# Gujarat Secondary and Higher Secondary Education Board, <br> Gandhinagar 

## Unit Test

Standard: $11^{\text {th }}$ (General Stream)
Max. Marks: 25
Subject: Statistics (135)
Time: 1 hour
$>$ There are total 13 questions in this test.
$>$ Students have to write the answers of this unit test in their notebook.

## SECTION A

- Choose the correct alternatives from the following options: [1 mark each]

1. Which one of the following is an example of qualitative data?
(a) Income Category
(b) Production (in tons)
(c) Age of workers (in year)
(d) Height of persons (in meter)
2. Which of the following variables is continuous?
(a) Number of errors per page of a book
(b) Number of cars produced
(c) Number of accidents on road
(d) Monthly income of a person
3. In which of the following situations, mean cannot be found?
(a) class length are unequal
(b) there are open ended class intervals
(c) the number of class intervals is more than 5
(d) inclusive type of classes are used

## SECTION B

- Answer the following questions as required: [1 mark each]

4. State the methods of collecting primary data.
5. For which type of data, multiple bar diagram is drawn?
6. If observations have varying importance, which average should be used?
7. State the condition under which geometric mean cannot be found.

## SECTION C

- Answer the following questions as required: [2 marks each]

8. State the difference between qualitative and quantitative data.
9. A frequency distribution of number of children in 50 families of a region is as under

| Number of children $x$ | 0 | 1 | 2 | 3 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of families $f$ | 10 | 25 | 12 | 3 | 50 |

Obtain more than type cumulative frequency distribution for these data.

## SECTION D

- Answer the following questions as required: [3 marks each]

10. Discuss the characteristics of an ideal questionnaire.
11. A student gets 35 marks in theory paper, 15 marks in practical examination and 5 marks in oral examination of a subject. The school gives weight 4,2 and 1 respectively to these types of examinations. Find the weighted mean of marks for this student.

## SECTION E

- Answer the following questions as required: [4 marks each]

12. There were 1250 skilled and 400 unskilled workers in a private company in the year 2011. There were 220 female workers and of them, 140 were unskilled. In the year 2012, the number of skilled workers was 1475 and of them, 1300 were males. Out of 250 unskilled workers, 200 were males. In 2013, there were 1700 skilled and 50 unskilled workers. Out of total workers, 250 were females of them 240 were skilled. In the year 2014, there were 2000 workers and of them, $2 \%$ were unskilled. Out of total workers, 300 were females and of them, 10 were unskilled. Present the above data in the form of table.
13. The distribution of annual sales tax of different companies in a zone is given below. Find the mean sales tax of these companies.

| Sales tax (thousand) | $0-10$ | $10-20$ | $20-30$ | $30-50$ | $50-70$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| No. of companies | 3 | 14 | 32 | 40 | 21 |

