

INTERMEDIATE PART-II (12th CLASS)**BUSINESS MATHEMATICS & STATISTICS (OLD SCHEME)****PAPER-II (COMMERCE GROUP)**

TIME ALLOWED: 1.45 Hours

MAXIMUM MARKS: 40

SUBJECTIVE**NOTE: - Write same question number and its part number on answer book, as given in the question paper.****SECTION-I****2. Attempt any six parts.****6 × 2 = 12**

- (i) Define Parameter.
- (ii) What is meant by Descriptive Statistics?
- (iii) Define Secondary Data.
- (iv) Enlist any three methods of collecting Primary Data.
- (v) Define Arithmetic Mean.
- (vi) Give any three advantages of Median.
- (vii) In Moderately Skewed Distribution Mean = 35.4 and Mode = 32.1 find value of Median.
- (viii) Define Mode.
- (ix) A distribution consists of 3 components with respective sizes 45, 40 and 65 alongwith their respective means 2, 2.5 and 2. Compute the Combined Mean.

3. Attempt any six parts.**6 × 2 = 12**

- (i) Define the term Classification.
- (ii) Write the name of Graphs.
- (iii) Define Class Boundaries.
- (iv) What is the difference between Simple Index and Composite Index?
- (v) Define Consumer Price Index Number.
- (vi) Given $\sum p_1q_0 = 1014$, $\sum p_0q_0 = 1001$, $\sum p_1q_1 = 973$, $\sum p_0q_1 = 980$
Find Fisher Index Number.
- (vii) Write down the properties of a random experiment.
- (viii) If A and B are not mutually exclusive events and $P(A) = 0.6$, $P(B) = 0.5$, $P(A \cap B) = 0.19$
find $P(A \cup B)$
- (ix) Define Independent and Dependent Events.

SECTION-II**NOTE: - Attempt any two questions.**

4.(a) The following are numbers of flowers on different branches of a tree. Classify the data by taking class interval as one:-

4

2, 4, 1, 3, 3, 5, 7, 8, 6, 4, 7, 6, 4, 4, 2, 1, 5, 0, 1, 5, 9, 9, 10, 3, 4,
6, 2, 5, 7, 9, 6, 1, 2, 10, 4, 8, 9, 2, 3, 1, 0, 4, 10, 1, 1, 2, 2, 2, 3, 4.

(b) Make a simple Bar chart of the following data:-

4

Years	2001	2002	2003	2004	2005	2006
Production (kg)	8	10	18	30	45	48

5.(a) Calculate 'A.M.' from the following:-

4

X	12	14	16	18	20	22	24
F	07	10	22	30	25	13	04

(b) Calculate "Median & Mode" from the following Frequency Distribution:-

4

Groups	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 - 39
Frequency	1	3	8	6	4	2

6.(a) Calculate Fisher's Ideal Index Number from the following data:-

4

Commodity	Base year		Current year	
	Price	Quantity	Price	Quantity
A	4.6	102	9.50	96
B	3.7	15	7.36	28
C	10.2	17	8.42	21
D	8.9	19	9.87	13

(b) From a well-shuffled pack of 52 cards, a card is drawn at random.

1 + 1 + 1 + 1

What is the probability that it is (i) a card of diamonds (ii) an ace
(iii) a king of hearts (iv) red card