) Direct inquiry

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

13 The data collected from census reports is known as
(A) Secondary data
(B) Both Primary data and Secondary data
(C) None of these
(D) Primary data
14 The approach of the student is to answer the question: If you select a sample of your class, then...
   (A) Select a random sample of the class
   (B) Select a stratified sample
   (C) Select a convenience sample
   (D) Select an otherwise

Mailed questionnaire method of enquiry can be adopted if respondents:
   (A) Have high income
   (B) Are educated
   (C) Are known
   (D) Are uneducated

15 The characteristics of a sample are:
   (A) Non-variable
   (B) Variable
   (C) Non-homogeneous
   (D) Consistent

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

16 100 students obtained a grade in the following category:
   (A) Good
   (B) Average
   (C) Poor
   (D) Very poor

Data about marks of 100 students is:
   (A) Qualitative data
   (B) Both Numerical data and Qualitative data
   (C) None of these
   (D) Numerical data
17. कॅटलीक अवितरणाचा वापर किंवा दर्जना अंगणी भारती हे :
(A) गुरुस्वामी माहिती
(B) सूचित भारती अने गुरुस्वामी माहिती बंजे
(C) आधारी असंख्य नाही
(D) सूचित भारती
Data collected about Marital Status of some persons is :
(A) Qualitative data
(B) Both Numerical data and Qualitative data
(C) None of these
(D) Numerical data

18. नीवेनामध्ये ते ओरे येण्याचे अवहेला ?
(A) प्रभावितता
(B) अक्सरतनी संपथा
(C) आपेक्षिकी असंख्य नाही
(D) तेव
Which of the following would you consider as a variable ?
(A) Honesty
(B) Number of accidents
(C) None of these
(D) Habit

19. नीवेनामध्ये ते ओरे गुरुस्वामी अवहेला ?
(A) व्यक्त
(B) अर्थशास्त्र
(C) आपेक्षिकी असंख्य नाही
(D) उंबर
Which of the following would you consider as an attribute ?
(A) Weight
(B) Poverty
(C) None of these
(D) Age

20. जम्भे तपस्याचे बेन विशेष न की हे त्याचे कर्ते रोजत व पुरुषांची फे ?
(A) परीक्षा तपस्या
(B) प्रत्यक्ष तपस्या अने परीक्षा तपस्या बंजे
(C) आपेक्षिकी असंख्य नाही
(D) प्रत्यक्ष तपस्या
Which method is more useful when the field of inquiry is not very large ?
(A) Indirect inquiry
(B) Direct inquiry and Indirect inquiry both
(C) None of these
(D) Direct inquiry
21 Which method is used to collect the information in Census?
(A) Method of questionnaire by telephone
(B) Method of questionnaire by enumerator
(C) None of these
(D) Method of questionnaire by post

22 Which of the following point is not proper for preparing a good questionnaire?
(A) The language of the questions should be easy and simple
(B) The questions should be short and clear
(C) The questions should be arranged logically.
(D) Personal questions should be asked in questionnaire

23 In which method data are originally collected?
(A) Secondary method
(B) All of these
(C) None of these
(D) Primary method
24 Today’s primary data will tomorrow’s ____________.
(A) Secondary method
(B) Primary methods and Secondary method both
(C) None of these
(D) Primary methods

25 Which one of these methods has the lowest response rate?
(A) Personal
(B) Phone
(C) Postal
(D) Online

26 Which scale is used to measure religion?
(A) Ratio
(B) Interval
(C) Ordinal
(D) Nominal
27. Which function of tabulation is carried out first?
(A) Classification
(B) Both are done simultaneously
(C) No criterion
(D) Tabulation follows classification

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

28. Which function is the first?
(A) Preparing a list of items
(B) Classification
(C) Arrangement
(D) All of the above

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

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

30. The class length of a class is 15 and the mid-value is 22.5. The lower limit of the class is:
(A) 15
(B) 37.5
(C) 7.5
(D) 30
31. जो आवृत्तिया माध्यम एक बारेरी आवृत्ती आधारित आहे, तो आपल्या माध्यमाच्याच कडेवाय: 
(A) दिशेक्ष भाषा
(B) एक वाक्याची भाषा अने दिशेक्ष भाषा बंधे
(C) आपेक्षिक अंकणांची नाही
(D) एक वाक्याची भाषा

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

32. 1-2, 3-4, 5-6, ........... वर्गांची वर्गविभाजन चे. 
For the class 1 - 2, 3 - 4, 5 - 6,..... the class length is:
(A) 0
(B) 1
(C) 2
(D) 0.5

