

ICSE Paper 2019

Economic Applications

- Answers to this Paper must be written on the paper provided separately.
 - You will not be allowed to write during the first 15 minutes.
 - This time is to be spent in reading the Question Paper.
 - The time given at the head of this Paper is the time allowed for writing the answers.
 - Section I is compulsory. Attempt any four questions from Section II.
 - The intended marks for questions or parts of questions are given in brackets [].
-

SECTION – I [40 Marks]

(Attempt all questions from this Section)

Question 1.

- (a) State the Law of Supply. [2]
- (b) "Entrepreneurs are innovators." Briefly explain. [2]
- (c) What do you understand by hyperinflation? [2]
- (d) Mining operations can destroy the ecosystem. Give two reasons to support the statement. [2]
- (e) Highlight the importance of selling costs in a monopolistically competitive market. [2]

Answers:

- (a) The law of supply states that other things being equal, the quantity of a good supplied increases with an increase in price level and decreases with a decrease in price level of the good. The supply schedule and supply curve show the positive relationship between price and quantity supplied.
- (b) When entrepreneurs adopt new inventions in the production process it is called innovation. Through innovation an entrepreneur can bring about appropriate alteration in his production methods. Product variation is possible through this innovation according to consumer's choice. Hence according to Schumpeter "the entrepreneurs are innovators".
- (c) When prices rise very fast at double or triple digit rates from more than 20 to 100 per cent per annum or more, it is usually called hyperinflation or galloping inflation.

(d) (i) Physical effects: Soil compaction is one of the most severe effects of mining on the ecosystem. It is a result of large machinery moving across the landscape. Compaction minimises the potential for plant establishment, lowering overall fertility of the soil and increasing water movement through the soil and landscape.

(ii) Chemical effects: Mining operations often contaminate the soil with toxic heavy metals and acids. Acids can lower the pH of the soil, preventing plants and soil micro-organisms from thriving.

(e) Under monopolistic competition, products are differentiated and these differences are made known to the buyers through selling costs. Selling costs refer to the expenses incurred on marketing, sales promotion and advertisement of the product. Such costs are incurred to persuade the buyers to buy a particular brand of the product in preference to competitor's brand. Due to this reason, selling costs constitute a substantial part of the total cost under monopolistic competition.

Question 2.

(a) Land is heterogeneous in nature. Explain. [2]

(b) How does the presence of banks in a country help in capital formation? [2]

(c) Which of the following is considered as labour in Economics? [2]

(i) Acting done by a film star.

(ii) The judgement given by a judge in the court.

(iii) Washing of clothes by a washer man.

(iv) Preparation of tea by a housewife.

(d) Why is money referred to as legal tender money? [2]

(e) What is meant by product differentiation? In which market form is it prevalent? [2]

Answers :

(a) Land like other factors of production differs from another in respect of location, fertility, nature and productivity. Two prices of land are not exactly the same.

(b) Public sector collects savings of the people and helps in capital formation. The nationalised as well as private banks have played an important role in collecting savings and mobilisation of resources.

(c) (i) Yes – Productive

(ii) Yes – Service

(iii) Yes – Service

(iv) No – Non Productive

(d) Legal tender money means that money which individuals are bound to accept it in the payment of goods and services. It cannot be refused in settlement of payments, e.g., coins and currency notes.

(e) Product differentiation means slightly different products of each seller. It prevails in monopolistic competition.

Question 3.

(a) State the formula for calculating the Price Elasticity of demand using the Percentage method. [2]

(b) Explain the impact of inflation on the fixed income group of people. [2]

(c) Give two examples of a pair of commodities that are substitutes of each other. [2]

(d) Explain how an improper price policy results in the poor performance of public sector enterprises. [2]

(e) Differentiate between capital and capital formation. [2]

Answers:

(a) According to this method, price elasticity of demand is measured as the ratio of percentage change in the quantity demanded to percentage change in the price.

$$E_d = - \frac{\text{Percentage Change in } Q_d}{\text{Percentage Change in Price}}$$

$$E_d = - \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

Where, ΔQ = Change in Q_d

ΔP = Change in Price

P = Initial Price

Q = Initial Quantity

(b) Inflation adversely affects fixed income groups like salaried people and pension earners as the real income falls.

(c) (i) Tea and Coffee

(ii) Computer and Laptop

(d) (i) The basic aim of the Public Sector is public welfare and economic development.

(ii) Due to this Public Sector keep the prices of their products low. Some time lowers than the cost of production.

(iii) This lowers the profit margin.

(iv) Lower profit margin leads to lower capital formation and ultimately still lower profits.

