

ICSE Board
Class X Economic Applications
Board Paper – 2016

Time: 2 hrs

Total Marks: 100

General Instructions:

1. *Answers to this paper must be written on the paper provided separately.*
 2. *You will **not** be allowed to write during the first **15** minutes.
This time is to be spent in reading the question paper.*
 3. *The time given at the head of the paper is the time allotted for writing the answers.*
 4. *Attempt **all** questions from **Part I** and **any four** questions from **Part II**.*
 5. *The intended marks of questions or parts of questions are given in brackets [].*
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PART I (40 Marks)

*Attempt **all** questions from this part.*

Question 1

- (a) What is meant by labour in economics? [2]
- (b) Construct an imaginary individual supply schedule. [2]
- (c) What are complementary goods? Explain its impact on demand. [2]
- (d) State two qualities of a successful entrepreneur. [2]
- (e) Explain any one disadvantage of division of labour. [2]

Question 2

- (a) What do you understand by bank rate? [2]
- (b) Classify the following into fixed and working capital. Give Reasons: [2]
 - (i) A television set in a hotel room.
 - (ii) Iron-ore in a steel plant
- (c) Identify the market forms for the items given below: [2]
 - (i) A single seller
 - (ii) Homogeneous goods
 - (iii) Product Differentiation
 - (iv) A single buyer
- (d) Define real capital. Give two examples. [2]
- (e) When is the demand for a good said to be perfectly inelastic? [2]

Question 3

- (a) Briefly explain why direct taxes foster civic consciousness among people. [2]
- (b) What is the impact of division of labour on cost of production? [2]
- (c) The price of a commodity rises from Rs 20.00 to Rs 40.00. Consequently its supply increases from 100 units to 400 units. Calculate the price elasticity of supply. [2]
- (d) State two agency functions of a Commercial bank. [2]

- (e) Give two reasons in favour of privatization of Public Sector Enterprises. [2]

Question 4

State whether the following statements are true or false. Give one reason for your answer.

- (a) Construction of dams can have negative impacts on the eco-system. [2]
- (b) The demand for inferior goods rises when the income of a consumer increases. [2]
- (c) A monopolist can sell the same product at different prices to different customers. [2]
- (d) During inflation the debtors gain and creditors lose. [2]
- (e) Labour is the beginning and end of production? [2]

PART II (60 Marks)

Attempt any four questions from this part

Question 5

- (a) What is demand? Explain how quantity demanded of a commodity X will be affected by : [7]
- (i) An increase in the price of its substitutes.
 - (ii) Consumer credit facility.
 - (iii) Government policy.
- (b) (i) What do you understand by efficiency of labour? Discuss any two causes of low efficiency of labour and suggest one measure to improve it. [8]

Question 6

- (a) With reference to land as a factor of production : [7]
- (i) Why is it considered a 'passive' and an 'indestructible' factor of production?
 - (ii) Mention two ways in which land is different from capital.
 - (iii) Discuss two important functions of land.
- (b) What is meant by an Indirect tax? Give two examples. Explain briefly two merits and two demerits of Indirect tax. [8]

Question 7

- (a) Define Ecosystem. Explain any two impacts of each of the following on the eco system: [7]
- (i) Industrialisation
 - (ii) Automobiles
 - (iii) Dwelling houses.
- (b) (i) Define a monopolistically competitive market. Give two examples of this market structure.
- (ii) Explain two important features of this type of market. State one similarity and one difference between monopolistic competition and perfect competition. [8]

Question 8

- (a) Define money. Explain how money can : [7]
- (i) Overcome the difficulties of double coincidence of wants.
 - (ii) Act as a store of value
 - (iii) Help producers employ various factors of production.
- (b) Explain clearly four ways by which the State can promote economic growth and development. [8]

Question 9

- (a) (i) What is the impact of the behaviour of cost of production on elasticity of supply? [7]
- (ii) Draw and explain the following degrees of elasticity of supply.
- i. $E_p = \alpha$
 - ii. $E_p = 0$
 - iii. $E_p > 1$
- (b) What are Commercial Banks? Explain clearly three methods adopted by Commercial Banks to borrow money from the public. [8]

