Class XII
Time Allowed: 15 minutes Q1:
Note: Attempt all question from this section. Each question carries one mark

1. Data collected from personal interview is an example of:
a) Primary data
b) Secondary data
c) Discrete data
d) Continuous data
2. The colours of eyes of the students in a class represents:
a) Qualitative data
b) Quantitative data
c) Discrete data
d) Continuous data
3. The wage of worker in a factory represents:
a) Quantitative data
b) Qualitative data
c) Discrete data
d) Continuous data.
4. One of the categories of the statistical method is
a) Managerial statistics
b) Decision science
c) Inferential statistics
d) Industry statistics
5. The difference between maximum value and minimum value of data is termed as:
a) Range
b) Mid value
c) Class boundaries
d) Cumulative frequency
6. The frequent repeated value of data is termed as:
a) Mean
b) Median
c) Mode
d) H.M
7. In which one of the following distribution Mean > Median > Mode:
a) Symmetrical
b) Positively skewed
c) Negatively skewed
d) Equal distribution
8. Index numbers are expressed in:
a) Percentages
b) Kilograms
c) Pounds
d) Liters
9. Which one of the following index number is based on quantity of base year?
a) Paasche's index number
b) Fisher's Index number
c) Laspeyre's index number
d) Marshall Index Number.
10. The probability of selecting a bad egg is 0.035 from the lot of 400 eggs. So, what is the number of bad eggs in the lot?
a) 14
b) 16
c) 18
d) 20

Class XII
Time 1 hour 45 minutes

HIGHER SECONDARY SCHOOL CERTIFICATE EXAMINATION 2023 SUBJECT: BUSINESS STATISTICS SECTION "B" AND SECTION "C" SECTION "B" SHORT ANSWER QUESTIONS

Total Time : $\mathbf{2}$ hours Total Marks: 50

Total Marks 40
Marks 20

## Q2. Answer any five questions. All Questions carry equal marks:

i. Describe the Types of statistics. Sources of Primary data and Secondary data.
ii. The following data give the record of wages (in Rs.) of 30 workers in a factory:

127129131122124112114137114126
$\begin{array}{llllllllll}129 & 124 & 126 & 134 & 128 & 121 & 129 & 135 & 118 & 132\end{array}$
127119133131125134117116131134.

Prepare a fequency distribution, taking class- intervals as $110-114,115-119,120-124$, etc.
iii. Draw a Pie Chart on your answer script from the following data:

| Items | Food | Clothing | Rent | Medical | ther |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Expenditure in (Rs.) | 96 | 32 | 50 | 23 | 40 |

iv. For the given data: $23,18,28,15,23,19$. Verify that the sum of the deviations from mean is zero. i.e., $\Sigma(x-\bar{x})=0$.
v. Find price relative taking 2005 as base year for the given data:

| Year | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Price | 200 | 220 | 240 | 230 | 250 | 270 |

vi. A six - sided die is tossed only once. What is the probability of getting?
i) an even number.
(ii) a 4 or a higher number.
(iii) a 7 .
vii. If a card is drawn at random from an ordinary pack of 52 playing cards. Find the probability that the card; a) Diamond card.
(b) Face card.

Note: Attempt any two questions from the following. All questions carry equal marks

Q3. The following data represents the retail prices of a sample of different brands of a commodity:
50505028654050223230.
$795022 \quad 20352425383535$.
$65 \quad 2014 \quad 25 \quad 244815101760$.
$25 \quad 22603012301012 \quad 2068$.
Prepare a frequency distribution with equal classes of size 10.

Also find:
i) Percentage frequency.
ii) Relative frequency.
iii) Cumulative frequency less than and more than.
iv) Find Class Boundries.
v) Find Mid-point.

Q4. Calculate Laspeyre's, Paasche's and Fisher's Ideal price index numbers for 2011 using 2010 as base year: Commodity Price Quantity

| Commodity | Price | Price | Quantity | Quantity |
| :--- | :--- | :--- | :--- | :--- |
|  | 2010 | 2011 | 2010 | 2011 |
| A | 10 | 12 | 15 | 16 |
| B | 15 | 20 | 20 | 22 |
| C | 25 | 30 | 10 | 15 |

Q5. A pair of fair dice is rolled once. What is the probability of getting;
(i) The same number.
(ii) First die is 3.
(iii) Second die is 5 .
(iv) The sum of the two faces is greater than10.

END OF PAPER

