

**ICSE Board**  
**Class X Economic Applications**  
**Board Paper – 2015**

**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 [ ].

**PART I (40 Marks)**

Attempt **all** questions from this part.

**Question 1**

- a) Complete the following Individual Demand Schedule: [2]

Price in Rs	Quantity of sugar demanded in kgs
5	20
6	
7	
8	
9	

- b) Why is capital called a 'produced means of production'? [2]
- c) State *two* assumptions of the Law of Supply. [2]
- d) What is difference between a loan and an overdraft? [2]
- e) State any *two* drawbacks of State enterprises. [2]

**Question 2**

- a) List *two* factors affecting the supply of labour. [2]
- b) If price of X increases, then demand for Y too increases.  
What is the relationship between goods X and Y? Give an example. [2]
- c) State *two* Primary functions of money. [2]
- d) What is meant by Monopsony? Give an example. [2]
- e) Define Fiscal Policy. [2]

### Question 3

- a) State the market form of the following commodities:
- Railways
  - Automobiles
  - Shampoos
  - Fighter Aircrafts [2]
- b) What is meant by shifting of tax burden?  
To which tax is this relevant? [2]
- c) A consumer purchased 10 units of a commodity when its price was Rs 5 per unit. He purchases 12 units of the commodity when price falls to Rs 4 per unit. Calculate the price elasticity of demand for the commodity. [2]
- d) State *two* 'active' factors of production. Give reasons to support your answer. [2]
- e) Differentiate between Floating and Sunk capital. Give an example for each. [2]

### Question 4

- a) State *two* advantages of opening a bank account. [2]
- b) 'The role of the State is important in developing the economic infrastructure of a developing economy'. Give *two* reasons to support your answer. [2]
- c) State the impact of an increase in Cash reserve ratio on loanable funds. [2]
- d) Classify the following types of tax into direct and indirect taxes:
- Entertainment Tax
  - Income Tax
  - House Tax
  - Sales Tax [2]
- e) Which of the following is a function of a Commercial Bank? Give a reason to support your answer.
- Acting as a lender of last resort.
  - Deciding what is legal tender.
  - Determining monetary policy.
  - Providing cash credit facility. [2]

## PART II (60 Marks)

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

### Question 5

- a) What do you understand by *division of labour*?  
Explain *three* ways by which division of labour is beneficial to producers. [7]
- b) State the Law of Demand. Explain *three* exceptions to this law. [8]

### Question 6

- a) What is meant by migration?  
Explain *three* ways by which migration impacts the ecosystem. [7]
- b)
- What is capital formation?
  - What are the *three* stages of capital formation?
  - Explain *three* reasons for the low rate of capital formation in India. [8]

### Question 7

- a) Who is an entrepreneur? Explain any *three* functions of an entrepreneur. [7]
- b) With reference to the taxation policy:
- Mention *three* differences between direct taxes and indirect taxes.
  - Differentiate between progressive and regressive taxes giving an example for each. [8]

### Question 8

- a) What do you understand by price elasticity of demand? With the help of diagrams explain the conditions when:
- $E_p > 1$
  - $E_p < 1$
  - $E_p = 1$  [7]
- b) With reference to the Central Bank of a country:
- State *two* reasons for the need of a Central Bank in a country.
  - List *two* ways in which a Central Bank acts as a Banker to the Government.
  - What is meant by open market operations? How does it act as a method to control credit? [8]

### Question 9

- a) What is Perfect Competition?  
Describe any *three* characteristics of Perfect Competition. [7]
- b) Give a reason for each of the following statements:
- The fixed income group is adversely affected during periods of inflation.
  - Selling costs are higher in Monopolistic Competition.
  - High rates of taxes reduce the savings capacity in an economy.
  - The demand for newspaper is inelastic. [8]

### Question 10

- a) Read the extract given below and answer the questions that follow: [7]

