Roll No. | | | | | | | Answer Sheet No._____

Sig. of Candidate._____ Sig. of Invigilator._____ 37

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) Grouped data is also called:

A. Raw data B. Primary data

C. Secondary data D. Qualitative data

(ii) Number of farz in five prayers is an example of:

A. Constant B. Variable

C. Attribute D. Discrete variable

(iii) Total of relative frequencies is equal to:

A. 0 B. 1

C. 10 D. 360

(iv) The graph of cumulative frequency is:

A. Ogive B. Pie chart

C. Histogram D. Historigram

(v) Sum of squared deviations taken from mean is:

A. Maximum B. Minimum

C. 0 D. None

(vi) For a certain distribution, if $\sum(x-5)=0$, the value of mean is:

A. 0 B. –5

C. 5 D. None

(vii) Index number for base year is:

A. 100 B. 0

C. 200 D. 10

(viii) Index numbers are also called the barometers of:

A. Statistics B. Economics

C. Mathematics D. None

(ix) If $P(A \cap B)=.25$ and $P(A)=.75$ then $P\left(A/B\right)$ is:

A. 1 B. 0

C. $1/3$ D. 3

(x) Probability of an impossible event is:

A. 1 B. 0

C. 50% D. $1/10$

For Examiner's use only:

Total Marks: 10

Marks Obtained:

BUSINESS STATISTICS HSSC–II

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) Define descriptive and inferential statistics.

(ii) Define discrete and continuous variable.

(iii) Define frequency distribution and size of class interval.

(iv) Construct a simple bar diagram for:

Years	1989	1990	1991	1992	1993
Profit (Millions)	10	12	18	25	40

(v) The grades of a matriculation class are:

Grades	A+	A	B	C	D
f	8	12	20	7	3

Find median grade.

(vi) For 10 observations $\sum(x-23)=-17$ find $\overline{X}$.

(vii) Describe qualities of a good average.

(viii) Define price index and a quantity index numbers.

(ix) Find index numbers for the following data using 1974 = 100:

Years	1970	1971	1972	1973	1974
Prices	9	6	9	11	10

(x) A die is rolled. Find the probability that face is a complete square or it is a maximum face.

(xi) Three coins are tossed. What is the probability than at least one head appear?

SECTION – C (Marks 16)

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

Q. 3 Find mean, Median and Mode for the following data:

Class limits	3.0 – 3.9	4.0 – 4.9	5.0 – 5.9	6.0 – 6.9	7.0 – 7.9	8.0 – 8.9
Frequency	13	27	40	30	16	4

Q. 4 Construct the following weighted index numbers for 1981 on the basis of 1980:

(i) Laspayre's Index

(ii) Paasche's Index

(iii) Fisher's Ideal Index

Commodity	Prices		Quantities	
	1980	1981	1980	1981
A	10	12	20	22
B	8	8	16	18
C	5	6	10	11
D	4	5	7	8

Q. 5 Two balls are selected at random from a bag containing 4 white and 2 black balls. Find the probability that:

(i) Both balls are white

(ii) Both are of same colour

(iii) Both are the different colour