

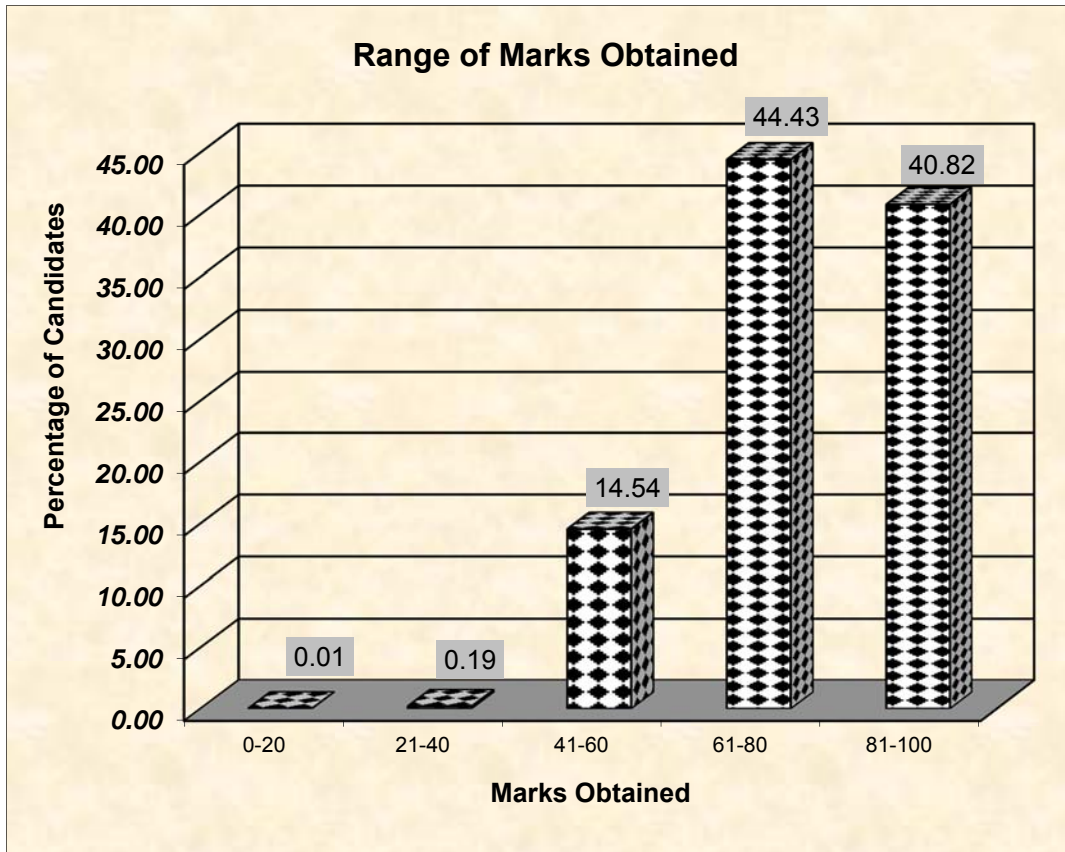
## ECONOMIC APPLICATIONS

### STATISTICS AT A GLANCE

Total Number of students who took the examination	15,430
Highest Marks Obtained	100
Lowest Marks Obtained	11
Mean Marks Obtained	76.83

### Percentage of Candidates according to marks obtained

Details	Mark Range				
	0-20	21-40	41-60	61-80	81-100
Number of Candidates	2	30	2244	6856	6298
Percentage of Candidates	0.01	0.19	14.54	44.43	40.82
Cumulative Number	2	32	2276	9132	15430
Cumulative Percentage	0.01	0.21	14.75	59.18	100.00



## ECONOMIC APPLICATIONS

### ANALYSIS OF PERFORMANCE

#### Question 1

State whether the following statements are *true* or *false*. Give reasons.

- (a) The price elasticity of demand for commodities, having close substitutes is relatively high. [2]
- (b) Rate of taxation depends upon the income groups in a progressive tax structure. [2]
- (c) The price level in a perfectly competitive market is determined by an individual seller. [2]
- (d) Efficiency of labour is influenced by working conditions. [2]
- (e) Supply and price are inversely proportional. [2]

#### Examiners' Comments

- (a) Most candidates failed to link the concept of price elasticity with substitutes. They were unable to explain why goods with substitutes have a high price elasticity.
- (b) A few candidates were unable to write how tax rates and the tax base are co-related.
- (c) Though many candidates wrote 'false' correctly, they could not justify the reason.
- (d) Most candidates answered this question correctly. A few however were confused between working conditions and weather conditions.
- (e) This question was answered correctly by most candidates. However, some candidates wrote 'not inversely proportional' instead of 'directly proportional'.