(e) Capital : It includes all man-made productive assets such as buildings, machinery, materials, fuels etc.

Capital formation : By capital formation we mean the increase in the stock of capital goods (e.g., machines, equipments, buildings, means of transport, factories, etc.) which are used for more production.

Question 4.

- (a) How does direct tax reduce income inequality? [2]
- (b) What are Public Sector Enterprises? Give two examples of Public Sector Enterprises in India. [2]
- (c) Distinguish between sunk capital and floating capital. [2]
- (d) Briefly explain the following credit control methods adopted by the Central bank : [2]
 - (i) Publicity
 - (ii) Moral persuasion
- (e) Name any two instruments of Fiscal Policy. [2]

Answers:

(a) Direct taxes reduce income inequality, because they are charged according to the income of person. Higher incomes are charged at higher rates than lower incomes.

(b) Public sector enterprises are those enterprises which are owned and managed by the government. Example : State Trading Corporation (S.T.C.), Hindustan Steel' Limited.

(c) Sunk Capital: Capital is said to be sunk when it is put to some special use and it cannot be shifted to any other use. It always remains at the place where it is fixed.

Factory, machine or roads can be described as sunk capital.

Floating capital : Floating capital is the capital which can be used in alternative lines of production. It is also called free capital. Examples: Steel, wood, raw materials etc.

(d) (i) Publicity:

The Central Bank undertakes publicity to educate and influence the commercial banks and the public opinion about the money market trends and banking conditions in the country. It publishes statements of its assets, policies, plans and programmes to be adopted in the country. During inflation it advice the banks and people to avoid non-productive loans.

(ii) Moral persuasion : Under this method, the Central Bank applies the policy of persuasion and pressure on the commercial banks in order to get them to fall in line with its policy.

(e) Taxes, subsidies, public debt etc.

PART – II [60 Marks]

(Attempt any four questions from this part)

Question 5.

- (a) (i) Prepare an individual supply schedule. [7]
(ii) Draw a supply curve based on the schedule prepared above.
(iii) State three assumptions of the law of supply.
(b) Explain four reasons as to why land is considered to be an important factor of production. [8]

Answers:

(a) (i) Individual supply schedule : Individual supply schedule shows the different quantities of a commodity that an individual firm or producer is prepared to sell at various prices. The law of supply can be explained with the help of individual supply schedule :

Table

Hypothetical Individual Supply Schedule for Commodity X

Price per unit of X(in ₹)	Quantity supplied of X per month (Units)
2	20
3	40
4	60
5	80
6	100

A hypothetical individual supply schedule of commodity X is given in Table. It is clear from the above individual supply schedule that more and more quantity of commodity X is being offered for sale by the firm as the price of the commodity increases. The firm is willing to supply 20 units of product X per month when the product price is ₹ 2 per unit. When the price rises to ₹ 3 per unit, it is now willing to sell 40 units of the commodity.

(ii) Supply curve is a graphical representation of a supply schedule. Individual supply curve reflects an individual supply schedule and market supply curve represents a market supply schedule. Figure has been graphed according to Table. Thus, curve SS reflects the individual supply curve.

Supply curve (as shown in Fig.) has a positive slope, i.e., it moves upward from left to right. It shows that more quantity will be supplied at higher prices and vice-versa. The various points on the supply curve (such as a, b, c, d & e) represent different possible

price-quantity combinations. The positively sloping supply curve SS shows the direct relationship between price and quantity supplied.

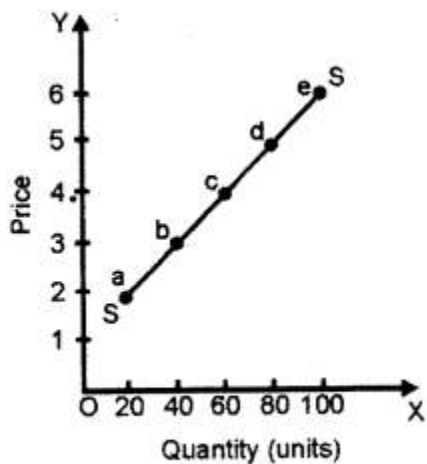


Fig. : Individual Supply Curve

(iii) The phrase 'other things being equal' as used in the law of supply indicates its assumptions. The main assumptions of the law are as follows :

- Price of other related goods should not change.
- Technology of production should not change.
- Cost of factors of production should remain the same.

