ICSE Board
Class X Economics
Sample Paper – 3 Solution

PART I

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

Answer 1

a) Normal goods are those goods whose demand increases as the income of the consumers rises. There is a positive relationship between income and demand for a good.

b) When the government imposes heavy taxes on the production of a particular commodity, the cost of production increases while the price remains constant. This results in a reduction in the profits. In such a situation, the producer will use the resources to produce those commodities on which the government has levied less tax. Thereby the supply of that particular commodity decreases.

c) Progressive taxation is represented in slab 3 and 4. Hence, the tax rate increases with an increase in the income slab of the income earner.

d) Under the Banking Regulation Act, 1949, the RBI has been entrusted with extensive power to control the commercial banking system. RBI acts as the banker to the other banks in four ways:

   i. Custodian of the cash reserves of the commercial banks
   ii. As the lender of last resort
   iii. As clearing agent
   iv. As supervisor

e) Primary functions of a commercial bank are:

   i. Accepting deposits from the public is the primary function of a commercial bank. A bank accepts deposits from individuals in society. In order to attract savings, banks accept three types of deposits—demand deposits, savings deposits and fixed deposits.
   ii. A commercial bank advances loans to business personnel, farmers and consumers against approved securities. Cash credit, overdraft, short-term loans, discounting of bill of exchange, money at call etc. are the loans advanced by the commercial bank.

Answer 2

a) At a given price of a product, its demand curve shifts in the rightward direction in the following two cases:
   i. Increase in the income of the consumer
   ii. Increase in the prices of substitute items

   At a given price of a product, its demand curve shifts in the leftward direction in the following two cases:
   i. Decrease in the income of the consumer
   ii. Decrease in the prices of substitute items

b) Technological progress creates a positive approach in the supply of a particular product. It decreases the cost per unit and increases the productivity of the given factor inputs of production. Thus, the producer enjoys more profit.

c) A situation where the government has to incur new public debt for meeting the interest obligations on an old debt is called debt trap. One of the sources of public revenue is public debt. But the negative effect of this is that the government may be lured to take recourse to borrowing whenever there is the requirement of money.

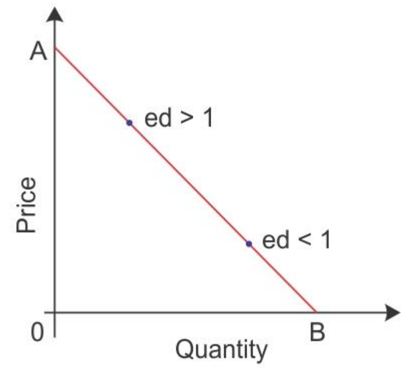
d) Fixed income groups: The hardest hit are the people who receive a fixed income. People who live on past savings, fixed interest or rent, pensions, salaries etc. suffer during periods of rising prices as their incomes remain fixed. Middle class families who depend on daily hard work to provide for their children's education, meet the livelihood in the times of sickness and old age and also to accommodate day-to-day expenses find it difficult to survive in the times of serious inflation.

   Borrowers: Debtors borrow from creditors to repay with interest at some future date. Changes in the price levels 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) The bank rate is that discount rate at which the Central Bank rediscounts different bills of exchange submitted by commercial banks while obtaining loans from the Central Bank. The bank rate is used as the main instrument of monetary control during the period of inflation.

Answer 3

a) Price elasticity of demand > 1 and price elasticity of demand < 1 are shown in the diagram below.



b) The law of supply states that other things being equal, the quantity of a good supplied increases with an increase in the price level and decreases with a decrease in the price level of that good.
Exception to the law of supply is that sellers may be willing to sell more units at declining prices for perishable goods.

c) Productive expenditure is the expenditure which increases the production of goods and services in the nation. These expenditures constitute physical assets such as machinery and human capital such as education, health etc.
Unproductive expenditure is the expenditure which does not increase the productivity. These expenditures constitute the maintenance of law and order in the nation.

d) During inflation, the profit income of the business category increases, while the real income of the common salaried people decreases. Hence, the pattern of income distribution in a society becomes much more unequal in nature.

e) The Central Bank is the apex bank which controls the entire banking system of a country. It has the sole authority to issue notes in the country. It acts as a banker to the government and controls the supply of money in the country.