Question 10

- (a) Read the extract and answer the questions that follow:
- Mumbai : Bankers today said, the sharp fall in inflation to 3.78% for July has raised hopes of another rate cut by RBI at September review of the policy. "Obviously, if more and more and more positive news on inflation front comes. It's a reasonable expectation to expect that rates will be cut at the September policy", reported Mr. Aditya Puri, the Managing Director of HDFC Bank. He said, the Governor of RBI, Mr. Raghuram Rajan had earlier said that RBI is actively looking at rate cut.
- (i) Name the policy implemented by RBI to control and regulate money supply. [7]
- (ii) Define creeping inflation. What is its impact on the economy?
- (iii) Explain how the following measures are adopted by RBI to control inflation:
- i. Change in Reserve Ratio
 - ii. Credit Rationing.
- (b) Explain four ways by which an entrepreneur can promote economic development. [8]

Solution

PART I

Answer 1

- (a) Labour is the aggregate of all human physical and mental effort used in the creation of goods and services.
- (b) An imaginary supply schedule is given below which shows the positive relationship between price and quantity supplied.

Price (in Rs)	Quantity Supplied
5	100
10	200
15	300

- (c) Goods which are used together to satisfy a particular want are complementary goods. An increase or decrease in the prices of complementary goods inversely affects the demand for the given quantity.
- (d) Qualities of an entrepreneur:
- Efficient to identify skilled resource and to assign work according to tastes and preferences
 - Ability to predict future market and business conditions
- (e) Monotony of work is one of the disadvantages of division of labour. If workers do the same work repeatedly, then they get bored and dull when completing the task.

Answer 2

- (a) Bank rate is used as the main instrument of monetary control during inflation. The increase in bank rate increases the cost of borrowing which reduces commercial banks borrowing from the central bank. Consequently, the flow of money from the commercial banks to the public reduces. Therefore, inflation arising because of bank credit is controlled.
- (b) Working and fixed capital
- A television set in a hotel room is fixed capital which is used for many years.
 - Iron ore in a steel plant is working capital because it is the raw material used in the production process.
- (c) Market forms
- A single seller: Monopoly
 - Homogeneous goods: Perfect competition
 - Product differentiation: Monopolistic competition
 - A single buyer: Monopsony

- (d) Real capital refers to the physical stock of goods which are used as inputs in the production process. Examples: Machines, raw materials
- (e) When there is no change in demand with change in price, the demand for such a commodity is said to be perfectly inelastic ($E_d = 0$).

Answer 3

(a) Direct tax is imposed on the income of a person based on the principle of ability to pay. The income tax burden is equitably distributed on different people and institutions. Thereby the tax burden falls more on the rich than on the poor. Hence, direct taxes foster civic consciousness among people.

(b) Division of labour increases efficiency of labour. Workers become more specialised if they are entrusted with only a part of the work in production. When efficiency of labour increases, it increases the quantity and quality of production. Society can produce goods at a lower cost of production.

(c) Given that price is Rs 20 to Rs 40 and supply is 100 units to 400 units,

$$\text{Price elasticity of supply} = E_s = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q} = \frac{300}{20} \times \frac{20}{100} = 3$$

Therefore, price elasticity of supply is highly elastic ($E_s > 1$)

(d) Agency functions of commercial banks:

- i. Commercial banks provide services like collection and making payments for their customers such as insurance premiums and dividends.
- ii. They also help in transferring funds from one place to another in the form of cheques and drafts.

(e) Favourable reasons for the privatisation of public sector enterprises:

- i. Lack of efficient management has thrown most PSUs in darkness.
- ii. High construction cost because most government projects were not completed within the stipulated time, so the estimated expenditures had increased over the period.

Answer 4

(a) **True.** Construction of a dam causes destruction of the ecosystem because of deforestation. This change in land use has destroyed the natural habitats of organisms and many are on the verge of extinction.

