ICSE Paper 2011
ECONOMIC APPLICATIONS

SOLVED PAPER

(Two Hours)
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) Mention two assumptions of the law of demand. **[2]**
(b) Briefly explain the impact of division of labour on cost of production by a firm. **[2]**

(c) A moderate dose of inflation is necessary for the development of an economy. Briefly explain. **[2]**
(d) With the help of suitable example explain the effect of a rise in price on the demand for complementary goods. **[2]**
(e) Explain in brief the first stage of capital formation. **[2]**

Answer:
(a) Two Assumptions of Law of Demand:

1. The income of the consumer remains the same during the period under consideration.
2. The prices of other closely related and similar goods remain unchanged during the period.

(b) Dividing the work according to the capability of a person is known as division of labour to accomplish the work successfully, the complicated work is divided into smaller simple segments and accordingly the labour is engaged to perform the task relating to each segment. Thus, a worker is required to perform only one specific type of work and its regular repetition improves his skill and efficiency as a result the cost of production per unit reduces.

(c) A sustained rising trend in general price level is known as inflation and if there is a sustained rise in price over time at a mild or moderate rate say round 1 to 2 percent per year it is desirable for the development of an economy because if price will increase, profit will increase, more profit will lead to higher production of goods and services, which increases national income and enhance economic develops.

(d) Complementary goods are those goods which are used jointly and consumed together like tennis ball and a racket, petrol and car. The relationship between the price of a product and the quantity demanded of another is inverse. For example if the price of cars were to rise, less people would choose to buy and use cars, switching perhaps to public transport trains. It follows that under these circumstances the demand for the complementary good petrol would also decrease.

(e) Personal saving: The main factor that determines capital formation in a country is personal saving. By personal saving we mean the difference between personal income and personal consumption. The difference can be utilised for capital formation.

Question 2:
State whether the following statements are true or false. Give reasons for each of the following:
(a) Commercial Banks act as the lender of the last resort. **[2]**
(b) The privatisation of PSUs do not guarantee social welfare. **[2]**
(c) Producers in a perfect market are price takers. **[2]**
(d) There is an inverse relationship between quantity supplied and price of a commodity. **[2]**
(e) A rise in income leads to a fall in demand for normal goods. **[2]**

Answer:
(a) False: Commercial bank do not act as the lender of the last resort. It is the Central Bank who provides financial help to the Commercial Banks in the time of emergency that is why ‘central bank’ of the country

acts as a ‘lender of last resort’ for the commercial bank. Commercial banks are the unique financial institutions in modem economies which are able to create money in the form of deposit money.
(b) True: The privatisation of public sector units do not guarantee social welfare because if the major industries are left in the hands of the private sector, they can make them the tools of exploitation of masses and endanger the safety of the country. Private entrepreneurs work with profit motives. The ownership of industries will entail them the right to exploit the consumers and wage earners on the one hand and suppliers of raw materials and finished products on the other.
(c) True: Producers in a perfect market are price takers because no single firm or single consumer can influence the price because of its negligible share in total supply. As product offered by producer is homogeneous. However, price is determined by the collective actions of all the consumers.
(d) False: Price of a commodity and quantity supplied have direct relationship not inverse. Supply comes from producer side and it is natural for the seller to offer more of a commodity as price ascends and less of a commodity as price decreases because as price increases his profit also increases and vice-versa.
(e) False: A rise in income level does not lead to a fall in demand for normal good rather with a rise in income, the purchasing power of people also increases, which in turn encourages the people to demand more of luxuries and comforts.

Question 3:
(a) Differentiate between a tax and a subsidy. **[2]**
(b) Why do producers incur high selling costs in an Imperfect Market? **[2]**
(c) The extent of division of labour depends on the size of the market. Briefly explain. **[2]**
(d) Define fiscal policy. **[2]**
(e) State the effect of inflation on creditors. **[2]**

Answer:
(a)

Tax	Subsidy

1. Taxes are received by the government from citizens and corporates.	Subsidy is given by the government to citizen in order to decrease the price rise in subsidised product.
2. It gives revenues/earning to government.	It incurred as the expenditure to the government.

(b) Producer incur high selling cost in imperfect market because of presence of competition they want to edge over the others by incurring selling cost or expenditure on sales promotion.

(c) Division of labour depends on the size of market because if the size of market is small then complex division of labour in not required but if size of market is large more demand has to be fulfilled then division of labour will result in increase in efficiency and reduction in cost.

(d) Refer **Ans. 1 (b), 2012.**

(e) Inflation means persistent rise in price. Inflation is a state in which the value of money is falling, i.e., price are rising.
At the time of inflation there is loss to the creditors because the value of money is falling.

