



Class: XII
Time Allowed: 15 minutes

MODEL PAPER EXAMINATION 2026
SUBJECT: BUSINESS STATISTICS
(SECTION “A”)

Marks: 10

Q1: **Note:** Attempt ALL question from this section. Each question carries ONE mark

1. A complete collection of individuals, objects or measurements under consideration in a study is called _____.
A. Sample B. Unit C. Population D. Parameter
2. _____ data is collected for the first time for a specific purpose and are original in nature.
A. Primary B. Secondary C. Qualitative D. Quantitative
3. For the following distribution

C.I	0-4	5-8	9-12
f	6	5	3

- The width of each class interval is _____.
A. h = 4 B. h = 3 C. h = 5 D. h = 7
4. A graphical representation of a cumulative frequency distribution is called _____.
A. Cumulative frequency polygon B. Ogive C. Both A & B D. None of these
5. The sum of deviation from mean is always _____.
A. Negative B. Positive C. Zero D. None of these
6. If the mean of a data with 15 observations is 100, then $\sum x$ is equal to
A. 1,500 B. 2,000 C. 2,500 D. 1,000
7. If an index is based on more than one commodity, it is called _____ index number.
A. Simple B. Composite C. Quality D. Quantity
8. If Laspeyre’s index = 40% and Paasche’s index = 45% then Fisher’s index _____.
A. 42.42% B. 41.41% C. 41.42% D. 40.41%
9. $7!$ Divide by $3!$ = _____.
A. 800 B. 640 C. 750 D. 840
10. 7P_4 = _____.
A. 840 B. 940 C. 1040 D. 740

END OF SECTION A

Q2. Answer any **FIVE** questions. All Questions carry **FOUR** marks:

1. Distinguish between:

a. Population and Sample
b. Quantitative and Qualitative variables
2. Fin the relative frequency distribution to the following frequency distribution

C.I	3-5	6-8	9-11	12-14	15-17	Total
f	2	6	5	7	5	25

3. Draw a histogram for the following frequency distribution

C.I	3-4	5-6	7-8	9-10	11-12	Total
f	2	5	4	3	1	15

4. For the data given below verify that the sum of the deviations from mean is zero
15, 20, 16, 24, 28, 17
5. Following are the prices of a commodity for the period 2010 to 2015. Calculate price index numbers (price relatives) with 2010 as base

Year	2010	2011	2012	2013	2014	2015
Price (Rs.)	75	80	85	90	85	95

6. A pair of dice is rolled once. What is the probability of getting:

a. A total of 6
b. A total of 10
7. A bag contains 4 Green and 5 Red balls. A ball is drawn at random from the bag. What is the probability that the ball is Red?

SECTION “C” (DETAILED ANSWER QUESTIONS)

Marks 20

Note: Attempt any **TWO** questions from the following. All questions carry **TEN** Marks

Q3. Consider the following data

19	20	22	17	19	16	16	28	19	25
21	22	17	28	23	15	17	27	20	17
18	25	15	26	25	29	20	25	22	15
17	18	24	24	29	22	21	23	24	18

- a. Develop a frequency distribution using classes of 15-17, 18-20, 21-23, 24-26, 27-29
- b. Develop a Percentage Frequency Distribution
- c. Find Class Boundaries
- d. Develop Cumulative Frequency Distribution for ‘Less than’ and ‘More than’

Q4. The prices and quantities of four commodities for the year 2024 and 2025 are as under:

Commodity	Price		Quantity	
	2024	2025	2024	2025
Rice	230	240	50	60
Wheat	260	270	70	80
Maize	210	220	60	70
Barley	320	340	90	100

Compute the Index numbers of the year 2025 by using the following:

i. Laspeyre’s Index Number
ii. Paasche’s Index Number
iii. Fisher’s Index Number.

Q5. A Committee meeting contains 20 men and 12 women members of which half of the men and half of the women are Managers. Find the probability that a member chosen at random is a man or a Manager.