(b) **False.** Inferior goods refer to goods whose demand decreases with an increase in income. This is because there is an inverse relationship between income and the demand for inferior goods.

(c) **True.** A monopolist can sell the same product at different prices to different customers because products are differentiated only on the basis of brand, colour and size. Here, the product of a firm is close but not a perfect substitute of the other.

(d) **True.** Debtors borrow from creditors to repay with interest at some future date. Changes in the price level affect them differently at different time periods. During inflation, when the prices rise and the real value of money goes down, the debtors pay back less in real terms than what they had borrowed and thus to that extent they are

gainers. On the other hand, the creditors get less in terms of goods and services than what they had lent and lose to that extent.

- (e) **True.** Labour is the beginning and end of production because one produces goods as well as consumes them. The demand for goods depends on the level of their earnings.

PART II

Answer 5

- (a) Demand for a good refers to the desire to buy a good backed with sufficient purchasing power and the willingness to spend.

Change in quantity demanded means the movements along the demand curve, i.e. the extension of demand caused by a decrease in price of the same good and the contraction of demand caused by an increase in the price of the same good. Therefore, an increase in the price of its substitute good, consumer credit facility and government policy does not affect the quantity demanded.

- (b) Efficiency of labour means the productive capacity of a worker. It indicates the ability of the worker to do more work or better work during a given period of time.

Cause of low efficiency of labour:

- i. Climatic differences affect efficiency of labour in production. The hot and humid climate of majority states of India is a factor which prevents people from doing more work and thus the ability to display high efficiency.
- ii. The ability and willingness of workers to work and learn skills depend on their health, the wage rate and the standard of living. Generally, the wages are low and labourers are poorly fed. Hence, the low standard of living affects the efficiency of work.

Measure to improve efficiency of labour:

Eradication of illiteracy is a priority to improve efficiency of labour.

Answer 6

(a) Land as factor of production:

- i. Land is a **passive factor of production** because it cannot produce anything on its own. Example: Land cannot produce food grains without the help of labour and capital. Land is **indestructible** because it cannot go out of existence. It can never be destroyed; although the fertility of land can be used up, it can always be renewed. A labourer would die one day, and hence, he will no longer be able to provide service in the productive activity.
- ii. **Land is different from capital:** (a) Capital is a passive factor of production, whereas labour is an active factor of production. (b) Capital can be separated from the owner, whereas labour cannot be separated from labourers.
- iii. **Functions of land:** (a) Determines agricultural production: The supply of land resources determines the level of agricultural production in an economy. Nearly 43% of the land area of India is plains and is suitable for crop cultivation. (b) Industrial development: Land resources of an economy help in industrialisation.

Raw materials for industry are obtained from land. Power needed to run an industry is also supplied by land.

- (b) Indirect taxes are imposed on an individual but are paid by another person either partly or wholly. Hence, the impact and incidence of taxes are on different people. Customs and excise duties are examples of indirect taxes. Here, the producer bears the impact and the incidence of tax on the consumer.

Merits of indirect tax

- i. **Broad coverage:** In the case of tax on a commodity, all the buyers of the commodity have to pay an indirect tax irrespective of their income level, whether they belong to high income groups or low income groups. By widening the tax net, the government can yield more revenue for public expenditure.
- ii. **Convenient:** Indirect taxes are paid in small portions at regular intervals. It is not a burden to the tax payer as it is included in the price of the commodity.

Demerits of indirect tax

- i. **Uncertain:** Taxes on goods with elastic demands are uncertain. When the commodity is taxed, prices of the commodity increases which reduces the demand for the commodity in the market. Hence, the revenue from indirect tax is uncertain.
- ii. **Discourage savings:** Most of the income is spent on consumption of goods where the price of goods includes indirect tax, thus making savings impossible.

Answer 7

- (a) An ecosystem is a group of living and non-living things which are interdependent and are found in a particular type of environment.

