Version No.			
4	1	8	1

ROLL NUMBER					

BUSINESS STATISTICS
HSSC–II
SECTION – A (Marks 10)

Time allowed: 15 Minutes

Section – A is compulsory. All parts of this section are to be answered on this page and handed over to the Centre Superintendent. Deleting/overwriting is not allowed.

Do not use lead pencil.

حصہ اول لازمی ہے۔ اس کے جوابات، اسی صفحہ پر دیے گئے نظم مرکز کے حوالے کریں۔ کاٹ کر دوبارہ لکھنے کی اجازت نہیں ہے۔ لیڈ پنسل کا استعمال ممنوع ہے۔

Answer Sheet No. _____

ہر سوال کے سامنے دیے گئے، کریکولم کے مطابق درست دائرہ کو پر کریں۔ **Invigilator Sign.** _____

Fill the relevant bubble against each question according to curriculum: **Candidate Sign.** _____

	Question	A	B	C	D	A	B	C	D
1.	A constant can assume:	More than one value	Only one value	Different values	No value at all	○	○	○	○
2.	Issuing a new N.I.C is an example of:	Registration	Sampling	Census	Fictitious data	○	○	○	○
3.	Data obtained by internet sources are:	Raw data	Private data	Secondary data	Primary data	○	○	○	○
4.	A pie diagram is represented by a:	Rectangle	Square	Triangle	Circle	○	○	○	○
5.	In symmetrical distribution mean, median and mode are always:	Equal	Different	Negative	Zero	○	○	○	○
6.	If mean of 10 observations is 20, then their sum will be equal to:	20	200	2	0.5	○	○	○	○
7.	If $Y = -75 - 25X$ and $\overline{X} = 3$ then $\overline{Y} = ?$	150	25	-150	0	○	○	○	○
8.	Base year weighted index number is also known as:	Fisher's index	Paasche's index	Marshall's index	Laspeyre's index	○	○	○	○
9.	Index for base period is:	One	Fix	100	More than 100	○	○	○	○
10.	When three dice are rolled then total number of possible outcomes will be:	6	12	18	216	○	○	○	○

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. 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) Differentiate between descriptive and inferential statistics.

(ii) Name any three sources of primary data.

(iii) Find the class boundaries, midpoint, and width for each class.

(a) 293 – 353 **(b)** 11.8 – 14.7 **(c)** 3.13 – 3.93

(iv) What is a pie-chart?

(v) Arithmetic mean of 20 values is 25, By adding 4 more values the mean becomes 30. Find the four values if the ratio between these values is 1:2:3:4.

(vi) The logarithms of 3 values of X are $1.7076, 1.6812,$ and 1.6532. Find the mean of X values.

(vii) If $l = 28, f_m = 25, f_1 = 20, f_2 = 18$ and $h = 7$. Compute mode.

(viii) Given $\Sigma(X - 10) = 2.8, n = 5,$ Calculate arithmetic mean.

(ix) Given that $\Sigma p_0 q_0 = 1430, \Sigma p_1 q_0 = 1760, \Sigma p_1 q_1 = 2110,$ and $\Sigma p_0 q_1 = 1715$. Find Fisher's Ideal Price Index.

(x) Given $p_0 = 5, 4, 3$ and $q_0 = 70, 75, 80$. Find ΣW

(xi) Solve the following: a. ${}^{9}P_4$ b. ${}^{13}C_0$

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 from the following distribution: **(08)**

Classes	0 – 20	20 – 40	40 – 60	60 – 80
Frequency	20	30	40	10

Q. 4 Construct Fisher's Price Index number for 2002 using 2001 as base. **(08)**

Items	**2001**		**2002**	
	Price	**Quantity**	**Price**	**Quantity**
A	64	270	75	290
B	40	124	45	144
C	18	130	21	137
D	58	185	68	200

Q. 5 If a die is rolled one time, find these probabilities. **(08)**

(i) Of getting a 4

(ii) Of getting a number less than 7

(iii) Of getting a number greater than 3 or an odd number

(iv) Of getting a number greater than 3 and an odd number