Roll No. | | | | | | |

Answer Sheet No. 37

Sig. of Candidate. _____

Sig. of Invigilator. _____

BUSINESS STATISTICS HSSC–II

SECTION – A (Marks 10)

Time allowed: 15 Minutes

NOTE: Section–A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 15 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q. 1 Circle the correct option i.e. A / B / C / D. Each part carries one mark.

(i) The data, which have not undergone any statistical treatment, are:

A. Primary data B. Secondary data

C. Discrete data D. Continuous data

(ii) In the plural sense, statistics means:

A. Method B. Numerical data

C. Sample data D. Population data

(iii) The graph of time series is:

A. Pie-Chart B. Ogive

C. Histogram D. Historigram

(iv) Relative frequency can never be:

A. Less than one B. More than one

C. Equal to one D. Equal to two

(v) The median of 3,4,5,6,9,10,12 is:

A. 5 B. 9

C. 6 D. 5.5

(vi) The most frequent value in the data is:

A. Mean B. Median

C. Mode D. Standard deviation

(vii) In fixed base method, the base period should be:

A. Far away B. Normal

C. Abnormal D. Unreliable

(viii) The weights in a price index are:

A. Average of prices B. Percentage of prices

C. Not important D. Quantities

(ix) When two coins are tossed, the possible outcomes are:

A. 1 B. 2

C. 4 D. 36

(x) If A and B are two independent events then:

A. $P(A) = P(B)$ B. $P(A \cap B) = P(A)P(B)$

C. $P(A \cap B) \neq P(A)P(B)$ D. $P(A/B) = P(B)$

For Examiner's use only:

Total Marks: 10

Marks Obtained:

BUSINESS STATISTICS HSSC–II

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Time allowed: 2:15 Hours **Total Marks Sections B and C: 40**

NOTE: Answer any eight parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet–B if required. Write your answers neatly and legibly.

SECTION – B (Marks 24)

Q. 2 Attempt any EIGHT parts. The answer to each part should not exceed 3 to 4 lines. **(8 x 3 = 24)**

(i) What is Statistics?

(ii) Name the methods of collecting primary data.

(iii) What is Histogram?

(iv) Differentiate between qualitative and quantitative data.

(v) Monthly earnings of 10 employees are: 100, 120, 130, 110, 109, 101, 150, 190, 170, 200. Calculate average earning of employees.

(vi) For a certain distribution, the value of mean is 15 and median is 20. What will be the value of mode?

(vii) If $\overline{X} = 15$ and $Y = 3X + 9$, then find $\overline{Y}$.

(viii) Define an index number.

(ix) Construct chain base index number for the following data.

Year:	1941	1942	1943	1944	1945	1946
Price:	122	124	118	125	128	135

(x) State addition law of probability for mutually exclusive events.

(xi) What are independent events?

SECTION – C (Marks 16)

Note: Attempt any TWO questions. All questions carry equal marks. **(2 x 8 = 16)**

Q. 3 Calculate median and mode of the following distribution.

Classes	**Frequency**
0 – 7	19
7 – 14	25
14 – 21	36
21 – 28	72
28 – 35	51
35 – 42	43
42 – 49	28

Q. 4 Show with the help of following data that Fisher's index is Geometric mean of Laspeyre's and Paasche's index.

Commodity	Base Year		Current Year	
	Price	Quantity	Price	Quantity
A	12	50	10	55
B	6	100	4	120
C	5	55	3	60
D	10	30	5	35

Q. 5 Show that in a single throw with two dice, the chance of throwing more than 7 is equal to that of throwing less than 7. Hence find probability of throwing exactly 7.