INDIAN SCHOOL MUSCAT

Class : XI | **First Term Examination** | **Time Allotted: 3 Hrs**

23-09-2018 | **Economics Theory 030 / A** | **Max. Marks: 80**

EXPECTED VALUE POINTS AND SCHEME OF EVALUATION

Section A: Introductory Microeconomics

Q.N	SUGGESTED VALUE POINT	EVALUATION SCHEME
1.	(b) It shows various combinations of two goods which an economy can produce with given amount of resources and technology	1 Mark
2.	False. The combination of two goods gives consumer same level of satisfaction because consumers preferences are monotonic	1 Mark
3.	(b) Both (i) and (iii)	1 Mark
4.	(b) A fall in the price of the good	1 Mark
5.	It shall depend upon the point where the consumer maximize her satisfaction and do not tend to purchase the good at that point of time.	

Units	TU	MU	P	
1	14	14	4	MU > P
2	24	10	4	
3	32	8	4	
4	38	6	4	
5	**42**	**4**	**4**	**MU = P**
6	44	2	4	MU < P
7	44	0	4	

1 + 1 + 1 = 3 Marks

From this table we see that the consumer will purchase 5 units of the good because the price is equal to MU(MU = Price)

The consumer will not like to purchase more than 5 units because the price of the good is greater than the satisfaction derived (MU<Price)

When the consumer purchases 1st unit, MU exceeds the price, and therefore she purchases the 2nd unit. MU still exceeds the Price and again she purchases the 3rd unit and 4th unit.

This goes on till the MU is equal to price of the good at the 5th unit. Thus, the consumer attains equilibrium at the 5th unit when the MU = P.

OR

What is a Budget line?

A consumer consumes only two goods X and Y. Her money income is ₹24 and the prices of X and Y are ₹4 and ₹2 respectively.

Answer the following questions:

a) Can the consumer afford a bundle 4X and 5Y? Explain

b) What will be the MRS_{xy} when the consumer is in equilibrium?

1 + 1 + 1 = 3 Marks

Budget line refers to all combinations of goods which a consumer can buy with his entire income and price of two goods.

$P_1 X + P_2 Y = M$ (4X4) + (5X2) = 24 16 + 10 ≠ 24 OR 26 ≠ 24

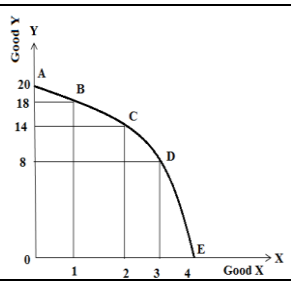
Therefore, consumer cannot afford a bundle 4X and 5Y

At equilibrium $MRS_{xy} = \frac{Px}{Py}$ or $MRS_{xy} = \frac{4}{2} = \frac{2}{1}$ OR $MRS_{xy} = 2$

6. In this situation, the buyer buys more of good X than on Y since he is deriving — 3 Marks

more utility from good X. As he keeps on buying more units of good X, the MU on good X keeps on falling while the MU on good Y keeps on rising due to Law of diminishing marginal utility effect. In other words, the good which is sacrificed, the desire to have more of it increases, & therefore on every additional unit of good X the MU on good Y rises. This process continues till $\frac{MUx}{Px}$ is equal to $\frac{MUy}{Py}$.

7.

Possibilities	Good (X) Units	Good (Y) Units	MRT = $\frac{\Delta Y}{\Delta X}$	PPC
A	0	20	-	
B	1	18	1X : 2Y	
C	2	14	1X : 4Y	
D	3	8	1X : 6Y	
E	4	0	1X : 8Y	

Calculation of MRT – 2 Marks.
Construction of PPC – 2 Markers
2 + 2 = 4 Marks

8.

S.N.	Planned Economy	Market Economy
1.	All the materials means of production are owned by government.	All the materials means of production are owned by private individuals.
2.	Main objectives of production is social welfare	Main objectives of production are maximization of profit
3.	Ownership of property is under government control.	There is no limit to private ownership of property.
4.	All the economic problems are solved as per direction of the planning commission	All the economic problems are solved through price mechanism i.e., demand and supply.

(ANY TWO)

Any two points of distinction

2 + 2 = 4 Marks

OR

S.N	Microeconomics	Macroeconomics
1.	It studies individual economic unit.	It studies aggregate economic unit
2.	It deals with determination of price and output in individual markets	It deals with determination of general price level and output in the economy.
3.	Its central problems are price determination and allocation of resources	Its central problem is determination of level of Income and employment in the economy.
4.	The main tools used in the study are demand & supply.	The main tools of Macroeconomic study are aggregate demand & supply.