(b) Land is an important factor of production inspite of the factor that land is a passive factor of production, no production can start without it. The importance of land becomes evident from the following facts :

(i) **Agricultural Development** : The agricultural development of a country largely depends upon the quantity and the quality of land. About 43 per cent of land area of India is plain and suitable for crop farming. Some parts of India have good climate, good rainfall and fertile lands and therefore then help in prosperous farming. The development of primary industries such as fishing, mining, forestry, etc., is determined by the quality of land found in the country. About 27 per cent of land area in India is mountainous which provides natural resources in form of forests and mineral resources.

(ii) **Industrial Development** : The development of industries is also dependent upon land, because the raw materials for these industries are ultimately obtained from land. What is more, the power (i.e., electricity, coal, etc.) to run such industries is also provided by land.

(iii) Development of the Means of Transport and Communication : Land facilitates the development of the means of transport and communication in country. Sea coast and rivers provide navigation facilities for transportation. However, the construction of roads and railway tracks turns out to be very costly and expensive in hilly regions.

(iv) Importance to Man : Much of our requirements of food, clothing, etc., are directly or indirectly met from land. Our food consists of rice, wheat, other cereals and pulses, fish, meat, eggs, milk, etc. all our food comes from plants and animals which nature supports. Not only food, even clothing comes from nature. Cotton cloth, woollen cloth and silk are products of plants and animals. Land is the main source of our agricultural activities. Residential houses are constructed on land. Not only this, houses are made of bricks, stone, wood and steel, all of which in their raw form come from nature.

Question 6.

(a) Does a demand curve always have a negative slope ? Give three reasons to justify your answer. [7]

(b) Point out the differences between perfect competition and monopoly on the basis of : [8]

- (i) Number of sellers
- (ii) Market price
- (iii) Entry of Firms
- (iv) Type of products produced

Answers:

(a) (i) The Giffen's Paradox : A fall in the price of inferior goods (Giffen Goods) tends to reduce its demand and a rise in its price tends to extend its demand. This phenomenon was first observed by SIR ROBERT GIFFEN, popularly known as Giffen's paradox. He observed that the working class families of U.K. were compelled to curtail their consumption of meat in order to be able to spend more on bread.

Mr. Giffen, British economist, observed that rise in the price of bread caused the low paid British workers to buy more bread. These workers lived mainly on the diet of bread, when price rose, as they had to spend more for a given quantity of bread, they could not buy as much meat as before. Bread still being comparatively cheaper was substituted for meat even at its high price.

(ii) Fear of Shortage : The people may buy more of a commodity even at higher prices when they fear of a shortage of that commodity in near future. This is contrary to the law of demand. It may happen during times of war and inflation and mostly in the case of goods which fall in the category of necessities of life like sugar, kerosene oil etc.

(iii) Conspicuous Necessities : Another exception occurs in use of such commodities as due to their constant use, have become necessities of life. For example, inspite of

the fact that the prices of television sets, refrigerators, washing machines, cooking gas, scooters etc., have been continuously rising, their demand does not show any tendency to fall. More or less same tendency can be observed in case of most of other commodities that can be termed as 'Upper- Sector Goods'.

Basis	Perfect Competition	Monopoly
(i) Number of Sellers	There are very large number of sellers.	There is a single seller.
(ii) Market price	Firm is a price-taker.	Firm is a price-maker.
(iii) Entry of Firms	There is freedom of entry and exit. So there is no possibility of abnormal profits and losses in the long run.	There is restriction on entry and exit. So, a firm can earn abnormal profits and losses in the long run.
(iv) Type of products produced	The product is homogeneous. i.e., it is identical in all respects.	There are no close substitutes of the product.

Question 7.

(a) Why is labour an important factor of production ? Explain the following characteristics of labour :

(i) Labour cannot be separated from the labourer. [7]

(ii) Labour can improve its efficiency.

(iii) Labour is perishable.

(b) Discuss four ways in which an entrepreneur contributes to Economic development. [8]

Answers:

(a) (i) Labour cannot be separated from Labourer : Land and capital can be separated from their owners but labour cannot be separated from a labourer. Labour and labourer are inseparable from each other. The labourer will have to present himself at a place where work is going on. For example, it is not possible for a teacher to teach in the school, while staying away at home. Therefore, the worker and his service go together. He cannot sell his labour like land and capital.

(ii) Labour can improve its efficiency : The supply of labour is inelastic in a country at a particular time. It means its supply can neither be increased nor decreased. For example, if a country has scarcity of a particular type of workers, its supply cannot be increased within a day, month or year. The supply of labour depends upon the size of population. Population cannot be increased or decreased quickly. Children take time to become workers.