#### Suggestions for teachers

- Instruct students to write true / false and not yes / no or right / wrong.
- Emphasise that students must state reasons even if statements are true.
- Assign students adequate practice on tackling application based questions.
- Encourage students to use relevant economic terms.

## MARKING SCHEME

### Question 1.

- (a) True. Demand for goods which have substitutes is relatively high. For e.g. if the price of coffee rises, many consumers will shift from the consumption of coffee to tea because tea has now become cheaper.
- (b) True. A tax is called progressive when the rate of taxation increases as tax payers income increases, therefore tax depends on income brackets.
- (c) False. In a perfect market price is determined by forces of demand and supply. Each seller has control over a small fraction of market supply, hence no individual seller is able to influence the price.
- (d) True. Good working conditions will have a positive impact on the efficiency of labour. An example is required.
- (e) False. Supply is directly proportional to price. Higher the price greater will the quantity supplied.

### Question 2

- (a) Draw and briefly explain a perfectly inelastic supply curve. [2]
- (b) How does the practice of shifting cultivation affect the environment adversely? [2]
- (c) In which form of market do producers and consumers have perfect knowledge about the market conditions? [2]
- (d) State *two* measures taken by the Government to reduce income inequality in an economy. [2]
- (e) Mention *two* features of Monopoly. [2]

### Examiners' Comments

- (a) A majority of candidates drew the graph correctly but failed to label it. The explanation too was not written by many candidates.
- (b) The question was answered correctly by most candidates. Some however overlooked the effects and wrote the meaning of shifting cultivation instead.
- (c) Most candidates identified and wrote the market form correctly.
- (d) Candidates wrote general answers like tax, fiscal policy, monetary policy instead of specific terms like progressive taxation, productive public expenditure, subsidies.
- (e) Most candidates answered the existence of a single seller but omitted to mention on the characteristics based on restricted entry.

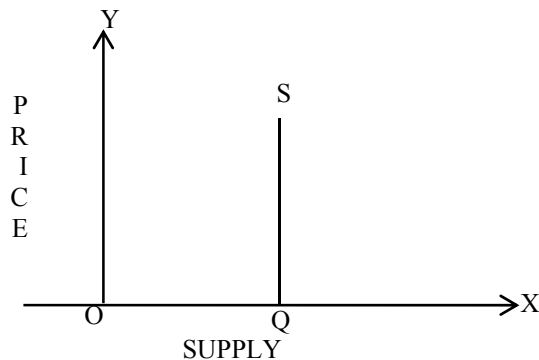
#### Suggestions for teachers

- Ensure adequate practice in drawing well labelled diagrams.
- Stress the need to draw neat and precise diagrams with pencils and rulers.
- Guide students to write specific terms instead of general answers.

## MARKING SCHEME

### Question 2.

(a)



In this case supply does not respond to any change in price. The price elasticity is zero. The supply curve is parallel to y-axis and shows that supply remains at OQ.

(b)

Practice of shifting cultivation is observed in the hilly terrains of Orissa and North Eastern states of Tripura, Assam, Manipur, Mizoram, etc. According to this practice, the tribal people cut and burn trees and bushes and then till and plough the ashes into the soil so that nutrient rich ash sustains crop production. However, with rainfall the top soil gets washed into the rivers. Ultimately the soil on the hillock becomes infertile and tribal people shift to some other hillocks. This causes deforestation. Hence the forest land eco system is badly affected.

(c)

In a Perfect Market.

(d)

1. Progressive taxation.
2. Promoting employment opportunities.
3. Promoting tax exemptions to people falling in the low income group.
4. Supply of basic necessities to people at subsidized rate.