PTI Jun 15, 2014

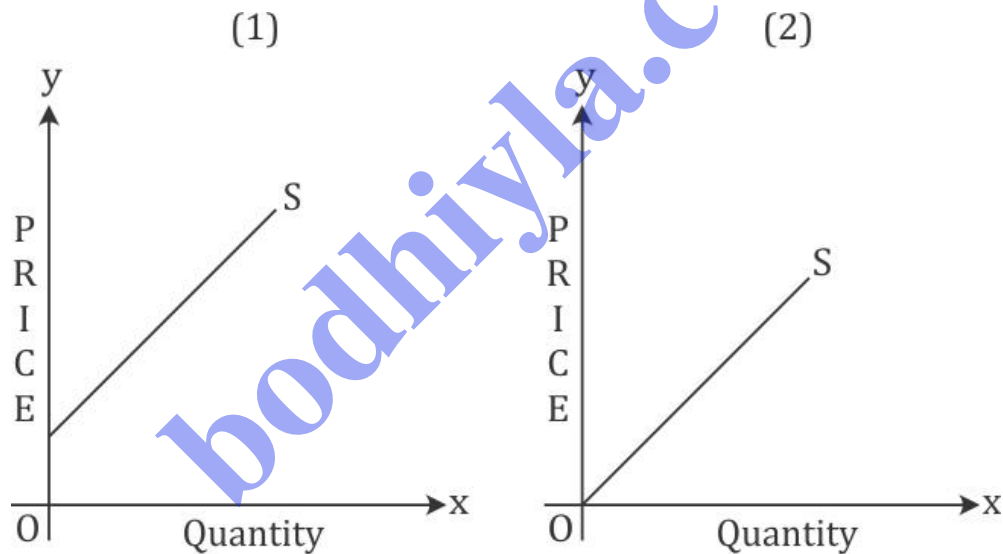
*NEW DELHI:* The Finance Ministry has asked the Department of Disinvestment to complete the groundwork for sale of shares in state-owned companies soon after the budget to take advantage of the bull phase in the stock market.

The government is expected to retain the disinvestment target of Rs 36,925 crore proposed in the interim budget for 2014-15.

- i. What is disinvestment?
- ii. How will privatisation lead to:
  - (1) Control of budgetary deficits
  - (2) Flow of funds to Public Exchequer.
  - (3) Greater flexibility in decision making.

- b) [8]

- i. Indicate the degree of elasticity on the Supply curves given below:



- ii. Explain *three* determinants of Elasticity of Supply.

# Solution

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## PART I

### Answer 1

#### (a) Individual Demand Schedule

Price in Rs	Quantity of Sugar Demanded in kg
5	20
6	18
7	16
8	14
9	12

#### (b) Capital is called a 'produced means of production' because

- i. It is produced, i.e. it is produced by human beings with the help of natural resources and is not a gift of nature.
- ii. It is a means of production, i.e. it is used as an input in producing other goods. It is not directly consumed.

#### (c) Assumptions of the law of supply:

- i. Price of other related goods should not change.
- ii. Technology of production should not change.

#### (d) Differences between a loan and an overdraft:

- i. Borrowers pay interest on the amount outstanding against the account for loans, whereas customers pay interest on the daily balance standing against the account for overdraft.
- ii. Loans against security are raised by the bank, whereas security is not required for overdraft facilities.

#### (e) Drawbacks of state enterprises:

- i. Lack of incentive: Government servants do not have the same incentives as a person in a private enterprise.
- ii. Technical problems: Technical considerations are not given due weightage in the establishment of state enterprises. The choice of location is influenced less by technical considerations and more by political considerations.

## Answer 2

(a) Factors determining the supply of labour:

- i. Population: The most important factor affecting the supply of labour in a country is its population. A larger population with necessary skills to perform physical or mental work will increase the supply of labour to the market.
- ii. Age structure: The total population of an economy is not considered under supply of labour. Supply of labour depends on the age structure of the population. Child labour is prohibited by law. Salaried people have to retire after attaining a certain age. Hence, only a certain age group of people is considered under supply of people.

(b) Goods X and Y are related goods/substitute goods which can be substituted for each other. Example: Tea and coffee – Increase in the price of coffee will increase the demand for tea, and consumers will shift from the consumption of coffee to the consumption of tea.

