Paper Code Number: 4643	2024 (1st-A) INTERMEDIATE PART-II (12th Class)	Roll No: _____
BUSINESS STATISTICS (COMMERCE GROUP) PAPER-II MTN-24		
TIME ALLOWED: 15 Minutes	**OBJECTIVE**	**MAXIMUM MARKS: 10**

Q.No.1 **You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that bubble in front of that question number, on bubble sheet. Use marker or pen to fill the bubbles. Cutting or filling two or more bubbles will result in zero mark in that question.**

S.#	QUESTIONS	A	B	C	D
1	An index number has wider scope is:	Price index number	Quantity index number	Special purpose index number	General purpose index number
2	An index number computed for a single variable is:	Simple	Composite	Weighted	Un-weighted
3	An arrangement of all or some sets of objects in a definite order is:	Factorial	Combination	Super set	Permutation
4	If the probability that it will rain is 0.3, the probability that it will not rain is:	0.3	0.5	0.7	One
5	In plural sense, "Statistics" means:	Methods	Numerical data	Primary data	Secondary data
6	The mid point of the group 9.5 – 10.5 is:	11.0	10.5	10.0	9.5
7	If a frequency curve has a longer tail to the right it is:	Positively skewed	Negatively skewed	Symmetrical	U-shaped
8	A distribution having one mode is:	Multi-modal	Bi-modal	Tri-modal	Uni-modal
9	If n=10, $\sum X = 700$, then Arithmetic Mean is:	50	60	70	700
10	The most frequent value in the data is:	Mean	Mode	Median	Weighted mean

2024 (1^{st}-A) INTERMEDIATE PART-II (12^{th} Class)	Roll No: MTN-24

BUSINESS STATISTICS (COMMERCE GROUP) PAPER-II

TIME ALLOWED: 1.45 Hours	SUBJECTIVE	MAXIMUM MARKS: 40

NOTE: Write same question number and its parts number on answer book, as given in the question paper.

SECTION-I

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

(i)	Define Primary data by giving an example.
(ii)	Differentiate between Constant and Variable.
(iii)	Enlist the functions of Statistics.
(iv)	What is tabulation?
(v)	Describe geographical classification.
(vi)	List the types of tabulation.
(vii)	Explain the term Mutually Exclusive Events.
(viii)	A fair die is rolled once, what is the probability of getting (i) Six? (ii) Even number?
(ix)	If A and B are two independent events and $P(A) = 0.40$, $P(B) = 0.35$. Find $P(A \cap B)$.

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

(i)	Given $U = \frac{X - 25}{5}$, $\Sigma fu = -46$, $\Sigma f = 50$. Find arithmetic mean.
(ii)	If (i) $\Sigma(X-50)^2 = 10$ (ii) $\Sigma(X-20)^2 = 25$ (iii) $\Sigma(X-46)^2 = 16$, what is value of mean and why?
(iii)	Define arithmetic mean with formulae.
(iv)	Find Mode if Mean = 20 and Median = 30.
(v)	Write down the advantages of Mode.
(vi)	Define weighted arithmetic mean.
(vii)	Distinguish between fixed base and chain base method.
(viii)	What is meant by Laspeyre's Index?
(ix)	What is Base period?

SECTION-II

NOTE: Attempt any two questions. **2 × 8 = 16**

4.(a) Following data relates to number of members in various families. 04

Make frequency distribution taking one as class interval.

2, 4, 2, 4, 5, 6, 7, 2, 3, 4, 5, 6, 3, 2, 3, 4, 5, 3, 2, 7, 6, 3, 4,
3, 4, 3, 5, 3, 3, 4, 5, 6, 3, 4, 5, 7, 6, 5, 3, 2, 5, 4, 3, 4, 5.

(b) Draw frequency polygon for following data: 04

Weight	40 – 49	50 – 59	60 – 69	70 – 79	80 – 89
No. of students	5	15	20	10	5

5.(a) Calculate the Arithmetic Mean by using Coding Method (Step Deviation Method) : 04

Groups	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60
f	10	30	50	40	20

(b) Find Mode from the following: 04

Daily income (Rs.000)	35 – 39	40 – 44	45 – 49	50 – 54	55 – 59	60 – 64
Number of Non-skilled workers	3	10	21	15	4	1

6.(a) Compute Index Number of Prices from the following data taking 1990 as base and using Median as an Average: 04

Years	Prices		
	A	B	C
1990	18	87	53
1991	22	77	60
1992	29	79	65
1993	32	94	80

(b) A card is drawn from a pack of well shuffled 52 cards. Find out probability that it is: 04

(i) Picture card (ii) Heart card