Important snaps by Team PIS Class- xi SUBJECT: ECONOMICS

CHAPTER:

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- ▶ How will you choose the wants to be satisfied?
- An individual may have unlimited wants but these wants are in an order of priority according to their intensity. The wants of highest intensity will be fulfilled first as they provide the highest satisfaction or utility to the individual and hence, the individual attaches the top most priority to these wants.
- Further, the choice of want also depends on the need or priority in the given situation, availability of the goods and services which can satisfy the wants and the purchasing power to realise a particular want. Thus, depending on all these conditions, we can say that an individual having a limited budget will fulfil a particular need that would provide him/her the highest possible satisfaction in the given income and given prices of the goods and services required to satisfy the wants. satisfaction in the given income and given prices of the goods and services required to satisfy the wants.

- Statistical methods are no substitute for common sense. Comment.
- ▶ It is absolutely true that statistical methods are no substitute for common sense. Statistical data should not be believed blindly as they can be misinterpreted or misused. The statistical data may involve personal bias or may be subject to manipulations for one's own selfish motive.
- Statistical data and methods are subject to the errors committed by an investigator while surveying and collecting data. Thus, one should use his/her common sense while working with the statistical methods.
- This point can be understand with the help of an example A person who wanted to cross a river with his family but did not know how to swim. He knew the average depth of the river to be 125 cm. His height was 175 cm, that of his wife was 152 cm and his two children measured 120 cm and 90 cm respectively in height.

▶ The government and policy makers use statistical data to formulate suitable policies of economic development'. Illustrate with two examples.

Answer:

The statistical data provide the base for the government and the policy makers to formulate policies. The statistical data not only help them to analyse and evaluate the outcomes of the past policies but also assist them to take corrective measures and to formulate new policies. Statistical data also help the government to ascertain the relationship between economic variables and form policies accordingly.

- Give two examples each of sample, population and variable. Answer:
 - **Example 1** A study was conducted to know the average weight of students of class seventh in Delhi. The total number of students in class seventh was 2860. Out of these 200 students were randomly selected and their weight was recorded. In this example
- Population is, the no of students of class seventh in Delhi, the total number of which is equal to 2860.
- Sample is, the 200 students selected whose weight was recorded.
- Variable under study, is the weight of the students.

- Which of the following errors is more serious and why?
 - (a) Sampling error
 - (b) Non-sampling error

Answer:

- (b) Sampling error refers to the difference between the sample estimate and the actual value of a population characteristic. This type of error occurs when one makes an observation from the sample taken from the population. It is possible to reduce the magnitude of sampling error by taking a larger sample.
- Non-sampling errors are more serious than sampling errors because a sampling error can be minimised by taking a larger sample but it is difficult to minimise non-sampling error, even by taking a large sample. Even a Census can contain non-sampling errors. These include errors in data acquisition, non-response errors and sampling bias

- Discuss how you would use the lottery method to select 3 students out of 10 in your class? Answer:
 - A representative (random) sample of 3 students can be taken out of 10 through lottery method. The names of all the 10 students of the class are written on 10 separate pieces of paper of equal size and all the slips are folded in a similar manner. These slips are then mixed well and 3 slips with these names are selected one by one so that all the students have equal chance of being selected in the sample.
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- Can there be any advantage in classifying things? Explain with an example from your daily life. Answer:
 - Classification refers to arranging or organising similar things into groups or classes. Classification of objects or things saves our valuable time and effort. Classification is done to group things in such a way that each group consists of similar items, e.g., we classify our wardrobe into different types of clothes or dresses according to the occasions on which they are to be worn. We put party wears, school uniform, casual daily wears and night wears separately. This helps us in an orderly arrangement of clothes and we can easily fetch the clothes we want at a particular time without searching through the whole wardrobe. Thus, it is evident that classification saves time and labour and helps to produce the desired results.

- What is a variable? Distinguish between a discrete and a continuous variable. Answer:
 - A measurable characteristic which takes different values at different points of time and in different circumstance is called a variable as it keeps varying. Different varibles vary differently and depending on the way they vary, they are broadly classified into two types
- S.N.Discrete VariableContinuous Variable(i) A discrete variable can take only whole numbers. A continuous variable can take any numerical value. (ii) Discrete varibles increase in finite jumps from one value to another and cannot take any intermediate value between them. Continuous variables can take any conceivable value and can be broken into infinite gradations. (iii) Examples number of workers in a factory, number of residents in a colony, etc. Examples height, weight, distance, etc.