(c) Two primary functions of money:

Medium of exchange and measure of value are the two primary functions of money.

- i. Money acts as a medium of exchange: The major function of money is to facilitate the process of exchange by removing the defects of the barter system.
- ii. Money is the measure of value: It is the monetary expression of the market value of goods and services.

(d) Monopsony:

Monopsony refers to a market where there is a single buyer of a commodity or service but there are many sellers. It implies a situation in which there is a monopoly element in buying. An example of monopsony occurs when a certain individual only has liking for some commodity or when a single large firm is the sole buyer of some commodity.

(e) Fiscal policy:

Fiscal policy refers to the revenue and expenditure policy of the Government which helps to correct the situations of excess and deficient demand. It is also called the budgetary policy of the Government.

## Answer 3

(a) Form of market:

- i. Monopoly
- ii. Oligopoly
- iii. Monopolistic competition
- iv. Monopsony

(b) Shifting of tax burden:

Tax imposes a burden on the taxpayer. Generally, the burden of tax falls on someone other than a person from whom the Government collects the tax. The impact of the tax falls on a person from whom the tax is first collected but not the burden of

taxation. The burden of tax shifted to another person is called the incidence of taxation. Thus, the tax burden is shifted on the consumer. For example, in sales tax, the tax burden is shifted by the seller of the commodity to the buyer.

(c) Price elasticity of demand for the commodity:

$e_p = \text{\% change in quantity demand} / \text{\% change in its price}$

$e_p = (\Delta Q/Q) / (\Delta P/P)$

$e_p = (12/10) / (4/5)$

$e_p = (12/10) * (5/4)$

$e_p = 1.5$

(d) Two active factors of production:

Labour is an active factor of production and sets the whole productive process in operation.

Entrepreneur is an active factor of production because the entrepreneur takes up the risks and sets the entire productive machinery into motion.

(e) Floating and sunk capital:

i. 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

ii. Sunk capital is one which can only be put to a single use. It is also known as specialised capital. It always remains in a fixed place. Example: Printing machine

#### Answer 4

(a) Advantages of opening a bank account:

i. Interest income created: Users with small saving amounts earn interest on their savings when they deposit money in the bank. Hence, depositing money in the bank generates income for them rather than letting the money lie idle.

ii. Mobilisation of small savings: Bank accounts help in mobilising the small savings of a vast segment of people. Further, these amounts are transferred for productive investment.

(b) Role of state:

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.

(c) Impact of increase in cash reserve ratio on loanable funds:

During the inflationary situation, the Central Bank increases the cash reserve ratio and thereby the fund for providing loans with the commercial bank declines.

(d) Types of taxes:

i. Direct tax

ii. Indirect tax

iii. Direct tax

iv. Indirect tax

(e) Function of commercial bank:

- i. Acting as a lender of last resort: It is the function of the Central Bank. When a commercial bank fails to get financial accommodation from any other source, then it approaches the Central Bank as a last resort. The Central Bank advances a loan to such a bank against approved securities. Thus, the Central Bank acts as a 'lender of the last resort'.
- ii. Deciding what is legal tender: It is the function of the Central Bank. The Central Bank of a country assumes supreme authority in issuing paper currency of definite denomination and value.
- iii. Determining monetary policy: It is the function of the Central Bank because the monetary authority of a country is the Central Bank which can determine monetary policy. Commercial banks act as channels through which the Government puts its monetary policies into practice.
- iv. Providing cash credit facility: In the process of accepting deposits and advancing loans, commercial banks are able to create credit. They are able to lend more funds than they have with them as cash deposits.

## PART II

### Answer 5

(a) Division of labour: Division of labour means the allocation of different parts of the production process to different workers or to different groups of workers.