Answer 4

a) According to the law of demand, other things being equal, the demand for a good increases with a fall in price and the demand diminishes with a rise in price. However, if there is a positive correlation between the price and quantity demanded, then it is paradoxical to the law of demand. The following demand schedule represents this situation:

Price	Individual demand
4	18
6	20
9	26
15	30

b) Factors determining the supply:

i. Price of the product: When there is an increase in the price of the product and if it is more than the marginal cost of production, it enables the firm to earn more profit by selling at a higher price. Hence, there will be an increase in the supply of a product.

ii. The prices of the factors of production: Given the other factors, if the prices of the factors of production increase, then there will be a decline in the profit of the firm. Hence, the firm would reduce the quantity of supply at the current price level.

c) Differences between tax on income and tax on commodity:

Tax on Income	Tax on Commodity
A tax on income is paid directly to the government by the person on whom it is imposed. Hence, the tax on income is known as a direct tax.	A tax on commodity is paid to the government by one person but the tax burden is borne by another person. Hence, the tax on commodity is known as an indirect tax.
It cannot be shifted on to any other person.	It can be shifted on some other person.
These taxes are levied according to the ability of the taxpayers.	Ability of the taxpayers is assessed indirectly in this taxation.

d) During an inflationary situation, the variable income group gains the most with a rise in income. In a business firm, the wage does not increase as fast as the level of price because the wage rate is contractually fixed. But there will be an increase in the prices of output sold in the market. This leads to an increase in the profits of the producer which encourages the producer to produce more commodities. Thus, a mild dose of inflation is always good for economic growth.

e) Differences between demand deposits and time deposits:

Demand Deposits	Time Deposits
Demand deposits can be withdrawn at any time.	Time deposits can be withdrawn only after the expiry of a specific period.
There is no interest rate on demand deposits.	Time deposits carry a higher interest rate.
Demand deposits are chequable, i.e. they can be withdrawn through cheques.	Time deposits are not chequable.

PART II

*Attempt **any four** questions from this part.*

Answer 5

a) Different stages in the evolution of money:

i. The barter system was a system where goods were exchanged for goods in the olden days. Various commodities when used as money are known as commodity money. It is the most primitive form of money. However, certain problems such as improper standardisation, indivisibility, storage difficulty etc. made this form of money an unsuitable medium of exchange.

ii. Mono-metalism and bi-metalism, i.e. valuable metals such as gold and silver, were used as a medium of exchange. As society progressed, different sections of people agreed to consider some precious metals as a common medium of exchange. The gold coin was introduced in India by King Kanishka of the Kushan Dynasty during the first century AD.

iii. The paper currency system is a system where coins and currency notes are used as a medium of exchange. Due to the expansion of trade and commerce and greater demand for money as a common medium of exchange, metallic money was replaced by paper money. The Central Bank of a country assumes supreme authority in issuing paper money of definite denominations and value. A medium of exchange which is generally acceptable and enforced by law is called fiat money. For example, rupee notes and coins are legal tender.

iv. At the final stage of evolution of money, demand deposits with commercial banks are considered bank money. Demand deposits are current account deposits with banks or other financial institutions which are payable on demand by cheques. Thus, cheques drawn on the demand deposits of commercial banks can be used as a medium of exchange.

b) An ecosystem can be defined as a group of living and non-living things which are interdependent and are found in a particular type of environment.

Causes of destruction of an ecosystem are:

i. Changes in land use: Due to an increase in the population growth rate and per capita consumption of resources, the ecosystem is changing and being destroyed. Hence, there is a change in land use. Deforestation is undertaken to accommodate more agricultural activity, human settlements, construction of dams, etc. Changes in land use have destroyed the natural habitats of organisms resulting in many being on the verge of extinction.

ii. Urbanisation: Urbanisation is a process of relative growth in a country's urban population. Due to urbanisation, there is a change in land use, depletion of water resources, use of large quantities of building materials for construction purposes, and development of slums etc. Increased use of land for housing and industries has resulted in the loss of biological diversity forever. Due to widespread construction, the local ground water level has declined and cities have to make provision for external sources of water.