(Any two of the above or any other relevant matter)

(e)

1. Single seller.
2. Devoid of competition.
3. No close substitutes.
4. Firm is the price maker.
5. Closed entry.

6. Possibility of price discrimination.

(Any two of the above )

### Question 3

- (a) How does the Central Bank act as a 'lender of the last resort'? [2]
- (b) The quantity of a commodity supplied increases by 25% when its price rises by 10%.  
Calculate price elasticity of supply. [2]
- (c) State an adverse impact of urbanization on the eco system. [2]
- (d) An Indirect tax is not always equitable. Give *two* reasons to support your answer. [2]
- (e) State *two* characteristics of Capital as a factor of production. [2]

### Examiners' Comments

- (a) Most candidates understood the concept, however they lacked clarity in their expression. Some were confused and stated that the Central Bank granted loans to the public.
- (b) Some candidates did not write the formula and missed writing that price elasticity was greater than one or that supply was elastic.
- (c) Most candidates answered the question correctly.
- (d) The term 'equitable' was not understood by candidates and hence the explanation was incorrect.
- (e) Most candidates answered the question correctly.

### Suggestions for teachers

- Instruct students to initially write the formula and then proceed to calculate the numerical stepwise.
- Related concepts like direct and indirect taxes should be taught in a tabular form so that the students can easily compare and contrast.
- Ensure students understand all the important economic terms associated with topics concerned.
- Use these terms in all explanations to reinforce the learning process.

### **MARKING SCHEME**

#### **Question 3.**

- (a) R.B.I. acts as a lender of the last resort. As a lender of the last resort R.B.I. provides directly or indirectly all reasonable financial assistance to Commercial Banks in times of financial crisis.
- (b) 
$$\frac{\text{Percentage change quantity supplied}}{\text{Percentage change in price}} \text{ or } \frac{25\%}{10\%} = 2.5 \quad \epsilon_p > 1$$
- (c)
  1. Greater incidence of deforestation.
  2. Growing volume of municipal waste.
  3. Growing volume of domestic waste.
  4. Greater incidence of water pollution and noise pollution.
  5. Increase in consumption of energy and burning of fossil fuels.

(Any one of the above)
- (d) If Government levies higher taxes on goods of necessities and not on goods of luxury, indirect tax will not be on the basis of equality.
  1. The burden will be more on the poor.
  2. This widens the disparity between the rich and the poor.

(Any other relevant matter)
- (e)
  1. Capital is the result of labour
  2. Capital is productive.
  3. Capital is the result of past savings.
  4. Capital yields revenue.
  5. Capital depreciates.
  6. Supply of capital varies over time.
  7. Capital involves cost.

(Any two characteristics should be stated)

#### Question 4

- (a) Suggest *two* measures to improve the efficiency of labour in India. [2]
- (b) What is meant by product differentiation? [2]
- (c) State the Law of Supply. Explain it with the help of a diagram. [2]
- (d) How does money act as a standard of deferred payment? [2]
- (e) State an important difference between Demand deposits and Time deposits. [2]

#### Examiners' Comments

- (a) Most candidates answered the question correctly.
- (b) A few candidates misunderstood the concept of 'product differentiation' with that of 'price discrimination'. Hence this led to vague and incorrect explanations and irrelevant examples being written by them.
- (c) Though the Law of Supply was written correctly, candidates lost marks for not writing 'other things being equal'. In some cases the diagram was not labelled clearly.
- (d) The term 'deferred' was not understood and hence the explanation was unclear.
- (e) Candidates only wrote the examples but failed to mention the important differences based on interest rates and time period.

#### Suggestions for teachers

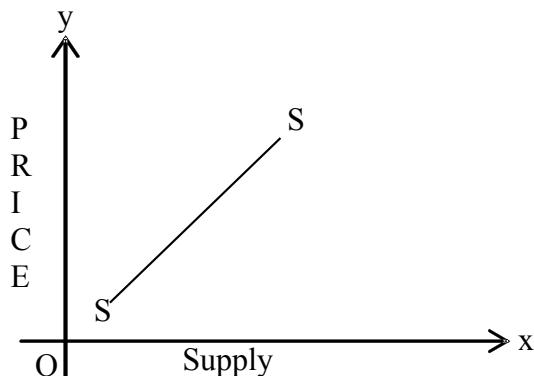
- Underline the need to be specific in writing definitions.
- Regular and periodic revision on important concepts must be conducted through oral questioning or tests.
- Guide students in comprehending and analysing questions by exposing them to different types of application based questions.
- Allot sufficient practice in the drawing and labelling of diagrams.