33. 9-19, 19-29, 29-39, ............. वर्गे चे:
(A) अनिवार्य वर्गे
(B) निवार्य वर्गे अने अनिवार्य वर्गे बंधे
(C) आपेक्षिक अंकणांची नाही
(D) निवार्य वर्गे
The classes 9-19, 19-29, 29-39,..... are:
(A) Inclusive class
(B) Both Exclusive class and Inclusive class
(C) None of these
(D) Exclusive class

34. घड्या मूल्यीक तेंु पुनरावर्तन दशावर्ती घड्यांची संख्या कडेचे क्या?
(A) आवृत्ती
(B) संचयी आवृत्ती
(C) आवृत्ती
(D) निश्चित
The number of repeated observations of a variate value is called its:
(A) Observation
(B) Cumulative frequency
(C) Frequency
(D) Sample
35. 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) 17  
(B) 14  
(C) 41  
(D) 7

36. A series of data with exclusive classes along with the corresponding frequencies is called:
(A) Continuous frequency distribution  
(B) Discrete frequency distribution  
(C) None of these  
(D) Cumulative frequency distribution

37. The difference between upper boundary point and lower boundary point of a class is known as:
(A) Lower class limit  
(B) Class interval  
(C) Mid-value  
(D) Upper class limit
The following frequency distribution is classified as:

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

A frequency distribution can be:

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

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

24, 34, 44, 54, 64, 74

(A) 70 – 80
(B) 69 – 79
(C) None of these
(D) 75 – 85
41 0-19, 20-39, 40-49; वर्गां मात्र, 20-39 वर्गां मुख्य अध्यारितः
For the class 0-19, 20-39, 40-49; lower boundary point of the class 20-39 is:
(A) 19.05
(B) 19.50
(C) None of these
(D) 19.95

42 आयुष्टि वितरणां मध्ये वर्गां मुख्य आयुष्टि:
(A) एक एकी.
(B) शून्य शून्य एकी.
(C) आपणांमध्ये एकखाली नाही.
(D) हेमेशी एकखाली शून्य.

In frequency distribution, frequency of each variate value:
(A) Has one
(B) Has varied
(C) None of these
(D) Has always same

43 वर्गां आयुष्टि हेमेशी जावळ:
(A) आपूर्तिकर्मां
(B) पूर्तिकर्मां
(C) आपणांमध्ये एकखाली नाही.
(D) टक्कां

Frequency of a variable is always:
(A) A fraction
(B) An integer
(C) None of these
(D) In percentage
44 માન્યતારૂપક્ક માપન ............... માટે વપરાય છે.

(A) પ્રફેનરનું નામ
(B) તાપમાન કેરેનાઈજો માં
(C) આધેવાલી અંકહરા નથી
(D) આંખનો રંગ

Interval scale is used to measure

(A) Name of book
(B) Temperature in Fahrenheit
(C) None of these
(D) Eye colour

45 બાળકામકું કાર માપન ક્ષેત્ર વપરાય છે ?

(A) સુધીતરૂપક્કી
(B) રેટલાંગીરૂપક્કી
(C) ક્ષેત્રક્કી
(D) નામવાંકી

Which scale is used to measure money ?

(A) Ratio
(B) Interval
(C) Ordinal
(D) Nominal

46 કાર માપન ક્ષેત્ર વપરાય છે ?

અધ્વેજનાં અંક વેબસાઇટને વર્ષ 2015 માટે ઉત્તમ 50 સુધીત મેળવતા હતા અનુસારે બનાવી છે.

(A) નામવાંકી
(B) રેટલાંગીરૂપક્કી
(C) ક્ષેત્રક્કી
(D) સુધીતરૂપક્કી

Indicate which level of measurement is being used ?

A filmy magazine lists the best 50 movies for the year 2015

(A) Nominal
(B) Interval
(C) Ordinal
(D) Ratio
23, 78, 68, 87, 71, 82, 73

Which stem and leaf plot correctly displays the data?

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

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

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

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

Key: 23 means 2|3

From the following information

23, 78, 68, 87, 71, 82, 73

Which stem and leaf plot correctly displays the data?
48 Which diagram is drawn to compare sub data of the data in proper way?
(A) Multiple bar diagram
(B) Percentage divided bar diagram
(C) Simple dividend bar diagram
(D) Bar diagram

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

50 Which unite is taken as measurement in bar diagram?
(A) Weight
(B) Both Width and Weight
(C) None of these
(D) Width