Answer 6

a) Five causes of inflation are:

i. Public expenditure increases: Spending by the government is an important part of the total spending in any modern economy. It is the total spending which determines the total demand. Thus, government expenditure is an important determinant of aggregate demand. Government expenditure has shown an upward trend in less-developed countries. In the beginning of the planning period in India, the amount of government spending has increased by leaps and bounds. This has created an inflationary situation in the economy.

ii. Hoarding: Excess demand is artificially created by hoarders. They stockpile goods and do not release them to the market for sale. This leads to an excess demand and inflation in the economy.

iii. Genuine shortages: Sometimes, the shortages may not be artificial but genuine. Due to some reason, the factors of production are limited in supply and production will be affected. Because supply will be less than demand, prices will rise.

iv. Population growth: Growth of population will increase the total demand in the market. If the supply of goods and services does not keep pace with the demand, the pressure of excess demand will create inflation.

v. Increases velocity of circulation: The total use of money in the market is the amount of supply by the government multiplied by the velocity of circulation of money. During the boom phase of a business cycle, people spend money at a faster rate. The velocity of circulation of money increases. This situation creates an inflationary condition in the economy.

b) Role of commercial banks in credit creation:

Bank deposits form the basis for credit creation. Banks accept deposits from the public by opening a deposit account known as the primary deposit. Banks do not hold the money in the account itself and the entire amount is not withdrawn from the account at the same time. So, they advance loans to business personnel and retain only a small portion of the total deposits in the bank. The Central Bank decides the amount to be held in the form of cash. This is called the Cash Reserve Ratio.

These banks advance loans to business people only against collateral securities. The bank will not give cash but open a derivative account in the name of the individual or institution. Here the loans create a derivative deposit which is called a secondary deposit or derivative deposit. Thus, the secondary deposit results in creation of credit.

Two limitations of the commercial bank to create credit:

Credit creation by commercial banks is based on the primary deposit. Hence, there should be a large amount of cash, but the Central bank has complete control over the cash deposited by an individual. They decide the amount of cash to be held as reserve and the amount which should be advanced as loans.

Business people can avail loans from the bank only when they have good securities to submit against a loan. If the approved securities are not available to them, then the bank will not be able to create credit as loans.

Answer 7

a) An increase in the general price level of an economy with an increase in the average cost of production is called cost-push inflation. Cost-push factors are an increase in the wage rate, increase in the prices of raw materials etc. Therefore, the producers increase the prices of these goods and services after an increase in the cost of production in order to maintain the profit rates.

Factors responsible for the causes of cost-push inflation:

i. Rise in wages: Rise in wages is considered the determinant of cost-push inflation. Due to trade unions, workers have organised strongly to get higher wages. This rise in wage costs may lead to the imposition of higher product price by producers. Hence, when the average prices of different consumption goods increase, workers would again demand for higher wages.

ii. Increase in the price of basic materials: Basic materials such as steel, chemicals, oil etc. are used directly or indirectly in major industries. Thereby any increase in the prices of basic materials affects the entire economy and the prices tend to increase.

iii. Higher taxes: Increase in taxes such as excise duties, sales tax, value added tax etc., where taxpayers can easily shift the burden of tax onto others leads to an increase in the prices of different commodities.

b) Public expenditure promotes the economic development of a nation in the following two ways:

i. Expenditure on infrastructural development improves the productive efficiency of industries and increases the employment opportunities.

ii. It encourages private enterprises by initialising state-owned financial and banking institutions to provide cheap credits.

iii. It helps in increasing the production of certain essential commodities to end private monopolies so that the state can start public enterprises.

iv. It reduces income inequalities through welfare measures such as education, medical facilities etc.

v. The aggregate demand increases with an increase in the public expenditure. Thereby the producer receives an incentive to increase the production level. Due to an excess demand for these products in the market, the stocks of their goods get exhausted completely. Hence, they increase the production capacity to maintain the stock resulting in more demand for capital and labour to increase the level of production. Thus, it leads to an increase in the level of employment within the economy.

