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)   Statistics must be:

A.	Comparable	B.	Not comparable
C.	Discrete in nature	D.	Qualitative in nature

(ii)   A measure computed from sample data is called:

A.	Parameter	B.	Statistic
C.	Statistics	D.	Data

(iii)   The process of arranging data into rows and columns is called:

A.	Array	B.	Classification
C.	Tabulation	D.	Frequency distribution

(iv)   Graph of the frequency distribution is:

A.	Histogram	B.	Ogive
C.	Historigram	D.	Pie-chart

(v)   In a symmetrical distribution mean, median and mode are always:

A.	Negative	B.	Different
C.	Unequal	D.	Equal

(vi) $D = x - A$, means the change of:

A.	Scale	B.	Origin
C.	Origin and scale	D.	Unit of measurement

(vii)   Laspeyer's index is also called:

A.   Geometric mean of Paasche's and Fisher's index

B.   Ideal index

C.   Current year weighted

D.   Base year weighted

(viii)   Index for base period is:

A.	One	B.	Fix
C.	100	D.	More than 100

(ix)   When a die and a coin are rolled together, then the possible outcomes are:

A.	6	B.	2
C.	12	D.	36

(x)   The probability of sure event is:

A.	1	B.	100
C.	0	D.	0.5

For Examiner's use only:

Total Marks: | 10 |

Marks Obtained: | |

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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)   What is a frequency distribution?

(ii)   Define population and sample.

(iii)   What is a pie-chart?

(iv)   If $l = 28$, $fm = 25$, $f_1 = 20$, $f_2 = 18$ and $h = 7$, compute mode.

(v)   Distinguish between variable and a constant.

(vi)   Define mode.

(vii)   In a certain distribution mean is 45 and mode is 50 then find median.

(viii)   What is difference between fixed base and chain base method?

(ix)   Compute index numbers by taking 1957 as base year:

Year	1955	1956	1957	1958	1959	1960	1961
Price	14	15	16	17	18	19	20

(x)   Define mutually exclusive events.

(xi)   Solve the following:

a. 8_{P_2} b. 7_{C_3}

SECTION – C (Marks 16)

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

Q. 3   Calculate arithmetic mean by using:

a.   Direct method

b.   Step-deviation method

Marks	No. of Students
30 – 39	1
40 – 49	3
50 – 59	11
60 – 69	21
70 – 79	43
80 – 89	32
90 – 99	9

Q. 4   Calculate chain index numbers for the following data. Use median as an average:

Year	A	B	C	D
1958	94	98	82	122
1959	98	83	97	105
1960	96	87	95	107
1961	94	82	97	112

Q. 5   From a pack of playing cards, a card is drawn at random, find the probability that the drawn card is:

a.   An ace card

b.   A red card

c.   A king or a queen

d.   A jack of clubs