Impacts of destruction of an ecosystem:

- i. **Dwelling houses:** Because of an increase in population growth rate and *per capita* consumption of resources, the ecosystem is being changed and destroyed.
 - **Deforestation** is undertaken to accommodate more human settlement.
 - Because of widespread construction, the **local groundwater level** has declined and cities have to make provision for external sources of water.
- ii. **Automobiles:** Air pollution has also increased enormously with an increase in the number of automobiles. Engines give off incompletely burnt waste products, including carbon, carbon dioxide, various oxides of nitrogen and hydrogen. These gases lead to innumerable environmental hazards and health hazards in individuals.
- iii. **Industrialisation:**
 - **Air pollution** has also increased enormously with an increase in the number of industries and factories. Gases such as carbon dioxide, sulphur and nitrogen are emitted from various industries. These gases lead to environmental and health hazards such as acid rain and skin disorders in individuals.
 - Dumping of industrial wastes is the main factor which contributes to **soil pollution**. Industrial wastes contain chemicals which get accumulated on the top layer of the soil, leading to a loss of fertility of the soil.

- (b) Monopolistic competition is a form of market in which there are many sellers of the product, but the product of each seller is different from the other. Example: Selling toothpastes such as *Colgate*, *Pepsodent* and *Closeup*.

Features:

- i. A monopolistic firm has partial control over price only through product differentiation. Products are differentiated through design and colour of packaging. This attracts consumers to buy the product at a higher price. As there are many rivals and close substitutes of products in the market, a monopolistic firm cannot have full control over the price.
- ii. In monopolistic competition, the firm has a negatively sloped demand curve which is more elastic. A large quantity of the product can be sold by reducing its price. It is more elastic than the demand curve of a monopoly firm because of close substitutes available in the market.

Similarity: Both perfect and monopolistic competition have a large number of buyers and sellers of a commodity.

Difference: Perfect competition is a form of the market which does not incur any selling costs for products, whereas monopolistic competition is a form of the market which incurs high selling costs for products.

Answer 8

- (a) Money is commonly accepted as a medium of exchange. It is an instrument which serves as a medium of exchange, a measure of value, a store of value and a standard for deferred payments.

Functions of money:

- i. ***Money acts as a medium of exchange:*** The introduction of money resulted in the end of the barter system, where goods were exchanged according to needs. Now, money acts as an intermediate in the exchange process and is thus known as a medium of exchange. Anyone can exchange goods for money and buy commodities which are required for personal use. Thus, it ***overcomes the difficulty of double coincidence of wants***.
- ii. ***Money acts as store of value:*** People keep their wealth in the form of money because money is the most liquid form of wealth. Savings in the form of money are maintained for purchasing commodities in the future. In this case, the value of commodities is stored. Hence, money acts as a store of value.
- iii. ***Money has made deferred payments easier:*** Deferred payments refer to payments which are made in the future. When money is borrowed, the principal and interest amounts have to be returned to the lender. However, these transactions are not possible in terms of goods and services. Money performs this function more effectively. Thus, it enables ***producers to employ factors of production***.

- (b) The state plays an important role in the development of an economy by generating employment for the poor and promoting their social welfare. **Promotional role of the state in economic development is as follows:**

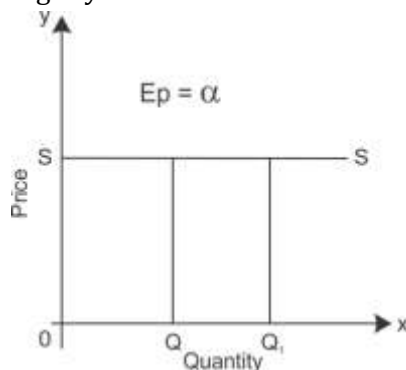
- i. Providing rural infrastructure and extending credit to the poor at a low rate of interest as an effective instrument to remove poverty.
- ii. Development of infrastructure such as transport, irrigation system, power and electricity, and communication is required to promote agricultural and industrial development.
- iii. The state has to intervene in macro-economic management of the economy. The government can intervene in some sections of the population which are not covered by market mechanism.
- iv. Income inequality is not a healthy phenomenon. Revenue policy and public expenditure policy are two measures undertaken by the government to reduce income inequality in an economy. The progressive and proportional system of taxation helps reduce the gap between the rich and the poor. All the public expenditure incurred in the projects will benefit the middle classes and the poor sections of an economy.

