





# BUSINESS STATISTICS HSSC-II

55

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.  ${}^8P_2$       b.  ${}^7C_3$

## 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