- Explain the 'exclusive' and 'inclusive' methods used in classification of data. Answer:
 - Exclusive Method In this method, the classes are formed in such a way that the upper class limit of one class becomes the lower class limit of the next class. Continuity of the data is maintained in this method. Under this method, the upper class limit is excluded but the lower class limit of a class is included in the interval.
- ▶ According to this method, an 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. On the other hand, if it were equal to the lower class limit then it would be included in that class, e.g., if the class intervals are 0-5, 5-10, 15¬20 and so on, a value of 10 would be included in the 10-15 and not in the interval 5-10.
- ▶ Inclusive Method The inclusive method does not exclude the upper class limit in a class interval. It inlcludes the upper class in a class. Thus, both class limits are parts of the class interval, e.g., the class intervals of 0-5, 6-10, 11-15, and so on are inclusive.

- Bar diagram is a
 - (a) one-dimensional diagram
 - (b) two-dimensional diagram
 - (c) diagram with no dimension
 - (d) None of these

Answer:

- (a) Bar diagrams are one-dimensional diagrams. Though these are represented on a plane of two axis in form of rectangular bars, the width is of no consequence and only the length depicts the frequency.
- Histogram can only be formed with continuous classification of data. (True/False) Answer:

True

A histogram is never drawn for a discrete variable/data. If the classes are not continuous they are first converted into continuous classes.

Histogram and column diagram are the same method of presentation of data. (True/False) Answer:

False

Histogram is a two dimensional diagram drawn for continuous data and the rectangles do not have spaces in between while column diagram is one dimensional with space in between every column (bar).

Median of a frequency distribution cannot be known from the ogives. (True/False) Answer:

False

Intersection-point of the less than and more than ogives gives the median

► A measure of dispersion is a good supplement to the central value in understanding a frequency distribution. Comment.

Answer:

- Dispersion is the extent to which values in a distribution differ from the avarage of the distribution. Knowledge of only average is insufficient as it does not reflect the quantum of variation in values.
- Measures of dispersion enhance the understanding of a distribution considerably by providing information about how much the actual value of items in a series deviate from the central value, e.g., per capita income gives only the average income but a measure of dispersion can tell you about income inequalities, thereby improving the understanding of the relative living standards of different sections of the society. Through value of dispersion one can better understand the distribution.

- Some measures of dispersion depend upon the spread of values whereas some calculate the variation of values from a central value. Do you agree?
 - Answer:
 - Yes, it is true that some measures of dispersion depend upon the spread of values, whereas some calculate the variation of values from the central value. Range and Quartile Deviation measure the dispersion by calculating the spread within which the value lie. Mean Deviation and Standard Deviation calculate the extent to which the values differ from the average or the central value.
- In town, 25% of the persons earned more than ₹ 45,000 whereas 75% earned more than 18,000.
 Calculate the absolute and relative values of dispersion.
 - Answer:
 - 25% of the persons earned more than ₹ 45,000. This implies that upper quartile Q_3 = 45,000 75% earned more than 18,000. This implies that lower quartile Q_1 = 18,000
 - Absolute Measure of Dispersion = $Q_3 Q_1 = 45,000 18,000 = 27,000$
 - Relative Measure of Dispersion

- ▶ What to produce? [CBSE 2004C, 05, 06, 08, 08C, 09, 10; AI 2006, 10]
 - (a) What to produce refers to a problem in which decision regarding which goods and services should be produced is to be taken.
 - (b) Since its resources are limited, every economy has to decide what commodities are to be produced and in what quantities.
 - (c) 'The guiding principle for an economy here is to allocate resources in such a way that gives maximum aggregate utility to the society.
- ► How to produce?[CBSE 2014C, 2006, 08C, 10, AI 2001, 05, 08, 10, 11]
 - (a) How to produce refers to a problem in which decision regarding which technique of production should be used is made.
 - (b) Goods and services can be produced in two ways: by using labour intensive techniques, and by using capital-intensive techniques.
 - (c) The guiding principle for an economy in such a case has to decide about the techniques of production on the basis of cost of production. Those techniques of production should be used which lead to the least possible cost per unit of commodity or service.

► For whom to produce?[CBSE 2014, 2005C, AI 2013]

- (a) For whom to produce refers to a problem in which decision regarding which category of people are going to consume a good, i.e., economically poor or rich.
- (b) As we know, goods and services are produced for those who can purchase them or have the capacity to buy them.
- (c) Capacity to buy depends upon how income is distributed among the factors of production. The higher the income, the higher will be the capacity to buy and vice versa. So, this is a problem of distribution.
- (d) The guiding principle is that the economy must see here that important and urgent wants of its citizens are being satisfied for the maximum possible extent or not.