Division of labour is beneficial to producers:

- i. Increase in the efficiency of labour: Division of labour increases the efficiency of labour. The worker becomes more specialised if a worker is entrusted with only a part of work in the process of production.
- ii. Quality of production improves: The quantity and quality of output produced by a worker increase within a short period of time. The increase in the efficiency of labour leads not only to an increase in the quantity of output but also to an improvement in the quality of the produced goods and services.
- iii. Reduced average cost: Because division of labour increases the total output, even with an unchanged number of labourers, the average cost of producing a commodity falls. This is a social advantage. Society can produce goods by incurring lower average cost of production. Hence, producers get an opportunity to raise their income and the standard of living improves a lot.

(b) Law of demand: The law of demand states that other things remaining constant, the quantity demanded of a good increases with a fall in price and diminishes when price increases.

Exceptions to law of demand:

- i. Conspicuous consumption: Some person may consume a very expensive commodity just to show off and attract the attraction of other people. In that case,



its price and demand may move in the same direction. Diamond ornaments are examples of such goods.

- ii. Bandwagon effect: The bandwagon effect is an exception to the law of demand. The consumer's demand for a commodity gets influenced by the taste and preference of the social class to which the consumer belongs. If a businessman prefers to play golf as a fashionable game among successful businessmen, then the price of a golf ball increases in the market. Here, the businessman may increase the demand for golf balls in order to show that he is a successful businessman.
- iii. Speculative activities: Goods which are objects of speculation may defy the law of demand. When the price of such a commodity rises, people may increase their purchase of that commodity in the expectation that the price would increase even further in the future. It happens in the share market.

### Answer 6

(a) Migration: Migration is defined as the movement of people from one place to another voluntarily or involuntarily. Some people may migrate from their place of origin because of natural disasters, and others may move to a new location for better jobs, education, health facilities or other social factors. Because of urbanisation, people migrate from rural areas to the cities. It has led to the following impacts on the ecosystem:

- i. Diverting water for a construction project lowers the water level. This reduces the number of places where water birds nest and fish reproduce.
- ii. Adding fertilisers to a local field changes the make-up of the soil. This affects the kinds of plants which are grown in the field.
- iii. The shoreline of a lake is being developed for a new recreation area. This can affect the numbers and kinds of organisms which can live by the lakeshore.

(b) Capital formation:

Capital formation means the creation of capital. A change in the stock of any capital during a particular period of time is called capital formation. Three important stages of capital formation are creation of savings, mobilisation of savings and investment of mobilised savings.

Reasons for the slow rate of capital formation in India:

- i. Lack of ability to save: Because of 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 the Indian economy.
- ii. Lack of willingness to save: In certain parts of the country, there still exists a feudal economic system. Even people who have the ability to save money are not willing to save and spend all their money on day-to-day consumption.
- iii. Insufficient mobilisation 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 because of poor banking knowledge and a poor banking network in underdeveloped states.

## Answer 7

(a) Entrepreneur: An entrepreneur is a person who carries the risk of business and coordinates the activities of all the other factors of production.

Functions of an entrepreneur:

- i. Planning of business activity: Before starting any business activity, the entrepreneur prepares the full-fledged strategy about the types of products to be produced, the sources from which the raw materials are to be collected and the type of technology to be introduced.
- ii. Organising business activity: Proper coordination among the available supply of labour, land and capital is necessary for the smooth progress of any production or business activity. An entrepreneur takes the responsibility of employing these factors in an appropriate proportion and maintaining proper coordination among them.
- iii. Decision making: Decisions about the types of products to be produced, what type of technology is to be adopted and the prices to be fixed for these products are taken by the entrepreneur. Future growth of any business organisation depends to a large extent on these decisions.

(b) Direct taxes and indirect taxes:

- i. Direct taxes: The tax burden cannot be shifted to any other individual or firm by the taxpayer. It is progressive because the tax rate increases with an increase in income slabs. The impact and incidence of tax fall on the same person.
- ii. Indirect taxes: The tax burden can be shifted by the taxpayer. It is regressive because the common people bear this tax burden. The producer bears the impact and incidence of tax on the consumer.

Progressive and regressive taxes:

- i. Progressive tax: When the percentage of income collected as tax increases with an increase in income, then it is called progressive income tax. Under this system, the tax liability increases in absolute terms and the proportion of income tax also increases. There is a different rate of tax at every income slab.