(iii) Labour is perishable : If a worker does not work on a particular day, his labour for that day is wasted. Labour is, thus, perishable. Labour cannot be stored. The labourer has to sell his labour immediately irrespective of the prices (i.e., wages) paid to him. It is because of this feature that labour has a weak bargaining power.

(b) Entrepreneurs play an important role in production. In every type of production, element of risk always exists. It is only the entrepreneur who bears risks involved in business. It is due to this fact that entrepreneurship is regarded as an indispensable factor of production. As the risk element in the business (due to operation of several unforeseen factors such as change in demand, technology, etc.) has gone up in modern production, the importance of entrepreneurship has increased considerably. In fact, greater the element of risk, greater is the importance of entrepreneurship in production.

The truth is that the economic development of a country is determined by the number and quality of its entrepreneurs.

(i) The size of national income which is considered the indicator of economic development of a nation is largely determined by the amount and quality of entrepreneurial resources. What is produced, how much is produced and how efficiently is produced, all depend upon the class of entrepreneurs. A country will be able to produce a large amount of output and generate a large national income if it possesses a large number of entrepreneurs with a modern outlook.

(ii) Secondly, entrepreneurs mobilise idle savings of the public through the issues of shares and debentures. Investment of these public savings in industry results in capital formation which is regarded crucial for economic development.

(iii) Thirdly, entrepreneurs generate employment opportunities and thus help to reduce unemployment problem in the country.

(iv) Fourthly, they also set up industries in the backward areas of the country to avail various concessions and subsidies provided by the government. In this way, they help to reduce regional disparities in the country.

Question 8.

(a) Define Money. Explain the secondary functions of money. [7]

(b) Explain the methods adopted by Commercial Banks to mobilize funds from the public. [8]

Answers:

(a) Money is anything which is universally accepted as a medium of exchange, measure of value, store of value and standard of deferred payments and has divisibility and

transferability. Money is the means of valuation and of payment; as both the unit of account and the generally accepted medium of exchange.

1. Standard of deferred payment : Most of the business transactions are done on credit basis, which call for future payments. Borrowing and lending is generally carried in terms of money whose value remain fairly stable.
2. Store of Value : Money enables a person to preserve value without fear of loss. Money can be stored easily in banks without loosing its value, risk and uncertainty.
3. Transfer of Value : Money serves as a transfer of value from place to place and from time to time. It can be transferred from one place to another through cheques, money orders and drafts.”

(b) Commercial Banks play an important role in mobilizing savings from the individual savers. They provide the households, the most important agency where they may deposit their savings, to earn income based on interest assuring a high degree of security of their funds.

There are various kinds of deposits through which Commercial Banks mobilize funds :

1. Fixed Deposit Account : In such deposits, the deposited amount can be withdrawn only after the period of time agreed upon by the bank and the depositor. The interest rates are higher in case of such deposits. The longer the period, higher is the interest rate. However, in practice banks allow the depositors to withdraw funds from such deposits even before the maturity period, but at a low interest.

2. Current Account : A depositor can withdraw their money from such accounts at any time. Usually no interest is paid by the bank on such deposits, but in fact, the bank charges some amount for the services rendered on maintaining such deposits. In some cases, the bank provides overdraft facility also to the depositor against certain securities or personal guarantee. Such deposits are mainly kept by traders and industrialists who are required to make regular deposits and payments through banks.

3. Savings Account : This kind of account is opened by banks with the objective of collecting small savings from the people who have small earnings, and deposit, in small amounts as they like, but the withdrawals are allowed, thrice a week only. However, the rate of interest is less than that on fixed deposits.

4 Recurring Account : In case of such deposits, an account holder has to deposit certain fixed amount every month for a specified period. The amount accumulated along with interest is paid to the depositor after the specified period. Rate of interest paid by the bank is higher than the savings account but less than the fixed deposit account.

Question 9.

(a) What is meant by urbanisation ? Explain three negative impacts of urbanisation on the eco-system.

(b) State two merits and two demerits of direct taxes. [8]

Answers :

(a) Development of cities and towns is known as urbanisation.

Adverse impact of urbanisation on the ecosystem :

Temperature : Temperature increases severely due to factors such as paving over formerly vegetated land, increasing the number of residences and giant apartments and industries.

Air pollution : There is enormous growth of factories and automobiles due to urbanisation. Harmful emissions of gases and smoke from factories and vehicles cause air pollution. It contributes to allergies and respiratory problems, thereby becoming a huge health hazard.

Water issues : The water cycle changes as cities have more precipitation than surrounding areas. Dumping of sewage can lead to outbreaks of epidemics.

