## Pratap Public School, Karnal Mid-Term Examination (2023)

Class - XI

Time: 3 Hours		M . 00
Name Roll No		M : 80
General Instructions:-	Section	
i) All questions are compulsory.		
ii) Marks for questions are indicated again	et each questions	
(PART-A) (3		
Match The statements given under A with t		(1)
A	B	
i) Plural sense	a) It does not study qualitative phe	enomen
ii) Collection of data	b) Statistics as method	
iii) Distrust of statistics	c) Statistics as numerical set of	data
iv) Limitations of statistics	d) First step in a statistical enqui	
v) Singular sense	e) Lack of confidence in statistic	cal
	methods and statements.	
2. State whether the following statements is t	rue or false? Give reason.	(1
'Systematic Sampling is 'also known as Qu	uasi random sampling.	
3. Read the following statements , Assertion	(A) and Reason (R) choose one of the	ne corre
alternatives.		(1
Assertion (A) " Primary data is original		
Reason (R): Primary data is collected by t	he investigator himself.	
Alternatives :		in Mary
i) Both Assertion (A) and Reason (R) are	true and Reason (R) is the correct ex	xplanat
of Assertion (A)	we but Decem (D) is not the same to	1
<li>ii) Both Assertion (A) and Reason (R) are tr of Assertion (A).</li>	ue but Reason (R) is not the correct e	xpianai
iii) Assertion (A) is True but Reason (R) is	false	
iv) Assertion (A) is false but Reason (R) is		
4. Data collected from 'The Times of India' i		
a) Primary data	b) Secondary data	(
c) None of these	d) Census	
5. What do you mean by a questionnaire?		
6. The class marks of a distributives are 26,	31, 36, 41, 46 and 51. Then the first	intervo
a) 23.5-28.5 distribection	b) 23-28	
c) 22.5-27.5	d) none of these	
7. Statistics is full advantage and does not se	uffer from a single limitations.	

## 8. Out of census method and sampling method, which one is suitable in the following

- i) When population, is heterogeneous, in nature.
- ii) It is comparatively easy to organize and supervise
- iii) Under this results are less reliable and accurate
- iv) Only error that may arise in the collection of data is error of bias.
- v) It requires relatively less money, time and labour.
- vi) When population is homogeneous in nature.
- 9. State whether the following statements are true or false. Give reason.
  - i) There are many sources of data.
  - ii) Data collected by investigator is called the secondary data.
  - iii) There is a certain bias involved in the non-random selection of samples.

10. Represent the data given below by percentage based bar diagram. (3)

	family A (25,000)	family B (40,000)
food	10,000	12,000
clothing	5,000	10,000
House Rent	4,000	6,000
Misce	4,500	8,000
Savings	1,500	4,000

OR

Prepare histogram for the following data

Marks	0-10	10-20	20-30	30-60	60-80	80-90	90-100
no. of students	5	10	4	18	4	3	9

11. Calculate arithmetic mean by step deviation method.

Marks (more than)	0	10	20	30	40	50
No. of students	50	45	38	26	10	4
		OI	3			-

(4)

Find arithmetic mean of the following by step deviation method.

Class interval:	50-59	40-49	30-39	20-29	10-19	0-9	
Frequency:	1	3	8	10	15	3	

12. Marks scored by 30 students are give below:

41	55	42	52	12	121	42	121	140						(6
41	33	42	23	42	31	42	31	42	55	42	35	65	65	74
74	41	53	42	55	42	20	31	42	25	150	1	100	03	14
	100	100	12	122	72	120	131	42	33	35	35	125	35	25