#### **MARKING SCHEME**

##### **Question 4.**

- (a) 1. Eradication of illiteracy  
2. Adequate training facility.  
3. Fair and prompt wages.  
4. Responsible trade unions.  
5. Good relationship between employer and employee..  
6. Good working conditions.  
7. Social security.  
8. Rational labour legislation. (Any other relevant matter) (Any two should be stated)
- (b) Product differentiation refers to Monopolistically competitive market. In this market good produced are not identical but are similar. Goods are close substitutes. For e.g. different brands of toothpaste, toilet-soaps, etc.

- (c) Other things remaining the same supply extends as a result of rise in price and contracts as a result of fall in price.



Diagram

should be explained briefly.

- (d) Acting as standard of deferred payment means that a payment to be made in future can be stated in money terms. The reason why future payments are expressed in terms of money is that money has the quality of general acceptability and it can be expressed in definite and standardized units.
- (e) In the case of Demand deposits money can be withdrawn by cheques without any restriction on the amount or number of withdrawals made. These are payable on demand. While Time deposits are not payable on demand, they do not enjoy cheque facility. Money deposited cannot be withdrawn before the maturity of the period for which the deposit is made.

### Question 5

- (a) Define Elasticity of supply. Explain any *four* of its determinants. [7]
- (b) Define a tax. Explain the following with examples:
- (i) Regressive tax (ii) Proportional tax (iii) Degressive tax. [8]

#### Examiners' Comments

- (a) The definition of elasticity of supply was written correctly, however its factors affecting the elasticity of supply was not explained satisfactorily. Most candidates misinterpreted the question with factors affecting the supply of a commodity.
- (b) Most candidates lacked the conceptual clarity on topics of regressive, proportional and degressive types of tax. Candidates were confused as to what the question required of them – some drew diagrams, some drew tables while very few wrote relevant examples.

#### Suggestions for teachers

- The topic on elasticity is an important yet challenging concept for most candidates. Clarity in understanding its concepts is possible through regular revision and classroom discussions
- Do a comparative study of the various types of taxes in a tabular form emphasizing the advantages and disadvantages of each.
- Give tests and assignments on these concepts to reinforce their learning.

## MARKING SCHEME

### Question 5.

(a) Elasticity of supply refers to responsiveness of supply to a given change in price.

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

Determinants of elasticity of supply are the following:

1. Behaviour of cost of production
2. Time element
3. Nature of the commodity
4. Availability and price of factor inputs.
5. Risk taking ability of supplies
6. Expectation of future prices.

(Any four of the above)

(b) “A tax is a compulsory contribution from a person to the government to defray the expenses incurred in the common interest of all, without reference to special benefits conferred.”

- (1) Regressive tax – is one in which the rate of taxation decreases as the tax payer’s income increases, for e.g. a person earning ₹5 lakhs may be taxed at a rate of 20% while a person earning ₹8 lakhs may be taxed at a rate of 15%.
- (2) Proportional tax – A tax is called proportional when the rate of tax remains the same as the income of the tax payer increases for e.g. if the rate of income tax is 10%, every person will be taxed at 10% whether he/she earns ₹5 lakhs or ₹20 lakhs per annum.
- (3) Degressive tax - A tax is called degressive when the rate of progression in taxation does not increase in the same proportion as increase in income.  
E.g. income upto ₹2 lakhs is exempted from income tax. The rate is 10% for income between ₹2 lakhs and ₹5 lakhs, 20% for income between ₹5 lakhs and ₹10 lakhs and 30% of tax for income above ₹10 lakhs.

### Question 6

- (a) What is meant by industrialization? Explain *four* impacts of industrialisation on the environment. [7]
- (b) Define Joint demand. With the help of diagrams explain the difference between Individual demand and Market demand. [8]



Examiners' Comments

- (a) Though most candidates knew the concepts on industrialization and urbanization they did not write specific answers. Many wrote general essays. Some overlooked the phrase 'impact on environment' and wrote the benefits of industrialization instead.
- (b) The example of joint demand was incorrect as candidates wrote examples of derived demand. Only a few candidates brought out the difference between individual demand and market demand through correctly drawn diagrams. Some candidates only wrote the schedules with no graphic presentations.

