Business Statistics	L.K.No. 1492	Paper Code No. 8641
Paper II	(Objective Type)	Inter (Ist– A – Exam – 2024)
Time : 15 Minutes		Inter (Part – II) (Commerce Group)
Marks : 10		Session (2020 – 22) to (2022 – 24)

BWP–24

Note : Four choices A , B , C ,D to each question are given. Which choice is correct fill that circle in front of that Question No. on the Objective Bubble Sheet. Use Marker or Pen to fill the circles. Cutting or filling two or more circles will result in Zero Mark in that Question.

Q.No.1

(1) Secondary Data can be collected by :

(A) Registration (B) Official Sources

(C) Direct Personal Observation (D) Questionnaire Method

(2) Sum of the Angles of Sectors of Pie Chart is always :

(A) 90° (B) 180° (C) 270° (D) 360°

(3) An Ogive is a :

(A) Cumulative Frequency Polygon (B) Frequency Curve

(C) Frequency Polygon (D) Histogram

(4) Data must be arrayed before Calculating :

(A) Mean (B) Mode (C) Median (D) Geometric Mean

(5) If Mean = 82 ; Median = 78 , then value of Mode is :

(A) 40 (B) 50 (C) 60 (D) 70

(6) A Data having two Modes is called :

(A) Uni – Model (B) Bi – Model (C) Tri – Model (D) Multi – Model

(7) Base year weighted Index Number are also called :

(A) Laspeyre's Index (B) Paasche's Index (C) Fisher Index (D) Marshall Index

(8) Index Number for base period is always :

(A) Zero (B) Negative (C) 100 (D) 1000

(9) The Probability of getting an even number when a die is rolled is :

(A) $\frac{1}{2}$ (B) $\frac{1}{3}$ (C) $\frac{1}{6}$ (D) $\frac{1}{8}$

(10) When two Coins are tossed the possible outcomes are :

(A) 2 (B) 4 (C) 8 (D) 16

Note : It is compulsory to attempt any (6 – 6) Parts each from Q.No. 2, Q.No.3 while attempt any (2) Questions from Part – II . Write same Question No. and its Part No. as given in the Question Paper.
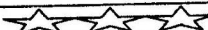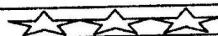
BWP–24

Make Diagram where necessary. **Part – I** 12 x 2 = 24

Q.No.2	(i)	Enlist the main parts of Table .	(ii)	Contrast between Variable and Constant.
	(iii)	Write down two Characteristics of Statistics .	(iv)	What is meant by Inferential Statistics?
	(v)	Define Histogram.	(vi)	What is Pie Chart?
	(vii)	Describe the properties of Random Experiment.	(viii)	Contrast between Mutually and Not Mutually Exclusive Events.
	(ix)	Distinguish Between Independent and Dependent Events.		
Q.No.3	(i)	Explain the Fixed Base Method.	(ii)	If $Y = X - 13$ and $\bar{X} = 39$ Find $\bar{Y}$.
	(iii)	Write down Empirical relation between Mean , Median and Mode.	(iv)	For a certain distribution $U = \dfrac{X - 100}{10}$ and $\sum f = 50$, $\sum fu = 150$ Calculate Mean.
	(v)	Enlist two advantages of Median.	(vi)	Define Positively Skewed Distribution.
	(vii)	Write down two qualities of a Good Average.	(vii)	Given that $\sum p_0 q_0 = 550$, $\sum p_1 q_1 = 600$ $\sum p_1 q_0 = 510$ Find Laspeyre's Index .
	(ix)	What is Weighted Index Number?		

Part – II 2 x 8 = 16

Q.No.4	(a)	The following figures relate to preferences with regards to preferred T.V Screen Size in inches among 36 Persons Selected at random from a Locality . Make a Frequency Distribution taking 5 as Class Interval Size and 10 as the Lowest Limit.	(4)

12	20	30	20	27	24
20	12	32	12	20	24
24	20	36	24	20	24
27	24	24	24	24	12
24	20	40	27	24	24
24	20	12	24	27	32

Q.No.4	(b)	Draw Simple Bar Chart of the Following data of Price Relatives .	(4)

Commodity	Wheat	Rice	Pulses	Sugar	Salt	Oils
Price Relative	237	198	156	124	107	196

Q.No.5	(a)	Calculate Arithmetic Mean by Short Cut Method for following Frequency Distribution.	(4)

Classes	15 – 24	25 – 34	35 – 44	45 – 54	55 – 64	65 – 74	75 – 84
Frequency	4	11	19	14	2	7	3

	(b)	Frequency Distribution of Marks of Students is given below. Calculate Median from the given Table :	(4)

Marks	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50
No. of Students	15	25	30	4	10

Q.No.6	(a)	Compute the Index Number for 1963 assuming 1953 as base by : (i) Laspayre's and (ii) Paasche's Formula .	(4)

Commodities	1953		1963	
	Price	Quantity	Price	Quantity
A	2	50	10	40
B	3	10	8	5
C	4	5	4	5

	(b)	Two Dices are thrown . Find the Probability that : (i) The Two Dice Show the same number . (ii) The numbers on the two Dice differ by more than 2 .	(4)

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