- a) Arrange the marks in ascending order, and descending order.
- b) Represent the marks in the form of describe resource distribution.
- c) Construct a frequency distributions when class intervals are inclusive, taking the lower class as 20-29.
- d) convert the inclusive series construed in (c) into exclusive series
- e) construct a frequency distribution when class intervals are evel-

larks	ution is	20-30	30-40	40-50	50-60	60-70	70-80	Total	1
lo. of students X	24	60	fl	130	f2	50	36	458	
ou are given that the					the med	dian for	mula fill	up mi	ssing
	- Incuic	iii valu	ب المرابع	471	•				
equencies. ) Find out the median	o for the	followi	na data						
	10-20	10-30	10-40	10-50	10-60	10-70			
Age No of persons	8	32	54	58	66	80	THE R		
No or persons	10	1	OR		11-11				
Find out the mode in t	he follow	wing se		ouping I	method)		Tre y Date		
size (below)	5	10	15	20	25	30	35	The state of	
frequency	1	3	13	17	27	36	38		
. Match the statements	given u	ınder A		rect of ti	on giver	under	D Date	K HAY	
A	1		В				T Day	No.	10
i) Position Economi	cs		a) it is s	suaaesti	ive in na	iture			
					gestive i		10 m.d		
ii) Normative econor	nics		ו פו זו (ט	iot sugg	Jesuve P	mate 1	בשמו וו	1137 (4	
			711						moto
	blem in	volves	selection	n of cat					
consume the goods.	blem in	volves			egory o	f people			
consume the goods.  a) How to produce	blem in	volves	b) For	whom to	egory o	f people			
consume the goods.  a) How to produce  c) What to produce	oblem in	volves	b) For		egory o	f people			(1)
consume the goods.  a) How to produce c) What to produce 6. Marginal utility:-		volves	b) For	whom to	egory o	f people			(1)
consume the goods.  a) How to produce c) What to produce 6. Marginal utility:- a) is always positive		volves	b) For	whom to	egory o	f people			(1)
consume the goods.  a) How to produce c) What to produce 6. Marginal utility:- a) is always positive b) is always negative			b) For d) none	whom to	egory o	f people			(1)
consume the goods.  a) How to produce c) What to produce 6. Marginal utility:- a) is always positive b) is always negative c) can be positive or	negativo	e but no	b) For d) none	whom to	egory o	f people			(1)
consume the goods.  a) How to produce c) What to produce 6. Marginal utility:- a) is always positive b) is always negative	negativo	e but no	b) For d) none	whom to	egory o	f people			(1)
consume the goods.  a) How to produce c) What to produce 6. Marginal utility:- a) is always positive b) is always negative c) can be positive or d) can be positive or	negativ	e but no	b) For d) none	whom to	egory of Production	f people			(1)
consume the goods.  a) How to produce c) What to produce 6. Marginal utility: a) is always positive b) is always negative c) can be positive or d) can be positive or 7. Total utility is	negative	e but no ve or ze he poin	b) For d) none	whom to	egory of Production	f people			(1)
consume the goods.  a) How to produce c) What to produce 6. Marginal utility: a) is always positive b) is always negative c) can be positive or d) can be positive or 7. Total utility is	negative	e but no ve or ze he poin	b) For d) none	whom to	egory of Production	f people			(1)
consume the goods.  a) How to produce c) What to produce 6. Marginal utility: a) is always positive b) is always negative c) can be positive or d) can be positive or 7. Total utility is 8. "Card inality" means a) Measured c) Not measured	negative	e but no ve or ze he poin	b) For d) none of zero ro t of satis	whom to	egory of Production	f people			(1)
consume the goods.  a) How to produce c) What to produce 6. Marginal utility: a) is always positive b) is always negative c) can be positive or d) can be positive or 7. Total utility is 8. "Card inality" means a) Measured c) Not measured	negative	e but no ve or ze the poin an be :	b) For d) none of zero ro t of satis Carel b) Ran d) Nor	ety.  incleaned of the	egory of Production Productions	f people ce			(1)
a) How to produce c) What to produce 6. Marginal utility: a) is always positive b) is always negative c) can be positive or d) can be positive or 7. Total utility is 8. "Card inality" means a) Measured c) Not measured 9. Define Total Utility.	negative	e but no ve or ze he poin	b) For d) none of zero ro t of satis	whom to e of thes	egory of Production	f people			(1)

13.