Question 4:
(a) "Entrepreneurs are innovators" said Schumpeter. Briefly explain. **[2]**
(b) State one similarity between Monopolistic competition and Monopoly. **[2]**
(c) Price of a good rises by 2%. As a result, its supply rises by 4%. Find out the price elasticity of supply. **[2]**
(d) State the difference between Income tax and Expenditure tax. **[2]**
(e) Distinguish between Fixed deposits and Demand deposits. **[2]**

Answer:
(a) Schumpeter said that the profit is the reward of innovation. Those entrepreneurs who are able to produce a commodity which other producers have not produced, from that he can earn profit. So the entrepreneur has to be creative risk taken. By the time his competitors will reach his level, he

should innovate another commodity that is why it is said that entrepreneur are innovators.

(b) One similarity between Monopolistic competition and Monopoly is large number of buyers. Under both the markets AR > MR.

(c) Price elasticity of supply is measured by

$$e_s = \frac{\text{Percentage Change in quantity supplied}}{\text{Percentage change in price}}$$

$$e_s = \frac{4\%}{2\%} = 2$$

Supply is said to be elastic when the percentage change in quantity supplied is greater than the percentage change in the price.

(d) Income tax is a direct tax and **Expenditure tax** is a indirect tax.
Tax imposed on receipt of income are called direct tax, for example income tax. Taxes which are imposed on expenditure incurred on commodity are regarded as indirect tax.

(e) Fixed deposits: A lumpsum is deposited for a fixed time period. These deposits are repayable on the expiry of the stated period. Generally, the time period varies from three months to five years. The rate of interest on these deposits is higher than other deposits.
Demand deposits: Demand deposits are deposits which can be withdrawn at any time by the account holder. Current account deposits are included in demand deposits. In this interest is not given to the account holder. There is no restriction on amount of withdrawal and number of withdrawal.

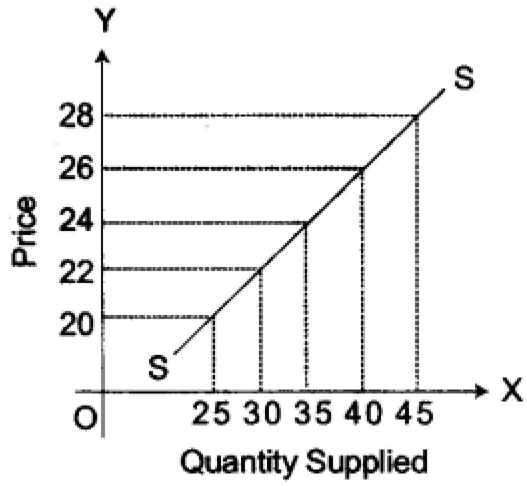
SECTION-II (60 Marks)

*(Answer **any four** questions from this section)*

Question 5:
(a) With the help of a hypothetical supply schedule draw a supply curve. State one exception to the law of supply. **[7]**
(b) Define efficiency of labour and explain any three of its benefits. Briefly explain two causes of the low efficiency of labour in India. **[8]**
Answer:
(a) The supply schedule is a tabulated representation of relationship between prices of the commodity and the quantity which the seller is ready to offer for sale.

Supply Schedule

Price (Rs.)	Quantity Supplied
20	25
22	30
24	35
26	40
28	45



Exception to the law of supply:
Price expectation: An important exception to the law of supply is price expectation. 'If the sellers fear that the prices are going to fall, they may resort to 'panic selling' i.e., at lower prices they may sell more.

On the other hand, if the prices show an upward trend, they may expect prices to rise further, they withhold more stocks, this hoarding means less is offered for sale ever at higher price. In either case law of supply fails.

(b) Efficiency of labour means the ability of labour by virtue of which it is productive. Three benefits of efficiency of labour:

1. **Determinants of the standard of living:** Efficiency of labour directly determines the standard of living of the people in a country. More efficient the workers are, the higher will be the per capita income in the country. Per capita income is one of the most important determinant of standard of living.
2. **Increased profits:** A higher level of efficiency of workers results in lower average costs of production and increases the profit of the enterprise. Thus, the employers also gain when workers become more efficient.
3. **Lower level of product cost:** Lower level of average cost of production leads, in the long run, to a lower level of price of the product. The higher efficiency of the workers would result in gain for the consumer.

Two causes of low efficiency of labour in India.