Answer 8

a) Three functions of the Central Bank:

i. Issuing of notes: The Central Bank of a country has an exclusive right of issuing notes. Under the original Act, there was provision for issuing currency notes according to the proportional reserve system. Here, the RBI can print or issue any volume of currency or notes by keeping a gold reserve worth Rs. 115 crore and foreign exchange worth Rs. 85 crore.

ii. Banker to the Government: The Central Bank is a banker, agent and financial advisor to the government. As a banker, it manages accounts of the government all across the country. It buys and sells securities on behalf of the government as an agent to the government. It helps the government in framing policies to regulate the money market as an advisor to the government.

iii. Lender of the last resort: The Central Bank also provides financial assistance to commercial banks by rediscounting eligible bills of exchange. When the commercial banks do not get loan facilities from any other source, they approach the Central Bank as a last resort. The Central Bank advances loans to such a bank against approved securities.

b) Reasons for slow rate of capital formation in India:

i. Lack of ability to save: Due to poverty, poor people are unable to save more than a negligible part of their earnings. Hence, a low rate of savings leads to a low rate of capital formation in an economy.

ii. Lack of willingness to save: In certain parts of the country, there is still a feudal economic system. People who have the ability to save money are not willing to save and spend all their income.

iii. Insufficient mobilsation of savings: People are not mobilising the savings for capital formation. Most of their savings are kept in the form of gold and cash at home. These savings are not used productively due to poor banking knowledge and a poor banking network in the underdeveloped states.

Answer 9

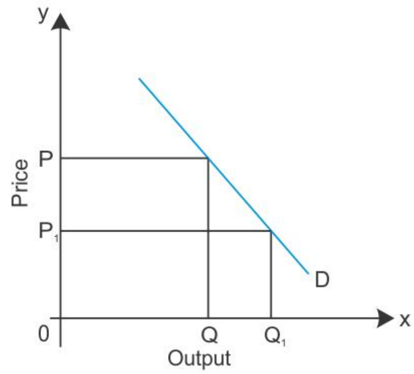
a)

i. The merits of direct tax are as follows:

- Equity: Direct tax is imposed on the income of a person based on the principle of his/her ability to pay. The income tax burden is equitably distributed on different people and institutions. Thereby, the tax burden falls more on rich than on the poor people.
- Certainty: An individual knows how much of tax is due and when it is due. The government knows with certainty how much tax revenue is to be collected from direct tax. Accordingly, the government can adjust its income and expenditure.
- Elasticity: Direct tax is more elastic in nature. During the period of crisis, the government can yield more revenue by increasing the tax rates.

ii. A tax is said to be progressive when the rate of tax increases with an increase in the taxpayer's income. Under this system, the tax liability increases not only in absolute terms but the proportion of income tax also increases. In India, the income tax rates are progressive in nature as the tax rate increases from 20 to 30 percent, when an individual earns more than Rs. 8 lakh per year.
Merit and demerit of progressive tax:
Rich people pay a higher average income tax than poor people. Hence, it reduces the income inequalities among the rich and poor groups of people. At the same time, it may diminish the work incentive of the people.

b) Under 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.



A monopolistic firm has partial control over price only through product differentiation. Products are differentiated through designs and packaging colour of the product. It attracts the 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.

Answer 10

a) Price elasticity of supply:
Price elasticity of supply is a percentage change in the quantity supplied with respect to the percentage change in the price of the commodity.
e_s = Percentage change in quantity supplied/Percentage change in price

$e_s = \Delta Q / \Delta P * P/Q$

where P = Initial price, ΔP = Change in price, Q = Initial quantity, ΔQ = change in quantity supplied

Price elasticity of supply = Price/Quantity * Change in quantity/Change in price
$e_s = 5/10 * 4/1 = 2$
Thus, the price elasticity of supply is greater than unity.

b) The three interest rates are:

i. Repo Rate: It is the rate at which the Reserve Bank of India lends funds to the commercial banks. It has a direct influence on the economy.
ii. Reverse Repo Rate: It is the rate at which an interest is provided to the commercial banks for their overnight deposits with the Reserve Bank of India.
iii. Cash Reserve Ratio: CRR is the rate at which commercial banks have to maintain a percentage of their deposits with the Reserve Bank of India as reserves.

The Government has adopted credit control measures to restrict the further rise in the supply of money in the economy. The RBI on April 20, 2010 announced a new monetary policy. The Repo Rate, Cash Reserve Ratio and Reverse Repo Rate were all raised by 25 basis points to tackle inflation. The Repo Rate has been increased to 5.25%, Reverse Repo to 3.75% and CRR to 6%.