Suggestions for teachers

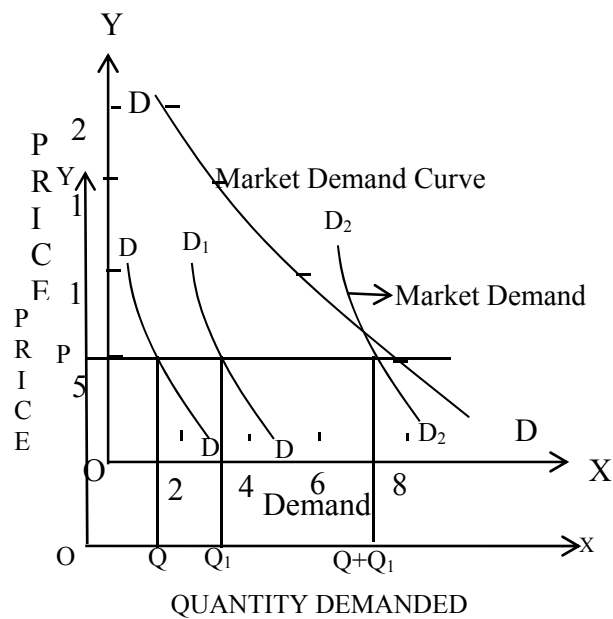
- Emphasise the need to read all chapters and to avoid selective study.
- Give several relevant examples to differentiate between joint demand and derived demand.
- Reiterate the importance of diagrams in the chapters of Theories of Demand and Supply.

**MARKING SCHEME**

**Question 6.**

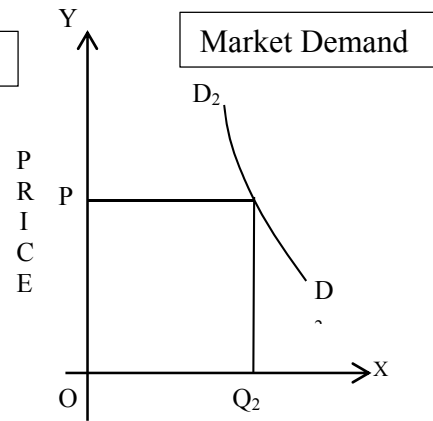
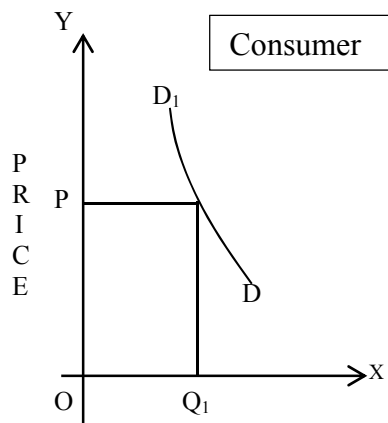
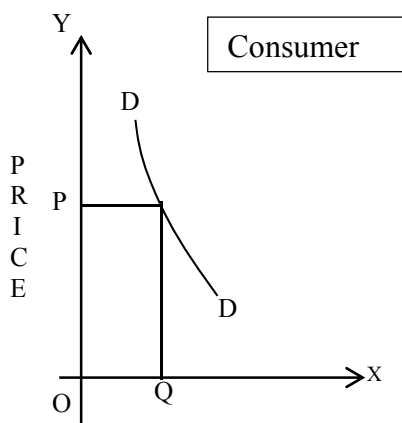
- (a) Industrialisation refers to growth and development of a large number of manufacturing units in a given region.  
 Its impacts on the environment:
  1. Greater pressure on natural resources
  2. Noise pollution
  3. Air pollution
  4. Generation of industrial waste.
  5. Water pollution.
  6. Deforestation.
 (Any two of the above)
- (b) Joint demand refers to the demand for two or more goods which are used jointly or demanded together for e.g. increase in the demand cars leads to simultaneous increase in the demand for petrol.

Individual demand curve



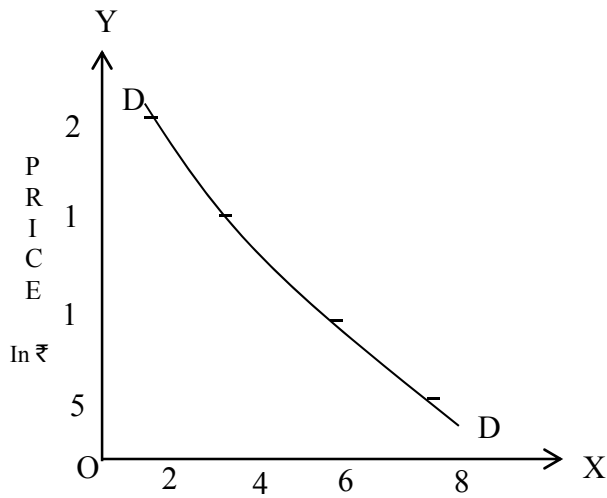
(b)

OR



OR

(c)



Any one of the above diagrams.