1. **Low wages:** Higher efficiency leads to higher income, workers get the incentive and they try to become more efficient. But the wages of labour in India are low in general, the workers are not in a position to keep themselves physically and mentally fit, they have little leisure time for recreation. This becomes a cause of low efficiency.
2. **Inadequacy of machinery equipment and raw materials:** The availability of equipments and supply of raw material is not adequate. In general the machines are out dated, poor standard and the frequent break downs of machines and electricity cause the downfall in the productive capacity of workers.

Question 6:
(a) The central bank is the apex monetary institution of the country. Explain its role as a:

1. Banker of the Government.
2. Lender of the last resort.
3. Custodian of foreign exchange reserves. **[7]**

(b) How does the state fulfill the following socio-economic objectives?

1. Reducing income inequality.
2. Promoting industrial growth.
3. Environmental protection. **[8]**

Answer:
(a)

1. **Central Bank as a banker of the Government:**
   The central bank acts as a banker to the Government. The Government maintains an account with the central bank. All incomes of the Government are deposited into this account and all the expenses of the Government are incurred out of this account. The Government can also borrow from the central bank. Besides, the central bank is in charge of managing the Governments public debt, i.e., it sells Government bonds to the public, pays regular interest and repays the loan after the maturity date.
2. **As a lender of the last resort:**
   central bank given financial accommodation to commercial banks by rediscounting their eligible bills at the time of emergencies. It means central bank saves commercial banks from financial crises by providing two types of loans:
   1. Rediscounting eligible securities and exchange bills of commercial banks.
   2. By providing loans against their securities.
3. Central bank of a country manages and controls the foreign exchange reserve and gold. It can sell gold to get foreign exchange and also can purchase foreign currencies at international prices.

(b)

1. **Reducing income inequality:** State fulfill the objective of reducing income inequality by taxation policy, the government makes it sure that the burden of tax is not falling on the poor section of the society. Similarly, when the government spells expenditure policy, it always attempts to benefit the lower income group of society. If the government decides about finances without caring for the social structure of the country the purpose of public finance i.e. removal of poverty and reduction of economic inequality would be affected.
2. **Promoting industrial growth:** The participation and support of the state affects the process of industrialization in less developed countries. For strong industrial base establishment of

iron and steels industry, heavy chemical industry etc. is must. But, as this requires huge investments and long gestation period, the private investors do not come forward. Therefore, the development of such basic industries depends upon the initiative taken by the Government. The state also extends support to the industrial sector by:
    1. Creating proper transport and communication facility.
    2. Supply of institutional credit.
    3. Setting of power projects.
3. **Environmental protection:** State fulfill the objective by protecting the environment in the following ways. Many policies and strategies laid down by Indian Government:
    1. The Water Act of 1974 (Prevention and Control of Pollution)
    2. Air Act (1981)
    3. GEMS (Global Environment Monitoring System)
    4. Ganga Action Plan (GAP)
    5. Industrial pollution control was started in 1993-94
    6. Using alternative fuel like CNG for public transport.

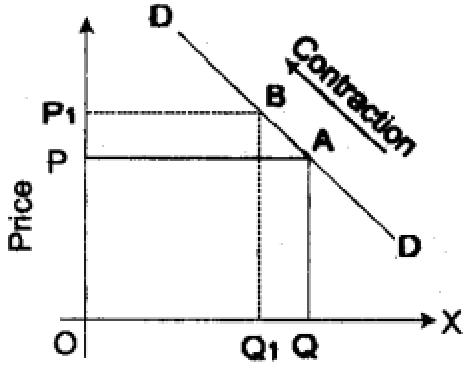
Question 7:
(a) With the help of suitable diagrams explain the difference between decrease in demand and contraction in demand. **[7]**
(b) Read the article given below carefully and answer the questions that follow:
Business Standard, Friday, 26th November, 2010
Food inflation declined to a 17 month low of 10.15 percent for the week ended November 13, as vegetable prices softened on fresh crop arrival, raising hopes that the Reserve Bank of India (RBI) would not raise key rates for now.
This is the sixth week in a row that food inflation has declined on the back of improved crop arrivals in markets across the country, as also the impact or RBI's monetary tightening which arrested pressure on demand.

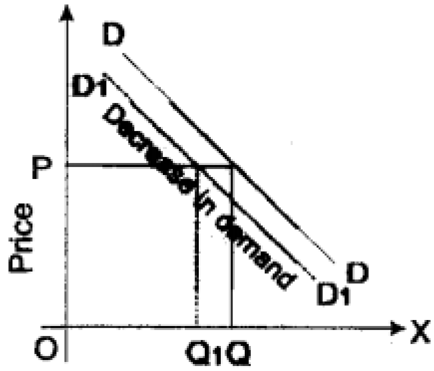
1. Define inflation.
2. What according to the article are two causes of a fall in food price?
3. What is meant by demand pull inflation? Briefly explain two factors which determine this phenomenon. **[8]**

Answer:
(a) Contraction in demand and decrease in demand: Both reflect fall in quantity demanded but causes are different:

1. Contraction of demand is the result of change (rise) in price alone whereas decrease in demand is at the same price due to change in factors other than the price of the commodity.