(ANY TWO)

Any two points of distinction

2 + 2 = 4 Marks

9. If change in quantity is (-) 0.6 and price elasticity of demand is (-) 0.75, calculate the percentage change in price. Also calculate the new expenditure if initial expenditure was ₹500 at the price of ₹20.

Calculation of percentage change in price

Given: $\Delta Q/Q$ = (-) 0.6

%Δ in demand = $\Delta Q/Q \times 100$ = (-) 0.6×100 = (-) 60%

2 marks for calculation of

$$Ed = \frac{\%\ \Delta \text{ in quantity demanded}}{\%\ \Delta \text{ in price}}$$

$$(-)0.75 = \frac{(-)60\%}{\%\ \Delta \text{ in price}}$$

% Δ in price=80%

percentage change in price 2 marks for calculation of new expenditure.

Calculation of new expenditure

Expenditure = Quantity X price 500 = Quantity X 20

$$\text{Quantity} = \frac{\text{Expenditure}}{\text{Price}} = \frac{500}{20} = 25 \text{ units}$$

New quantity = Quantity + change in quantity = 25 + (25 × (-) 60%) = 25 – 15 = 10 units

New price= Price + change in price; = ₹20 + (₹20 × 80%); = ₹20 + ₹16 = ₹36

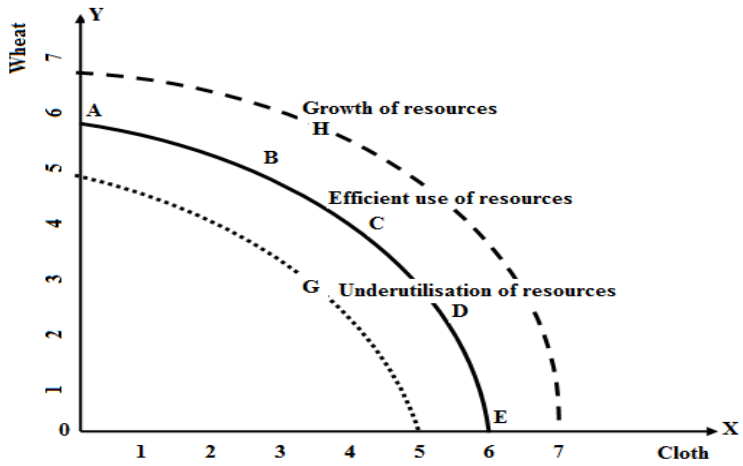
New expenditure = New quantity X New price = 10 units X ₹36 = ₹360

New expenditure = ₹360

2 + 2 = 4 Marks

10. Ans:

Definition of PPC – 1 Mark



Marking the three situations 1 X 3 = 3 Marks

Reasons for shift in PPC 1 + 1 = 2 Marks

1 + 3 + 2 = 6 Marks

a) Every point on production possibility curve like ABCDE indicates full employment and efficient uses of resources.
b) Any point below or inside production possibility curve like G underutilization of resources.
c) Any point above production possibility curve like H indicates growth of resources.

Causes of rightward shift

(a) When there is improvement in technology.
(b) Increase in resources. (ANY ONE)

Causes of Downward shift

(a) When resources deplete

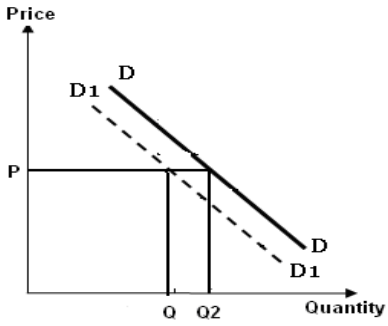
11. **Complementary goods** are those where the utility of a good depend upon the availability of another good.
e.g., car and petrol.
Demand for one good is affected by the **price of its complement.** There is an **inverse relation** between the two goods.
If the price of petrol rises, the demand for its complement cars will fall. The demand curve for cars will shift leftwards.

3 marks for complementary goods

3 marks for inferior goods

3 + 3 = 6 Marks

Demand curve for cars when price of petrol rises



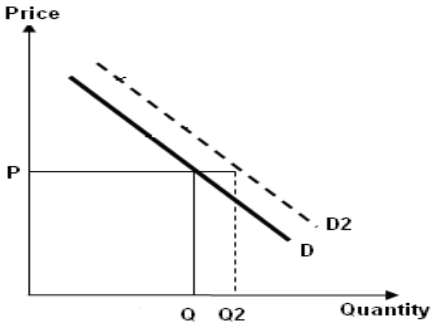
Inferior Goods are those goods which are demand more with decrease in income and less at a higher income. Demand is inversely related to change in income of the consumer.

E.g.: Bajra, coarse grains, etc.

Demand for inferior goods increase with decrease in income and the demand curve for inferior goods will shift rightwards.

When the income of consumer decreases the demand for coarse grains will increase.

