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

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) A measure computed from sample data is _____

A. Parameter B. Statistic

C. Stalistics D. Data

(ii) Number of *Farz* in five prayers is an example of _____

A. Discrete variable B. Constant

C. Attribute D. None of these

(iii) A sector diagram is also called _____

A. Bar diagram B. Histogram

C. Pie diagram D. Historigram

(iv) In a relative frequency distribution, the total of relative frequencies is equal to _____

A. 100 B. 1

C. Σf D. 0

(v) For a certain distribution, if $\Sigma(x-20)=25$, $\Sigma(x-25)=0$ and $\Sigma(x-35)=-25$, then $\overline{X}$ is equal to _____

A. 20 B. 25

C. -35 D. 35

(vi) The sum of deviation is zero, when deviations are taken from _____

A. Median B. Mean

C. Mode D. Geometric Mean

(vii) If Laspayre's Index = 110, Paasche's Index = 108, then Fisher Ideal Index is _____

A. 110 B. 109

C. 100 D. None of these

(viii) What is called a number that measures a relative change in a single variable with respect to a base?

A. Good index number B. Quantity index number

C. Simple index number D. Composite index number

(ix) Two coins are tossed. Probability of getting head on first coin is _____

A. $\frac{2}{4}$ B. 1

C. 0 D. 4

(x) Two events A and B are said to be mutually exclusive if _____

A. $A \cup B = \phi$ B. $A \cap B = S$

C. $A \cap B = \phi$ D. $A \cap B = 1$

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 **Histogram**, **Historigram** and **Tabulation**.

(iii) Represent the following data by pie charts:

Districts	Lahore	Multan	Rwp.	Gujrat
Area	50	115	135	165

(iv) In a moderately skewed distribution, the value of median is 42.8 and the value of Mode is 40. Find Mean.

(v) Define **Price Relative** and **Link Relative**.

(vi) Give w = 20, 25, 30, 40 and I = 100, 105, 110, 120. Find weighted average of relative's index number.

(vii) The deviation about X = 180 are 4, 11, – 8, –12, 7, 9, 16, 9, 13, 15. Calculate Arithmetic Mean.

(viii) Describe the qualities of a good average.

(ix) If three coins are tossed, what is the probability of getting:

a. At least two heads b. Two tails.

(x) Suppose $P(A)=\frac{1}{4}$, $P(B)=\frac{1}{3}$ and $P(A\cup B)=\frac{1}{2}$ find $P(A\cup B)$

(xi) Given $X=10+5U$, $\Sigma fU=308$, $\Sigma f=7$. Find A.M

SECTION – C (Marks 16)

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

Q. 3 Calculate Mean, Median and Mode of the following data:

Max. load	No. of cables
9.3 – 9.7	2
9.8 – 10.2	5
10.3 – 10.7	12
10.8 – 11.2	17
11.3 – 11.7	14
11.8 – 12.2	6
12.3 – 12.7	3
12.8 – 13.2	1

Q. 4 Construct Price Index number for 2000 on the basis of 1990 using:

(i) Base year weighted method
(ii) Current year weighted method
(iii) Fisher Ideal Index

Items	**1990**		**2000**	
	Price	**Quantity**	**Price**	**Quantity**
A	2	10	4	8
B	4	5	5	6
C	5	8	6	10
D	3	20	3	25

Q. 5 a. A class contains 10 men and 20 women of which half of the men and half of the women have brown eyes. Find probability that a person chosen at random is a man or has brown eyes.

b. A dice is rolled. Find the probability of getting a complete square.