2. In the case of contraction of demand, we move up the demand curve from A to B as shown below but in the case of decrease in demand the demand curve shifts leftward.





(b)

1. **Inflation:** Inflation is a situation in which the value of money falls and price rises.
2. Two causes of fall in food price are:
   1. Regular supply of fresh crop
   2. Impact of monetary policy
3. **Demand-pull inflation** occurs when the demand for goods and services exceeds the supply available at existing prices, i.e., when there is excess demand for goods and services.
   Two causes of demand pull inflation:
   1. **Increase in public expenditure:** Government deficit increases when the public expenditure increases and the government fails to mobilize sufficient funds to meet its expenditure. This tremendous increase in Government expenditure has led to the increase in demand of goods and services but the availability of these has not increased proportionately and under such condition there is price rise.
   2. **Decrease in taxes or hoarding of black money:** Black money means unaccounted money. It is created through tax evasion and is responsible for price rise.

Question 8:
(a) Define land and explain any three of its important characteristics. Suggest two measures to improve productivity of land. **[7]**
(b) Explain two similarities and two dissimilarities between a Perfect market and an Imperfect market. **[8]**

Answer:
(a) In economics, the word ‘land’ is defined to include not only

the surface of the earth but also all other free gifts of nature called natural resources. For instance, mineral resources, forest resources and, indeed, anything that helps us to carry out the production of goods and services, but is provided by nature, free of cost. In fact, 'Land is a stock of free gifts of nature.'
The features of land are as follows:

1. **Supply of land is fixed:** The supply of land is fixed. It is given by nature. It is true that, from time to time, we can increase the quantity of operational land available in the country by clearing forests. However, the potentially available amount of land in the country is fixed.
2. **Production of land is free:** Another peculiarity of land is that, it does not have ally cost of production. It is already there, ready to be used. All other agents of production have to be produced at a cost. For instance, labour has to meet his cost of living and his cost of training and education has also to be accounted for. Land, however, is a free gift of nature.
3. **Land is immobile:** A third peculiarity of land is that, it is immobile. Land can not move in the sense in which labour or capital can. Therefore, there are persistent differences between the rent of land in different regions. Such differences may be caused by differences in fertility, location etc.
4. **Land is heterogeneous:** Different types of land indicate wide variations in productive capacity. It depends on the chemical composition of the soil, availability of irrigational facilities, climatic conditions etc. Hence, some plots of land may be so infertile that cultivation is not worthwhile in such cases, while some other plots of land may be very fertile.

Two methods to improve the productivity of land are as follows:

1. **Proper use of Land—**Productivity of Land can be enhanced by undertaking investment on land. Construction of irrigation facilities is an example of investment on land. Higher the investment on land, higher will be the productivity of land in future.
2. **Scientific way of cultivation—**Productivity of Land can be increased by using scientific techniques of cultivation on land. If the farmers use HYV seeds, adequate amount of fertilisers/manure, pesticides, improved agricultural tools and implements, etc. then yield of crop per hectare can be increased to a great extent.

(b) Refer **Ans. 7 (b) (ii), 2016.**

Question 9:
(a) What are Public Sector Undertakings (PSU)? Give two of its examples. Explain any four problems faced by PSUs in recent times. **[7]**
(b) Define elasticity of supply and explain any four of its determinants. **[8]**
Answer:
(a) Refer **Ans. 10 (a), 2012.**

(b) Price elasticity of supply measures the degree of responsiveness of the quantity supplied of a commodity to a change in its price. It measures the sensitivity of the quantity supplied to a change in the price. More precisely, price elasticity of supply is defined as the proportionate change in quantity supplied of a commodity divided by a given proportionate change in its price.
It may be expressed as

$$e_S = \frac{\text{Percentage Change in Quantity Supplied}}{\text{Percentage Change in Price}}$$

Where, es stands for elasticity of supply.
Determinants of Elasticity of Supply:

1. **Nature of cost of production:** Elasticity of supply depends upon change in the cost of producing additional quantity of output. If an increase in output by the firms in an industry causes only a slight increase in their cost per unit or leads to decrease in cost per unit, we would expect supply to be fairly elastic. If, on the other hand, increase in supply leads to a large increase in cost of production, the supply would be relatively inelastic.
2. **Time element:** Time period is an important determinant of elasticity of supply. Supply of a commodity, in the ultimate analysis, depends upon its production. A price change due to change in demand for a commodity may have a small response in the quantity supplied in the short-run since the production capacity may be limited.
3. **Nature of the commodity:** Nature of the commodity is also an important determinant of the elasticity of supply. For instance, the supply of durable products is relatively elastic. Durable goods can be stored and hence producers can meet the market demand by running down their stocks.
4. **Nature of inputs:** Elasticity of supply depends on the nature of inputs used for the production of a commodity. If the production of a product requires inputs that are easily available, its supply would be more elastic. On the other hand, if it uses specialised inputs, its supply will be relatively inelastic.

Question 10:
(a) State the following:

1. Four merits of a Direct tax.
2. Three demerits of an Indirect tax. **[7]**

(b) Read the excerpt given below and answer the questions that follow:
The Hindu, 19th July 2010
The new symbol of the Rupee: a step towards globalisation. Evoking national spirit and international attention, the Indian Rupee attained a new avtar in its new symbol………..the Indian currency will be joining the elite club of the US Dollar,European Euro, British Pound Sterling, and Japanese Yen.

1. State one positive effect of globalisation.
2. Name the institution that has the sole authority to print currency notes in India.
3. Distinguish between limited legal tender and unlimited legal tender currency.
4. Define cash reserve ratio. What purpose does it serve?
5. Write the new symbol for the Indian Rupee. **[8]**

Answer:
(a)

1. **Four Merits of Direct Taxes**
   1. **Equitable:** Direct taxes are based on the canon of equity. Their burden is equitably distributed, as they are progressive in nature. As the income of a person increases, the rate of income tax also increases. So all direct taxes fall heavily on the people whose income and wealth is increased. The poor are not affected by such taxes.
   2. **Certain:** Direct tax satisfy the canon of certainty. Taxpayer is certain as to the time and manner of payment, and the amount of taxes to paid in the case of these taxes. Similarly, the government is also certain as to the amount of money it shall receive from these taxes.
   3. **Economical:** These taxes also satisfy the canon of economy. The cost of collection of direct taxes is low. In the case of income tax, it is deducted at the source from the salaried persons. The same officers can make the assessment of wealth, incomes, inheritances, gifts, etc. No separate staff is needed for each. Such taxes are also economical

    to the tax payers who make payment direct into the treasury.
    4. **Elastic:** Direct taxes are flexible and thus satisfy the canon of elasticity. The government can increase or decrease the rates of direct taxes according to the requirements of the economy. In case of war, natural calamities or emergency, the State can raise the rates of these taxes in order to raise large tax revenue. During a depression, it can reduce their rates considerably.
2. **Three Demerits of Indirect Taxes**
    1. **Uncertain revenue:** The revenue from indirect taxes is uncertain because it is not possible to accurately estimate the effort to such taxes on the demand for products. If a heavy excise duty is levied on some luxury articles, its sale may be adversely affected by a fall in demand and the State revenue may actually decline.
    2. **Regressive:** Indirect taxes on necessaries, which are consumed by the poor are regressive in nature. The rich and the poor are required to pay the same amount of tax on such commodities as matches, kerosene, toilet soap, washing soap, toothpaste, blades, shoes, etc. but the burden is heavirer on the poor than on the rich. Thus they do not satisfy the canon of equity.
    3. **Uneconomical:** These taxes are uneconomical in the sense that the cost of collection to the State is heavy. The State has to appoint inspectors to check the accounts and stocks of producers, wholesalers, and retailers in order to find out weather they are paying taxes or not. Thus they are more expensive than direct taxes.

(b)

1. One positive effect of globalisation to the Indian industries is that the Multi National Companies have brought in highly advanced technology with them. This has made Indian industries advanced.
2. Reserve Bank of India has the sole authority to print currency notes in India.
3. **Limited Legal Tender:** It is the money which can be accepted only up to a certain maximum limit fixed by law. For instance in India, coins are limited legal tender because coins of 5, 10, 20 and 25 paise are accepted up to the maximum sum of Rs. 25.
   Unlimited Legal Tender: It is the money for which there is no limit to the quantity of money offered in a payment at a time. For example, in India, Paper notes are unlimited legal tender because all currency notes can be used to settle payments of unlimited value.

4. Commercial banks are required under law to keep a certain percentage of their total deposits with the central bank in the form of cash reserve. This is called cash reserve ratio.
   a powerful instrument to control credit and lending capacity of the banks. Presently CRR is 6%.
5. The new symbol for Indian Rupee is ₹.