- What do you mean by the production possibilities of an economy? [1 Mark]
 Answer: Production possibilities of an economy refer to different combinations of goods and services which an economy can produce from a given amount of resources and a given stock of technology.
- What is a production possibility frontier? [CBSE 2006C; AI 2006, 09] [1 Mark]
 Answer: Production possibility frontier is a curve which depicts all the possible combinations of two goods which can be produced with given resources and technology in an economy.
- Discuss the subject matter of economics. [3 Marks] Answer:
- ▶ The subject matter of economics includes microeconomics and macroeconomics.
- Microeconomics, studies the behaviour of individual economic units of an economy, like households, firms, individual consumers and producers etc. It does not study the economy as a whole.
- Macroeconomics is the part of economic theory that studies the economy as a whole, such as national income, aggregate employment, general price level, aggregate consumption, aggregate investment, etc.

- ▶ Define Budget Set. [CBSE 2011, 13] [1 Mark]
 Answer: Budget set is the collection of all bundles of goods that a consumer can buy with his income at the prevailing market prices.
- Question 2. What is Budget Line? [CBSE 2011, 13, 11C, A1 10][1 Mark]
 Answer: Budget line is a graphical representation which shows all the possible combinations of the two goods that a consumer can buy with the given income and prices of commodities. It is also called consumption possibility lin
- Why is budget line negatively sloped? [CBSE 2011 C][I Mark]
 Answer: 'Budget line is downward sloping because if a consumer wants to buy more of one commodity, he has to buy less of other goods, given money income
- Answer: There will be no change in the budget line. Let us understand this with the help of an example: Suppose, the price of goods 1 rises from Rs 4 to Rs 8 and that of goods 2 rises from Rs 5 to Rs 10. Income also rises from Rs 20 to Rs 40. With double increase in prices and income, intercepts on both X-axis and Y-axis will remain unchanged at 5 units (goods 1) and 4 units (goods 2) respectively. Slope of budget line will also remain the same. Therefore, there will be no change in the budget set and the budget li

- What is meant by demand? [CBSE 2005C, AI 07]
 Answer: Demand is a quantity of a commodity that a consumer wishes to purchase at a given level of
 - price and during a specified period of time.
- ▶ Define market demand. [CBSE 2008, 12, 13]
 Answer: Market demand refers to the quantity of a commodity that all the consumers are willing and able to buy, at a particular price during a given period of time.
- ue to rise in price of the commodity x, the demand of commodity y also rises. What type of commodity they are?
 - **Answer:** Substitute goods.
- ▶ How will an increase in the price of petrol affect the demand curve of a car?
 - **Answer:** The demand curve of a car will shift to the left.
- A fall in the income of the consumer leads to a rise in the demand for a good. What is good X called?

 Answer: Inferior good.

- Explain price elasticity of demand.
 Answer: The degree of responsiveness of quantity demanded to changes in price of commodity is known as price elasticity of demand.
- Define price elasticity of demand.
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- Why is price elasticity of demand has negative sign always? Answer: Price elasticity of demand is generally negative because of the inverse relationship between price and quantity demanded.
- Give the formula for measuring price elasticity of demand according to percentage method.
 Answer: Elasticity of demand (ED)
 Percentage change in quantity demanded Percentage change in price
- Question 4. Give the formula for measuring price elasticity of demand according to point method. Answer: Elasticity of demand (ED) Lower Segment of demand curve (LS) Upper Segment of demand curve (US)

- ▶ Define supply. [CBSE, Foreign 2004]
 Answer: Supply refers to the quantity of a commodity that a firm is willing and able to offer for sale, at each possible price during a given period of time.
- Define market supply. [CBSE 2005]
 Answer: Market supply refers to the quantity of a commodity that all firms are willing and able to offer for sale at each possible price during a given period of time.
- What effect does an decrease in input price has on the supply of the commodity? Answer: Supply will increase.
- What causes a movement along the supply curve of a good? [CBSE 2004]
 Answer: Change (increase or decrease) in price causes a movement along the supply curve.
- What causes a downward movement along a supply curve? [CBSE 2004, 09]
 Answer: Fall in price and fall in quantity supplied, i.e., contraction in supply.

- ▶ When do we say there is excess demand for a commodity in the market? [1 Mark]

 Answer: When Market price is below the equilibrium price, then at that given price, demand is greater than supply, which leads to excess demand.
- Question 4Answer: When Market price is above the equilibrium price, then at that given price, demand is lesser than supply, which leads to excess supply
- ▶ Define market equilibrium. [CBSE Foreign 2011]
 Answer: Market equilibrium refers to the situation when market demand is equal to the market supply.
- . Give the meaning of equilibrium price. [CBSE, Sample Paper 2010]

 Answer: The price at which equilibrium is reached is called equilibrium price.