Example:

Yearly income of an individual	Tax rate
Up to 1,60,000	-
1,60,000–5,00,000	10%
5,00,000–8,00,000	20%
8,00,000–above	30%

ii. Regressive tax:

In regressive tax, the average tax rate decreases with an increase in income of an individual. The absolute amount of tax collection increases with the increase in income. Example:

Income per month	Rs 1000	Rs 42000
Tax rate	10%	7.5%
Tax collection	Rs 100	Rs 150

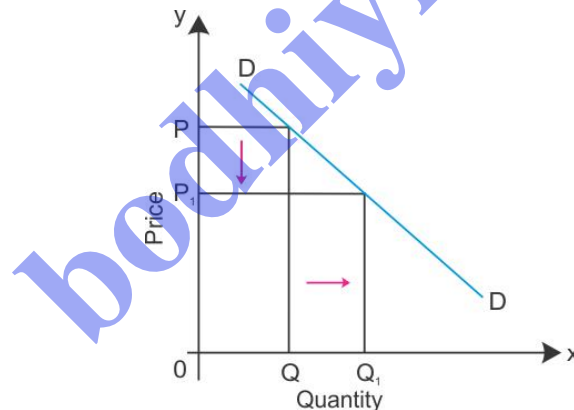
### Answer 8

(a) Price elasticity of demand:

Price elasticity of demand for a good is defined as the percentage change in demand for the good divided by the percentage change in its price. Price elasticity of demand is a pure number and it does not depend on the units in which the price of the good and the quantity of the good are measured. Price elasticity of demand is a negative number as the demand for a good is negatively related to the price of a good.

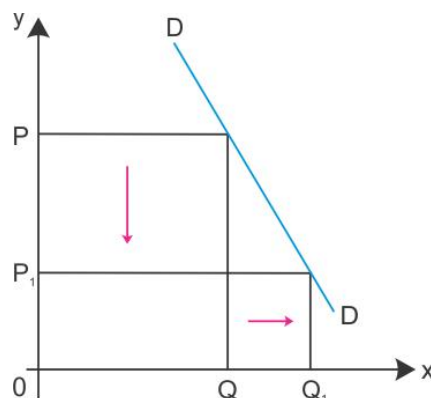
i. At a particular price, the percentage change in demand for a good is greater than the percentage change in price, and the demand for the good is elastic at that price.

$$e_p > 1$$



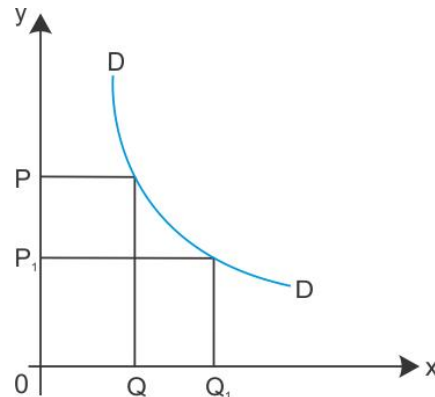
ii. At a particular price, the percentage change in demand for a good is less than the percentage change in price, and the demand for the good is inelastic at that price.

$$e_p < 1$$



iii. At a particular price, the percentage change in demand for a good is equal to the percentage change in price, and the demand for the good is unitary elastic at that price.

$$e_p = 1$$



(b) With reference to the Central Bank of a country:

- i. **Need of a Central Bank:** A Central Bank is the apex bank which controls the entire banking system of a country. It has the sole authority to issue notes in that country. It also acts as a banker to the Government and controls the supply of money in the country.
- ii. **Central Bank acts as a banker to the Government:**
  - a. The Government maintains an account with the Central Bank. All types of income of the Government are deposited into this account and all the expenses of the Government are also incurred from this account.
  - b. It also advances short-term loans to the Government to meet the deficit in its budget.
- iii. **Open market operations:** Open market operations refer to the sale and purchase of Government securities and bonds by the Central Bank. While controlling inflation, the Central Bank sells Government securities to the public through the banks. This results in the transfer of a part of bank deposits to the Central Bank account and reduces credit creation capacity of commercial banks.