196	A 30		generally			
-	2. The demand func The demand at p	tion of a pro	duct X is a	iven as DV		(1)
	The demand at p	rice of Rs2 v	will be	ST.	= 12-2 Px. Where	Px stands for price.
2	23.In a typical demai	nd schodula	viii be			(1)
	a) Varies directly	ing scriednie	quantity d	emanded		(1)
	a) Varies directly					
	Vanous propo	rtionately wi	th price			
A	c) Various invers		е			
	d) Is independer	nt of price				
	24. When price rises	s from Rs8	to Rs 10, 1	then demand	d falls from 5 un	its to 4 units. Now
	elasticity of dema	and will be				(1)
25	45. Price elasticity of			tovs are res	spectively (-) 0.9 s	
13	for which one is	more elastic	and why?	. to your or too	pectively (-) 0.5 a	(1)
***	26. If a good takes u			nsumer hud	get it will be	
	27.A 5% fall in the p	rice of X lead	ls to a 10%	rise in its de	mand In case of	_ elastic. (1)
						s more elastic. (1)
	a) X		o demand.	b)		s more elastic. (1)
	c) Both X and Y	are equally	elastic	d)		
-3						
	28. State the condition explain the ratio	nale behind t	hose sendit	ione	ne manierence c	urve analysis and
					11.1114	(4)
	29. Complete the fo	nowing table,	draw and c	connect poss	ibility curve	
	possibilities	Good X	Good Y	MPT	The Shandard of the	
	A	0	20	-		
	В	1		6Y:1X	The second	
1	C	2	9		A Street British	
	D	3		4Y:1X		
	E	4	2			
	F	5	-	2Y:1X		
	OF	R PP	F			
	a) What does the b) Massive une	ne slope of PE	F indicate?	the left		
					nd or refute.	(2.0)
1	The state of the s	ito to consilm	A TIMO GOOD			(2+2)
	On the basis of	od B at Rs4 p	er unit. The	income of the	d Good B. Good as consumer is fixed	ns priced at Rs2
	On the basis of a) Mention all the	uns informatio	n. Answer	the following	questions	at Rs20.
		TO WILLIAM TO VVI	III. II COMO III	n - 11 -	get set	(4)
	c) How many un	bundles which	cost exactl	y Rs 20.		
	d) Determine the	ills of good A c	an be purch	ased if the e	otire incom- :	ent on that good?
	d) Determine th	nishing n	budget line		o income is sp	ent on that good?
	31. a) Law of diminintervals. "De	fend or ref	nal utility wi	Il operate ev	en if con-	
	b) A consumer of	consumer			on a consumption	n takes place in
4 4 8 1	E VI	only only	v two good-	V		

b) A consumer consumes only two goods X and Y and is in equilibrium. Price of 'X' falls.

- 32.a) What is the behaviour of total utility (TU) when (use diagram)
  - i) MU curve remains above X axis.
  - ii) MU curve touches X axis

- 33.a) The demand function of a commodity X is given by Qx = 12 2Px. Prepare the demand schedule and also demand curve, F its price varies from Rs 6 to 1. b) With the help of demand function Qd = 40 - 5P, answer the following questions:
  - - i) Calculate demand at price of Rs2
    - ii) Calculate price, when demand will be 0.

iii) Calculate demand, when price will be 0.

(3+3)

- 34.a) The price of a commodity X decreases by 10%, as a result, the quantity demanded doubles. Calculate coefficient of price elasticity of demand. Comment upon the likely shape of the demand curve.
  - b) A consumer buys 80 units of a good at a price of Rs 5 per unit. Suppose, the price (3+3)elasticity of demand is (-) 2. At what price will he buy 64 units?

- a) The price of commodity is Rs 15 per unit and its quantity demanded is 500 units. Its quantity demanded rises by 80 units as a result of fall in its price by 20 percent. Calculate is price elasticity of demand. Is its demand in elastic? Give reason for your answer.
- b) The price elasticity of demand of good X is half the price elasticity of demand of good Y. A25% rise in the price of good Y reduces its demand from 400 units to 300 units Calculate percentage rise in demand of good X when its price falls from Rs10 to Rs8 per unit.

(3+3)