**Question 7**

(a) State *one* difference between an entrepreneur and other factors of production.

Explain any *four* qualities in an individual to be a successful entrepreneur.

[7]

- (b) Define a Commercial Bank. Explain *three* ways by which Commercial Banks advance loans to the public. [8]

#### Examiners' Comments

- (a) Most candidates wrote the difference between entrepreneur and each factor of production separately instead of factors of production in general. However, the qualities of an entrepreneur was explained confidently.
- (b) The definition of Commercial Banks was incorrect in most cases. The different loans too was not explained clearly. Candidates failed to mention about the rates of interest charged.

#### Suggestions for teachers

- Reiterate the importance of writing correct definitions.
- Stress upon the points to be included while answering questions.
- Give projects based on Banking so that students visit banks and become aware of the different types of deposits and loans.

### MARKING SCHEME

#### Question 7.

- (a) (1) Entrepreneur is the only factor who earns profit and other factors are remunerated according to their contribution to output.  
(2) He bears risks and faces uncertainty while other factors do not.  
(3) He delegates work and sets targets and other factors such as labour work toward the target.  
(Any one relevant fact)
- Qualities of a good entrepreneur
1. Organisational ability
  2. Attitude of risk taking
  3. Prudent decision making quality
  4. Innovative ability.
  5. Negotiating skill.
- (Any four of the above)
- (b) Commercial banks are financial institutions which borrow money from the public in the form of deposits and lend money to the public in the form of loans. These institutions lend money to trade and commerce e.g. Canara Bank.  
Three ways by which they lend money.
1. Loans
  2. Cash Credit
  3. Over draft facility
  4. Discounting of bills
- (Any three of the above)

#### Question 8

- (a) Define labour as a factor of production. Explain in brief *three* characteristics of labour. [7]
- (b) With the help of an example explain the meaning of Price Discrimination. To which market is it relevant? Explain any *two* similarities between a Perfect Market and a Monopolistically Competitive Market. [8]

## Examiners' Comments

- (a) Most candidates answered the question correctly. The definition was correct and the characteristics were accurately explained.
- (b) The concept of Price Discrimination was not understood by many candidates as they confused it with Product Differentiation. The similarities between Perfect Competition and Monopolistic Competition was answered correctly by most candidates.

### Suggestions for teachers

- Impress on the importance of learning definitions especially of important economic terms.
- Allot ample time to explain the important concepts in each chapter.
- Revise and recall all important concepts after the syllabus has been covered.

## **MARKING SCHEME**

### **Question 8.**

- (a) Labour in Economics refers to any physical or mental endeavor carried out with a view to earn money for e.g. Teacher, Doctor, Plumber, etc.

Characteristics of labour as a factor of production are the following:

1. Labour is perishable
2. Labour is an active factor
3. Labour cannot be separated from labourer.
4. Labour sells his labour not himself.
5. Labour is less mobile.
6. Labour differs in efficiency.
7. Inelastic supply of labour
8. Labour is both a means and end of production.
9. Demand for labour is derived.
10. Labour has less bargaining power.

(Any three of the above)

- (b) Price discrimination refers to a situation when a producer sells the same product to different buyers at two or more different prices for reasons not associated with difference in the cost of production and cost of supplying the product to different consumers. E.g. Indian railways charge lower freight charges for transporting essential products such as food products, coal, etc. as compared to transportation of other products.

This is relevant to Monopoly.

- (1) Both markets have free entry and exit.
- (2) Both markets have large number of buyers and sellers

(Similarities should be explained)

### **Question 9**

- (a) Define money. How does money perform its role as a:
- (i) Medium of Exchange.

(ii) Store of Value.

[7]

(b) What are Public Sector Undertakings? Explain *four* reasons for the privatization of Public Sector Undertakings.

[8]

Examiners' Comments

- (a) The definition of money was incomplete in many cases. The explanation for the functions of money was written with little conviction.
- (b) Most candidates answered the first part about the Public Sector correctly but appeared confused with the concept of privatization.

Suggestions for teachers

- Emphasise the need for clear and correct explanations for writing answers. Merely writing the sub-headings is not adequate for scoring marks.
- Students must clearly understand the concepts of privatization and disinvestment in these days of globalization. Discuss newspaper and magazine reports to make these concepts more clear.
- Have group discussions and debates to reinforce the learning process.