Demand for inferior goods with decrease in income of consumer



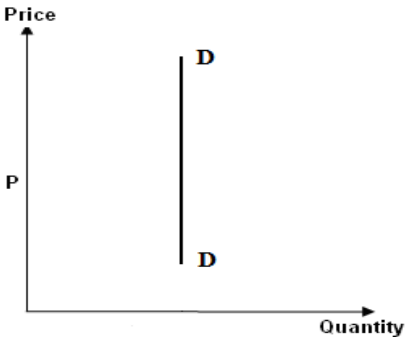
OR

Ans:

(a) Perfectly inelastic demand is when the % change in demand for a good is zero due to any % change in its price. This implies that the demand for the good does not give any response to the change in its price.

For example, salt.

Perfectly Inelastic Demand (Ep=0)



3 marks for perfectly inelastic demand

(b) Relatively elastic demand is when the % change in demand for a good is greater than the % change in its price. This implies that the demand for a good gives more response to the change in its price.

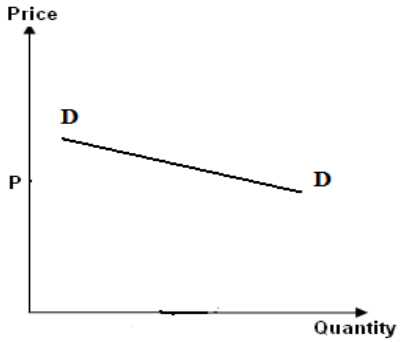
For example, the luxurious goods

3 marks for relatively elastic demand

3 + 3 = 6 Marks

Relatively

Elastic Demand (Ep>1)



12. Ans:-

(a) **Availability of close substitutes**: If close substitutes of product are available, the commodity tends to be more elastic, if there are not available; they tend to be less elastic.

(b) **Proportion of total expenditure spent on the product:** If the amount spent on a product constitutes a very small fraction of the total expenditure, then the demand tends to be less elastic of the amount spent is high the elasticity of demand tends to be high.

(c) **Habits:** A commodity if it forms an essential part of the individual, the demand tends to be inelastic. It is consumed casually; the demand tends to be elastic

(d) **Time Period:** Longer the time period, the more elastic is the demand for any product the shorter the time period, less elastic is the demand for any products

(ANY THREE)

Any three (2 marks each)
2 X 3 = 6 Marks

Section B: Statistics for Economics

Q.N	SUGGESTED VALUE POINT	EVALUATION SCHEME
13.	Economic activities are ones that are undertaken for a monetary gain. This is what economists mean by ordinary business of life.	1 Mark
14.	Ans: (b) Organising a free blood donation camp	1 Mark
15.	Ans: (c) Pilot Survey	1 Mark
16.	Ans: (a) Incorrect responses are recorded	1 Mark
17.	**Using a suitable example, show how statistics helps an economist to present economic facts in a precise and definite form?** When economic facts are expressed in statistical terms, they become exact. Exact facts are more convincing than vague statements. For example: Saying that with precise figures, 310 people died in the recent earthquake is more factual and a statistical data. Whereas, saying hundreds of people died, is not a statistical data and also not precise and definite.	3 Marks
18.	Enumerate the different methods of collecting primary data. **Personal Interviews**: The researcher (or investigator) conducts face to face interviews with the respondents. Personal contact is made between the respondent and the interviewer. **Mailing Questionnaire:** When the data in a survey are collected by mail, the questionnaire is sent to each individual by mail with a request to complete and return it by a given date. It allows the researcher' to have access to people in remote areas too, which might be otherwise difficult to reach in person or by telephone. **Telephone Interviews**: In a telephone interview, the investigator asks questions	1 X 3 = 3 Marks

over the telephone.

OR

What is secondary data? What is its source? Give any one precaution that should be taken before using a secondary data?

If the data have been collected and processed (scrutinized and tabulated) by some other agency, they are called Secondary Data.

Sources: Published data are secondary data. It can also obtained from any other source, for example, a web site.

Precaution: Before using such data, its suitability, reliability, etc. must be verified.

19. Discuss the different ways of classification of data with examples.

(a) **Chronological Classification:** In such a classification, data are classified either in ascending or in descending order with reference to time such as years, quarters, months, weeks, etc.

(b) **Spatial Classification:** In Spatial Classification the data are classified with reference to geographical locations such as countries, states, cities, districts, etc.

(c) **Qualitative Classification:** Data classified according to characteristics that cannot be quantified. For example, nationality, literacy, religion, gender, marital status, etc. They cannot be measured. Yet these attributes can be classified on the basis of either the presence or the absence of a qualitative characteristic.

(d) **Quantitative Classification:** data that can be quantified or expressed in numerical values. Characteristics like height, weight, age, income, marks of students, etc. are quantitative in nature.

