CONTENTS

Syllabus for Academic session 2016-17 3
Design of the question paper 7
Instructions for attempting the examination 8

Microeconomics Question Bank
Introduction and Economic Problems 9
Consumer’s Equilibrium 11
Demand 13
Elasticity of demand 15
Production 17
Theory of Costs 19
Theory of Revenue 21
Producer’s Equilibrium 23
Supply and elasticity of supply 25
Market Equilibrium 27
Forms of market 29
Microeconomics Economics Assignments (A1-A11) 31-52

Macroeconomics Question Bank
National Income Accounting 53
Money 55
Banking 56
Determination of income and employment 57
Government budget and the economy 59
Foreign exchange and Balance of payments 61
Macroeconomics Economics Assignments (A12-A23) 63-86
Practice paper and Marking Scheme 87-96
Syllabus for Academic Session 2016 - 17

Introductory Micro Economic Theory
Unit 1  Introduction  6 Marks
Unit 2  Consumer Equilibrium and Demand  16 Marks
Unit 3  Producer Behaviour and Supply  16 Marks
Unit 4  Forms of Market and Price Determination under Perfect competition with simple applications  12 Marks

Introductory Macro Economic Theory
Unit 5  National Income and Related Aggregates  15 Marks
Unit 6  Money and Banking  8 Marks
Unit 7  Determination of Income and Employment  12 Marks
Unit 8  Government Budget and the Economy  8 Marks
Unit 9  Balance of Payments  7 Marks

Month wise Break up of Syllabus
MARCH 2016
Introduction
- Meaning of Microeconomics and Macroeconomics
- What is an economy?
- Central Problems of an Economy: what, how and for whom to produce
- Production Possibility Frontier and Opportunity cost

Consumer Equilibrium and Demand
- Consumer’s Equilibrium- meaning of utility, marginal utility, law of diminishing marginal utility, conditions of consumer’s equilibrium using marginal utility analysis
- Indifference curve analysis of consumer’s equilibrium – consumer’s budget (budget set and budget line), preferences of the consumer (indifference curve and map), conditions of consumer’s equilibrium

APRIL 2016
- Demand, determinants of Demand
- Law of Demand, Demand Schedule, Demand curve and its slope
- Market Demand
• Movement along and shifts in demand curve
• Price Elasticity of Demand
• Measurement of price Elasticity of demand – Percentage and Geometric methods in linear demand curve
• Relationship between elasticity of demand and total expenditure
• Factors affecting price elasticity of demand

Producer Behaviour and Supply
• Production Function: short run and long run
• TP, AP, MP
• Returns to factor

MAY 2016
• Costs: type of costs
• Short Run costs: Total cost, Total Variable Cost, Total Fixed cost, Average Fixed cost, Average Variable cost, Average cost, Marginal cost - meaning and their relationships.
• Revenue: Total, Average and Marginal Revenue - meaning and their relationship in different markets
• Producer’s Equilibrium: Meaning and its condition in terms of MR – MC approach

JULY 2016
• Supply: meaning and determinants of supply
• Law of supply, supply schedule and supply curve and its slope
• Movement along and shifts in supply curve
• Price elasticity of supply – percentage and geometric method

Forms of Market and Price Determination
• Determination of market equilibrium, effects of shifts in demand and supply
• Perfect competition – features
• Non-competitive markets – meaning and features
  o Monopoly, Monopolistic competition & Oligopoly

Simple Application of Tools of Demand and Supply
• Price ceiling and Floor price
AUGUST 2016

National Income and Related Aggregates

- Macroeconomics – its meaning
- Basic concepts of macroeconomics – consumption goods, capital goods, final goods, intermediate goods, stocks and flows, gross investment and depreciation
- Circular Flow of Income
- Concepts and aggregates related to national income: GDP, GNP, NDP, NNP at both market price and factor cost
- Measurement of National Income-
  - Value Added Method
  - Income Method
  - Expenditure Method
- Reconciliation of the 3 Methods

SEPTEMBER and OCTOBER 2016

- Private Income, Personal Income and Personal Disposable Income
- National Disposable Income- Gross and Net
- Real and Nominal GDP
- GDP and Welfare

Determination of Income and Employment

- Aggregate demand and its components
- Propensity to consume and propensity to save (average and marginal)
- Short-run equilibrium output
- Investment multiplier and the multiplier mechanism
- Meaning of full employment and involuntary unemployment
- Problems of excess demand and deficient demand
- Measures to correct excess demand and deficient demand- change in Government spending, taxes and money supply

Money and Banking

- Money and its meaning
- Functions of money
- Supply of money – M1
• Money creation by the commercial banking system
• Central bank and its functions (example of the Reserve Bank of India)
  - Bank of issue
  - Government Bank
  - Banker’s Bank
  - Controller of credit through CRR, SLR, Repo Rate, Reverse Repo Rate, Open Market Operations, Margin Requirements