Answer 9

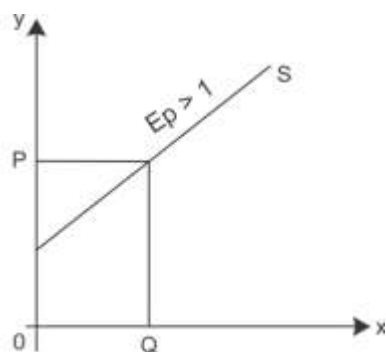
(a) Impact of the behaviour of cost of production on elasticity of supply: The price elasticity of supply of any commodity depends on the nature and supply of inputs required for the production of that commodity. If these inputs are easily available, then the supply of that commodity will be relatively elastic. Otherwise, its supply becomes relatively inelastic because of the non-availability of inputs. Thus, the cost of production varies according to the nature and supply of inputs.

(b) Degree of elasticity of supply:

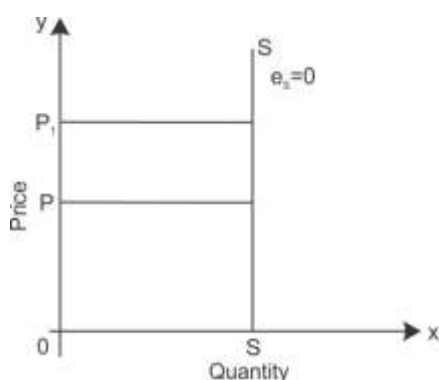
- i. $E_p = \infty$: Supply is said to be infinite when $E_p = \infty$. Infinite elasticity of supply refers to a horizontal straight line supply curve which shows infinite supply corresponding to a particular price of the commodity. The below diagram shows that the quantity supplied is infinite when the price of the commodity is OS. It reduces to zero even when the price is slightly reduced.



- ii. $E_p > 1$: Supply is said to be elastic when $E_p > 1$. Elastic supply refers to a straight line, positively sloped supply curve from the y-axis irrespective of the angle it makes. The below diagram shows that the quantity supplied is elastic, i.e. an increase in the price of the commodity from OP will lead to extension of supply.



- iii. $E_p = 0$: When the supply of a commodity becomes completely price-inelastic, the supply curve becomes parallel to the vertical axis.



Answer 10

(a) Banking:

- i. Bank rate is the policy implemented by the RBI to control and regulate money supply.
- ii. Creeping inflation: Creeping inflation is inflation where the price level increases at a slow rate of 2–2.5% per annum. It keeps away from the stagnant situation in an economy. However, it is also dangerous for the economy as it extends for a long time.

iii. Measures adopted by RBI to control inflation:

Cash Reserve Ratio (CRR): While controlling inflation, the central bank raises the CRR which reduces the lending capacity of commercial banks. Consequently, the flow of money from commercial banks to the public decreases. In the process, it halts the rise in prices arising due to bank credits to the public.

Credit rationing: The quota system was introduced in 1960. The RBI fixes credit quota for member banks. If a member bank seeks more loan than its fixed quota, then it will have to pay higher interest.

(b) Entrepreneur to promote economic development

- i. Risk bearing and innovative capabilities are associated with entrepreneurship. Entrepreneurs introduce cost-reducing or demand-creating innovations in various industries, and industrial production becomes a factor. Hence, the country would become self-sufficient in the production of a various industrial

goods of high quality to cater to the changing needs of domestic and international markets.

- ii. Contribution towards the generation of higher employment and income opportunities. They spend a greater portion of their profits in new ventures or for productive purposes. Hence, higher investment can create more employment and income opportunities within the country.
- iii. They set up industries in backward regions to avail various concessions and subsidies provided by the government. This enables to reduce regional disparities in an economy.
- iv. They also help the economy to reduce dependence on foreign countries by producing indigenous substitutes of imported goods.