1 X 4 = 4 Marks

20. Distinguish between discrete variable and continuous variable.

Discrete variable	Continuous variable
A discrete variable can take only certain values. Its value changes only by finite "jumps".	A continuous variable can take any numerical value.
It cannot any fractional value. For example, fractional value 0.5 student does not make any sense	It can take values that are whole numbers like 90cm, 100cm, 108cm, and 150cm. It can also take fractional values like 90.85 cm, 102.34cm, and 149.99 cm etc. that are not whole numbers.
There are no classes in frequency array (discrete variable). Since there are no classes in a frequency array there would be no class intervals.	It shows how the different values of a variable distributed in different distributions along with their corresponding class frequencies.

Any Two 2 + 2 = 4 Marks

OR

What is meant by loss of information in statistics?

Frequency distribution summarizes raw data making it concise and comprehensible; it does not show the details that are found in raw data. Once the data are grouped into classes, an individual observation has no significance in further statistical calculations. For Example, the class 20-30 contains 6 observations: 25, 25, 20, 22, 25 and 28. So when these data are grouped as a class 20-30 in the frequency distribution, it provides only the number of records in that class and not their actual values. All values in this class are assumed to be equal to the middle value of the class interval

4 Marks

21. An economic survey related that 30 families in a town incur following expenditure in a day in rupees. Prepare a frequency distribution of exclusive type with a class interval of five (5).

Class interval 1 mark

Tally marks – 1

11,12,14,16,16,17,18,23,20,16,11,12,36,34,25,27,28,28,30,15,28,26,22,28,31,12,31,38,15,20

1 mark

Expenditure (₹)	Tally Marks	No. of families (f)
10 – 15	𝍸 |	6
15 – 20	𝍸 ||	7
20 – 25	||||	4
25 – 30	𝍸 ||	7
30 – 35	||||	4
35 – 40	| |	2
		∑f = 30

Frequency 1 mark

∑f – 1 mark

1+1+1+1 = 4 Marks

22. Differentiate between census and sample methods of collecting data.

Census Survey	Sample Survey
Census or Complete Enumeration is a survey which includes every element of the population.	A sample survey refers to a group or section of the population from which information is to be obtained.
This method covers every individual unit in the entire population.	A good sample (representative sample) is generally smaller than the population
Provides detailed information about the population	Capable of providing reasonably accurate information about the population
The method is expensive and the survey takes a longer time to be complete.	The method is inexpensive and the survey can be completed in a shorter time

Any three (2X 3) = 6 Marks

OR

Distinguish between 'Random sampling' and 'Non random sampling'.

Random Sampling	Non Random Sampling
Every individual has an equal chance of being selected or not being selected and the individuals who are selected are just like the ones who are not selected.	All units of the population do not have an equal chance of being selected
Sample is drawn at random from the population	Convenience or judgment of the investigator plays an important role in selection of sample.
This is also called lottery method. The same could be done using a random number table also.	They are mainly selected on the basis of judgment, purpose, convenience or quota

Any three (2X 3) = 6 Marks

23. What are the points to be kept in mind when preparing a good questionnaire?

(a) The questionnaire should not be too long. The number of questions should be minimum.

(b) The series of questions should move from general to specific. The questionnaire should start from general questions and proceed to more specific ones.

(c) The questions should be precise and clear.

(d) The questions should not be ambiguous. The respondents should be able to answer quickly, correctly and clearly.

(e) The question should not use double negatives. The questions starting with "Wouldn't you" or "Don't you" should be avoided, as they may lead to biased responses.

(f) The question should not be a leading question, which gives a clue about how the respondent should answer.

(g) The question should not indicate alternatives to the answer.

(h) The questionnaire may consist of closed ended (or structured) questions

Any six (1 X 6) = 6 Marks

or open ended (or unstructured) questions.

24. What is a frequency distribution? In a frequency distribution, how are the class limits determined?

Frequency distribution – 1 mark

A **frequency distribution** is a comprehensive way to classify raw data of a quantitative nature

Determination of class limits – 1 mark

Determination of class limits: The class limits must be such chosen that the mid-point or class mark of each class coincide, as far as possible, with any value around which the data tend to be concentrated. There are two different methods of class limits are:

Exclusive method – 2 marks

Exclusive Method: The classes, by this method, are formed in such a way that the upper class limit of one class equals the lower class limit of the next class. Under this method, the upper class limit is excluded but the lower class limit of a class is included in the interval. Therefore, any observation that is exactly equal to the upper class limit would not be included in that class but would be included in the next class. The lower class limit then it is included in that class.

Inclusive method 2 Marks

Inclusive Method: In comparison to the exclusive method, the Inclusive Method does not exclude the upper class limit in a class interval. It includes the upper class in a class. Thus both class limits are parts of the class interval.

1+1+2+2=6 Marks

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