**MARKING SCHEME**

**Question 9.**

- (a) Anything that generally acceptable as a means of Exchange and at the same time acts a measure and a store of Value is money. **OR**  
Anything that is widely accepted in payments for goods and services.
- (1) As a medium of Exchange.
  - (2) As a store of Value. (These functions should be clearly explained with suitable examples)
- (b) Public sector undertakings are enterprises owned, controlled and managed by the Government – Central Government, State Government and local self-governing bodies. E.g. BHEL, BEL, HAL, Hindustan Steel Limited, etc.
- The reasons for privatization are the following:
1. Cost Over-run
  2. Low capital return
  3. Excessive man power
  4. Improper price policy
  5. Underutilisation of capacity
  6. Improvement in production
  7. To control budgetary deficits.
  8. Increase in competition. (Or any other relevant matter) (Any four of the above)

**Question 10**

Read the extract given below and answer the questions that follow:

Rising vegetable prices and the impact of a weak rupee pushed inflation to a five month high of 5.79% in July 2013, posing yet another challenge for Asia's third largest economy battling to defend the rupee and boost growth.

Official data released on Wednesday showed inflation as measured by the wholesale price index, jumped to 5.79% in July from previous months 4.86%. Easing wholesale price inflation had fuelled expectations of a moderation in tight monetary policy but the slide of the rupee against the dollar has dashed those hopes for now.

- (i) What is meant by running inflation? [2]
- (ii) Mention *two* fiscal measures to control inflation. [1]
- (iii) Briefly explain the effect of a high level of inflation on the following:
- (1) Fixed income groups. [2]
  - (2) Producers [2]
  - (3) Creditors and debtors. [2]
- (iv) Explain *three* monetary policies of the Reserve Bank of India to control credit. [6]

Examiners' Comments

- (i) Most candidates failed to define inflation by writing the correct and proper terms. In some cases the percentage was incorrect.
- (ii) Some candidates only mentioned the fiscal tools and failed to explain how these tools could control inflation.
- (iii) Answers on the effects of inflation on fixed income group did not find mention on 'real income' or 'purchasing power'. Only the short term effect on producers was explained.
- (iv) Though most candidates identified the monetary policies of the Reserve Bank of India, they could not elaborate upon it.

Suggestions for teachers

- Give importance to the percentage of price rise while explaining different types of inflation.
- The Fiscal and Monetary tools to control inflation must be clearly explained in steps to make it easier for students to understand.
- These concepts are important so reinforce their learning by tests and oral questioning.

## MARKING SCHEME

### Question 10.

- (i) Running inflation refers sustained rise in prices over 8% and generally around 10% per annum. Running inflation is a warning signal indicating the need to control it.
- (ii) Progressive taxation- (Reduction Public Expenditure or any other relevant matter)
- (iii) (1) Fixed income group includes pensioners, Government servants, etc. This class is worst affected by inflation because the purchasing power of these individuals goes on decreasing with rising prices.
- (2) Producers – These gain in the short period. Usually cost of production does not increase as fast as price of their product and so producers earn profit. But in the long run they may be adversely affected.
- (iv) Creditors and Debtors – Debtors gain when they pay back their debt during inflation. This is because of the fall in the value of money that was high when they borrowed and low when they repaid the debt. Against this, the Creditors are losers during inflation because of fall in the value of money.

#### Three Monetary Policies:

- (1) Bank Rate Policy.
- (2) Change in Reserve Ratio. (CRR & SLR)
- (3) Open Market Operation
- (4) Regulating Marginal Requirement
- (5) Regulating Consumer Credit
- (6) Credit Rationing
- (7) Moral Suasion, etc.

(Any three methods mentioned above)

### **Topics/Concepts found difficult**

- Factors determining Elasticity of Supply
- Privatization
- Price Discrimination
- Product Differentiation
- Taxation
- Credit Control Methods
- Fiscal and Monetary Policy
- Individual demand and market demand
- Ways of lending money by Commercial Banks

### **Suggestions for students**

- Read the questions carefully and underline the main points.
- Avoid selective study.
- Allocate sufficient time for Part II.
- Practise graphs, diagrams and numericals.
- Solve many previous years question papers as possible to get an idea about the different ways in which questions can be asked.
- Definitions and formulas should be learnt thoroughly.