### Answer 9

(a) **Perfect competition:** Perfect competition is a form of the market where there are a large number of buyers and sellers of a commodity. A homogeneous product is sold in the market. An individual firm has no control over the price; it is a price taker.

**Characteristics of perfect competition:**

- i. **Large number of sellers and buyers:** The number of firms selling a particular commodity is so large that any increase or decrease in supply by an individual firm hardly impacts the total supply. So, an individual firm fails to impact the price of the commodity in the market. It can sell any amount at the existing price of the commodity. Hence, a firm under perfect competition is a price taker. Even the number of buyers is large, and hence, an individual buyer is also unable to influence the price of the commodity.

- ii. Homogeneous products: All sellers sell identical units of a product. The existence of identical product implies the same price for the product in a competitive market. Hence, buyers have no reason to prefer the product of one seller compared to that of another.
- iii. Free entry and exit of firms: A firm can easily enter and exit any industry as there is no legal restriction. Whenever there are abnormal profits, new firms will enter the industry, and whenever there are losses, few existing firms will exit the industry. This situation is possible only in the long run.

(b) Reasons:

- i. Fixed income group is adversely affected during periods of inflation: The hardest hit is the people who receive fixed income. People who live on past savings, fixed interest or rent, pensions and salaries suffer during periods of rising price as their incomes remain fixed. The middle class who by hard work take care of their children's education, livelihood in the times of sickness and old age, and accommodate day-to-day expenses find it difficult to survive the times of serious inflation.
- ii. Selling costs are higher in monopolistic competition: Each firm has to incur selling costs such as expenditure on advertisement to promote sales. This is because there is a large number of close substitutes in the market.
- iii. High rates of taxes reducing the savings capacity in an economy: If the investors, entrepreneurs and income earners in a society have to pay taxes at a higher rate for earning more, then such persons are discouraged to earn more. Hence, the process of generation of capital accumulation and savings would be affected badly as the rich people can save more.
- iv. The demand for newspaper is inelastic: Newspaper has only few uses. Its demand is likely to be inelastic. It is a situation where even substantial changes in price leave the demand unaffected, i.e.  $E_d < 1$ .

**Answer 10**

(a)

- i. Disinvestment: Privatisation of public sector undertakings by selling off part of the equity of public sector undertakings to the public is known as disinvestment.
- ii. (1) Control of budgetary deficits: The budgetary deficits in India are increasing considerably and further contribute to rising prices. To reduce budgetary deficits, the scope of the public sector should be contracted and that of the private sector should be expanded.  
(2) Flow of funds to public exchequer: There will be reduction in burden on the public exchequer. Operation of public sector enterprises has been putting a large burden on the public exchequer because of huge losses incurred by several enterprises and a growing amount of subsidy payments. Privatisation would be helpful in reducing the burden on the Government.

(3) Greater flexibility in decision making: The policy of privatisation will be helpful in imparting greater flexibility in the decision-making process. Management would be free from any Government intervention. Timely and prudent decisions will improve the efficiency of business operation.

(b)

i. Degree of elasticity on supply curves:

(1)  $E_p > 1$

(2)  $E_p = 1$

ii. Determinants of elasticity of supply:

(1) Possibility of shift from one line of production to the other: If the producers can easily shift from the production of other products to the one whose price has increased, the supply would be more price elastic. For example, agricultural production is seasonal. So, the supply of most of the agricultural crops is inelastic. For industrial products, however, the supply is continuous. Here the supply of industrial products is supposed to be more elastic because producers can easily shift from one line of production to another or they can fully use the productive capacity of the machines.

(2) Supply of inputs: 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.

(3) Technological condition: If the production technology used in the production of any commodity is primitive, then the supply of that commodity is primitive and the supply of that commodity would be relatively inelastic. However, if modern technology is used in the production of a commodity, then the supply of such a commodity would be relatively elastic.