NOVEMBER 2016

Government Budget and the Economy

Meaning and components of Government Budget
• Objectives of Government Budget
• Classification of Receipts- Revenue and Capital
• Classification of Expenditure – Revenue and Capital, Plan and Non plan,
• Various measures of government deficit: meaning:
  o Revenue Deficit
  o Fiscal Deficit
  o Primary Deficit

Balance of Payments
• Meaning of Foreign Exchange Rate: Fixed and Flexible rates and Managed Floating
• Determination of exchange rate in a free market
• Balance of Payments Account- meaning and components
• Balance of payments deficit – meaning

Revision
Design of Economics Question Paper

Question Paper is divided into two parts –

Part A: Introductory Microeconomics
Part B: Introductory Macroeconomics

1. Layout of the question paper as per latest CBSE directive
2. Weightage by content

<table>
<thead>
<tr>
<th>Unit No.</th>
<th>Unit/ Sub Unit</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Introduction</td>
<td>6</td>
</tr>
<tr>
<td>2.</td>
<td>Consumer Equilibrium and Demand</td>
<td>16</td>
</tr>
<tr>
<td>3.</td>
<td>Producer Behaviour and Supply</td>
<td>16</td>
</tr>
<tr>
<td>4.</td>
<td>Forms of Market &amp; Price Determination under perfect competition and simple applications</td>
<td>12</td>
</tr>
<tr>
<td>5.</td>
<td>National Income and Related Aggregates</td>
<td>15</td>
</tr>
<tr>
<td>6.</td>
<td>Money and Banking</td>
<td>8</td>
</tr>
<tr>
<td>7.</td>
<td>Determination of Income and Employment</td>
<td>12</td>
</tr>
<tr>
<td>8.</td>
<td>Government Budget and the Economy</td>
<td>8</td>
</tr>
<tr>
<td>9.</td>
<td>Balance of Payments</td>
<td>7</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

3. Types of questions

<table>
<thead>
<tr>
<th>Typology of questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remembering: knowledge, recall</td>
</tr>
<tr>
<td>Understanding/ comprehension</td>
</tr>
<tr>
<td>Application</td>
</tr>
<tr>
<td>Higher Order Thinking skills</td>
</tr>
<tr>
<td>Evaluation and multidisciplinary</td>
</tr>
</tbody>
</table>

4. Scheme of Options

There is no overall choice. However, there is an internal choice in one question of 6 marks, one question of 4 marks, and one question of 3 marks. Thus, there will be an internal choice for 3 questions each in the microeconomics section and macroeconomic section.
INSTRUCTIONS FOR ATTEMPTING THE EXAMINATION

1. The paper is divided into two parts. Each section is to be answered separately.

2. Questions should be answered in **proper sequence** and not in reverse order.

3. 1 mark questions are required to be answered in **one** sentence each. For MCQ full option should be written with the correct subpart mentioned.

4. 3 marks questions should not normally exceed 60 words each.

5. 4 marks questions should not normally exceed 70 words each.

6. 6 marks questions should not normally exceed 100 words each.

7. Answer should be **brief** and to the point and the above word limit should be adhered to as far as possible.

8. Read the question paper carefully, especially questions that offer a choice.

9. Use a pencil and ruler for drawing diagrams and remember to **label the axes** correctly.

10. Mark the diagram with arrows so that it becomes self explanatory.

11. All schedules should be **tabulated** using a pencil and ruler.

12. **Formulae** carry marks. Remember to write the formulae and units in numerical questions.

13. In questions that require a schedule / diagram, remember to incorporate it in your explanation.

14. All calculations should be shown in a rough column on the same page as the solution.

15. **Proper formatting** of answers is essential. Each point should have a **heading** followed by an explanation in the next line.

16. Do not forget to **underline key words**.
Introduction & Economic Problems

The following are 1 mark questions:

1. What is economics?
2. What is meant by marginal rate of transformation?
3. Give one point of difference between microeconomics and macroeconomics.
4. Is the study of the automobile industry a macro economic study? Why?
5. When is the allocation of resources in an economy considered to be efficient?
6. There is widespread unemployment in an economy. Depict this situation on a diagram using a PPF.
7. Why is the study of the problem of unemployment in India considered a macroeconomics study?
8. What does a rightward shift in a PPF indicate?
9. Why is a PPF concave?
10. A teacher can do three jobs – teach in a school, take home tuitions or write books. She earns Rs 1 lakh per annum from teaching, 1.5 lakh per annum from tuitions and Rs 3 lakh per annum as royalty from the sale of her books. What is the opportunity cost of writing books?
11. What is an economy?
12. What is meant by consumption?
13. What is meant by production?
14. The MRT of books is 5 bottles. What does this mean?

