# Model Question Paper <br> Undergraduate Programme - Statistics 

Questions: 40
Time : 40 Minutes
Max. Marks 40x $1: 40$
SAMPLE QUESTIONS

1. The arrangement of data either in ascending or descending order is called:
(A) Frequency distribution
(B) Cross classification
(C) An array
(D) Contingency table
(E) Probability distribution
2. Histogram can be used only when:
(A) Class intervals are equal or unequal
(B) Class intervals are all equal
(C) Class intervals are unequal
(D) Frequencies in class interval are equal
(E) None of the above
3. The following frequency distribution is

| x | 12 | 17 | 24 | 36 | 45 | 48 | 52 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| f | 2 | 5 | 3 | 8 | 9 | 6 | 1 |

(A) Continuous distribution
(B) Discrete distribution
(C) Cumulative frequency distribution
(D) Both (A) and (C)
(E ) All of the above
4. The mean of seven observations is 8 . A new observation 16 is added. The mean of eight observations is:
(A) 24
(B) 20
(C) 18
(D) 12
(E) 9
5. The most often repeated value in a data set is called
(A) Mean
(B) Median
(C) Mode
(D) Range
(E) Extreme value
6. The standard deviation of a sample of 100 observations is 8 . The variance of the sample equals
(A) 8
(B) 10
(C) 64
(D) 4096
(E) 0
7. Two samples A and B have the same standard deviations, but the mean of $A$ is greater than that of $B$. The coefficient of variation of $A$ is
(A) Greater than that of $B$
(B) Less than that of $B$
(C) Equal to that of B
(D) Not equal to that of $B$
(E) None of these
8. The value of correlation coefficient lies between
(A) 0 to 1
(B) 0 to -1
(C) -1 to +1
(D) 1 to 10
(E) $-\infty$ to $\infty$
9. If $X_{1}=-2, X_{2}=1, X_{3}=0, X_{4}=1, X_{5}=3$ then $\sum_{i=1}^{5} X^{2}{ }_{i}$
(A) 3
(B) 9
(C) 15
(D) 22
(E) 37
10. In calculating index numbers the ideal average is:
(A) AM
(B) GM
(C) HM
(D) Median
(E) Mode

Answer the following questions from Q.No11to 15 by using the following table gives the percentage of marks obtained by seven students in six different subjects in an examination

The Numbers in the Brackets give the Maximum Marks in Each Subject.

| Student | Subject (Max. Marks) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Maths | Chemistry | Physics | Geography | History | Computer <br> Science |
|  | $\mathbf{( 1 5 0 )}$ | $\mathbf{( 1 3 0 )}$ | $\mathbf{( 1 2 0 )}$ | $\mathbf{( 1 0 0 )}$ | $\mathbf{( 6 0 )}$ | $\mathbf{( 4 0 )}$ |
| Ayush | 90 | 50 | 90 | 60 | 70 | 80 |
| Aman | 100 | 80 | 80 | 40 | 80 | 70 |
| Sajal | 90 | 60 | 70 | 70 | 90 | 70 |
| Rohit | 80 | 65 | 80 | 80 | 60 | 60 |
| Muskan | 80 | 65 | 85 | 95 | 50 | 90 |
| Tanvi | 70 | 75 | 65 | 85 | 40 | 60 |
| Tarun | 65 | 35 | 50 | 77 | 80 | 80 |

11. What are the average marks obtained by all the seven students in Physics? (rounded off to two digit after decimal)
(A) 77.26
(B) 89.14
(C) 91.37
(D) 96.11
(E) 90.11
12. The number of students who obtained $60 \%$ and above marks in all subjects is?
(A) 1
(B) 2
(C) 3
(D) 4
(E) None
13. What was the aggregate of marks obtained by Sajal in all the six subjects?
(A) 409
(B) 419
(C) 429
(D) 449
(E) 439
14. In which subject is the overall percentage the best?
(A) Maths
(B) Chemistry
(C) Physics
(D) History
(E) Social
15. What is the overall percentage of Tarun?
(A) $52.5 \%$
(B) $55 \%$
(C) $60 \%$
(D) $63 \%$
(E) $69 \%$