(b) Two merits of Direct Tax are :

1. Economical : Direct taxes are economical because the cost of collecting these taxes is relatively low as they are collected at source and paid to the government by the tax payers.
2. Certainty : Direct tax satisfy tax payers as they have the knowledge of correct assessment of tax and the government is fully aware of the amount of tax revenue they will receive.

Two demerits of Direct Tax are :

1. Possibility of evasion : The collection of direct tax is dependent on the honesty and good intentions of the tax-payers. Hence, there is a great possibility of tax-evasion.
2. Inconvenience : Direct taxes are considered highly inconvenient by the tax-payers. The tax-payers have to maintain accounts and submit statements of their income with other relevant details. This creates inconvenience to the tax-payers.

Question 10.

(a) Read the extract given below and answer the questions that follow :

Economic Times, April 12,2018, New Delhi

NEW DELHI : The Tata Group remains in the race for Air India, the debt-laden national

carrier on which IndiGo, Jet Airways and Emirates are no longer keen. Other airlines still interested in participating in the privatisation of Air India include Lufthansa and Singapore Airlines. Reuters on Wednesday reported that the Tata Group is not interested in bidding for Air India. But sources told ET that the Tata's have not pulled out, and are still interested in acquiring Air India along with a foreign partner. Meanwhile, in another move that will allow bidders to change members between the initial and final bidding stages, likely suitors for Air India have sought a relaxation in the norms for consortia participating in the debt-laden carrier's privatisation.

(i) Explain any two ways in which the government can undertake privatisation of public sector units. [4]

(ii) State three reasons for the need for privatisation. [3]

(b) Discuss four ways in which the State plays an important role in Economic Development. [8]

Answers:

(a) (i) 1. Contraction of Public Sector : Number of industries reserved for the public sector has been reduced from 17 to 8. And now only 3 industries (namely, atomic minerals, atomic energy and rail transport) are reserved for the public sector. Hence, even core industries like iron and steel, electricity, air transport, shipbuilding, heavy machines and strategic industries like defence productions have been opened for the private sector.

2. Policy of Disinvestment: Selling off a part of the equity of public sector undertakings is called disinvestment. According to the government, the purpose of disinvestments of shares of PSUs was to raise resources for the budget to reduce fiscal deficit and to provide funds for the modernisation of PSUs. The government has adopted two methods of disinvestments – (i) selling of shares in select PSUs and (ii) strategic sale of a PSU. Disinvestment was primarily through sale of minority shares in small lots.

Under the latter method, the government started selling major part of its stake one or another a private sector company. It resorted to strategic sales of a number of companies. Modem Foods India, Bharat Aluminium Company (BALCO), Videsh Sanchar Nigam Ltd. (VSNL), Maruti Udyog Ltd. (MUL) etc. are examples of strategic sales. At present, the emphasis is to list large profitable PSUs on domestic stock exchanges and to sell their equity in small portions.

(ii) (a) Poor performance of Public Enterprises : In view of the poor performance of public sector undertakings, public sector has become an economic burden on the national economy.

(b) Rising Budgetary Deficits : The budgetary deficits in India are increasing considerably and further contribute to rising prices. To reduce budgetary deficits, the scope of public sector should be contracted and that of private sector be expanded.

(c) High Capital Output Ratio : The capital output ratio in the economy has been increasing particularly for the public sector. It is likely to increase further. High capital output ratio in the public sector demands privatisation. In short, as private enterprises are motivated by profits, they take right economic decisions. This will avoid the wastage of resources. Hence, the economy is expected to show greater efficiency and productivity under privatisation.

(b) (i) Promotion of welfare : In India, 'socialistic pattern of society' has been regarded as the national goal. This goal calls for state participation in industrial and commercial enterprises to promote social welfare. In our economy, public sector enterprises are being used as an instrument to promote economic growth with social justice.

(ii) Infrastructure : Without the development of infrastructural facilities (such as transport, communication, power, irrigation, education, basic industries, etc.) economic development is not possible. These infrastructural facilities are developed only by the public sector of the country because private sector does not take interest in their development due to lack of resources and less profitability. Public sector investment in infrastructure has paved the way for agricultural and industrial development.

(iii) Strong Industrial Base : There is no denying the fact that rapid industrialisation during the first three decades after independence was mainly due to the public sector. Thus, by developing a strong industrial base, the public sector has now opened the path of rapid industrialisation of the country.

(iv) Export Promotion and Import Substitution : Public sector enterprises have been contributing a lot for the promotion of India's exports. This has resulted in foreign exchange earning.