The following are 3/4 mark questions:

1. Explain three factors that give rise to an economic problem.
2. What does a PPF represent? When does it shift to the left? Explain with a diagram.
3. Explain the central problem of ‘for whom to produce’.
4. What is the effect of ‘a growth in resources’ on a production possibility frontier? Explain with the help of a diagram.
5. In what sense is the problem of ‘how to produce’ a central problem of an economy?
6. Explain the central problem of ‘what to produce’ with the help of an example.
7. Explain the problem of allocation of resources faced by an economy.
8. Draw a production possibility frontier. What does a point inside the frontier indicate?
9. Explain what a movement along a PPF shows.

10. Why is the production possibility frontier called the opportunity cost curve?

11. What is the opportunity cost of a given activity? Explain with the help of an example.

12. Calculate marginal rate of transformation in the following example. Plot the PPF by taking cloth on the x axis. Comment on the shape of the curve.

<table>
<thead>
<tr>
<th>Food (in Kg)</th>
<th>280</th>
<th>258</th>
<th>233</th>
<th>205</th>
<th>175</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloth (in m)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

13. Identify which of the following are the subject matter of microeconomics and macroeconomics.
   - National Income.
   - Distribution of Bollywood films.
   - Government Budget.
   - Price determination of a commodity.
   - Inflation.
   - Consumption of Coca-Cola in India.


15. If the marginal rate of transformation is decreasing, what will be the shape of the PPF? Explain with the help of a schedule.

16. Explain the problem of “choice of technique”. How does it arise?

17. If the production possibility curve shifts to the right, then it will always be parallel to the original curve. Comment.
Consumer’s Equilibrium

The following questions are for 1 mark:

1. What is meant by total utility?
2. What is meant by marginal utility?
3. What is marginal rate of substitution?
4. What does the slope of the total utility curve represent?
5. What is an indifference curve?
6. What are monotonic preferences?
7. What is consumer’s equilibrium?
8. What does the slope of the budget line give in terms of prices?
9. The TU derived from consuming 3 units of a commodity is 75 utils and the MU of the 4th unit is 10 utils. What is the TU after consuming 4 units?
10. What is a budget constraint?
11. If preferences of a consumer are monotonic, then which of the bundles – 3 eggs and 5 toasts or 4 eggs and 5 toasts will the consumer choose?

The following questions are for 3/4 marks:

1. State and explain the law of diminishing marginal utility.
2. With the help of a diagram explain consumer’s equilibrium in case of a single commodity.
3. How many units of a commodity should a consumer buy to get maximum utility? Explain with the help of a numerical example.
4. Explain the relationship between total utility and marginal utility with the help of a diagram.
5. Explain why higher indifference curves reflect higher levels of satisfaction for a consumer.
6. Explain a budget set and budget line. Derive the slope of the budget line.
7. Explain the shape of an indifference curve.
8. The price of Good X is Rs 5 and the consumer has consumed 6 units. The marginal utility of the 6th unit is 15 utils. If the marginal utility of money is 4, then is the consumer in equilibrium. Explain.
9. A consumer consuming one good is in equilibrium. The price of the good falls. What should the consumer do to stay in equilibrium? Justify your answer.
10. Differentiate between ordinal and cardinal utility.

11. What will happen to the budget line when:
   a. Price of good as shown on the x axis falls
   b. Price of good as shown on the y axis rises
   c. Money income falls.

The following questions are for 6 marks:

1. Explain why the ratio of prices of two commodities must be equal to the marginal rate of substitution between the goods for a consumer to be in equilibrium.

2. Why is the point of tangency between the budget line and the indifference curve the point of consumer’s equilibrium?

3. Explain three properties of indifference curves.

4. The prices of Good X and Good Y are Rs 4 and Rs 2 respectively and a consumer’s income is Rs 40. Answer the following questions:
   a. Can the consumer consume a bundle 5X, 10Y?
   b. If MRS\_{xy} is 3, is the consumer in equilibrium? Justify.
   c. What should the consumer do to maximize satisfaction, given her budget constraint? Explain.

5. The marginal utility schedule of commodity X and commodity Y for a consumer is as follows:

<table>
<thead>
<tr>
<th>Unit of X</th>
<th>MU of X</th>
<th>Unit of Y</th>
<th>MU of Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

If the total money spent by a consumer is Rs 16, and the price of X is Rs 2 and price of Y is Rs 5, determine consumer’s equilibrium if the marginal utility of money is Rs 2. Using indifference curves, explain the total price effect when the price of one commodity falls.
Demand

The following questions are for 1 mark each:

1. What is meant by demand for a commodity?
2. If an increase in the price of Good X leads to a fall in the demand for Good Y, then how are the two goods related?
3. If the demand function for a good is given by \( Q_x = 20 - 2P_x \), how much is the quantity demanded when the price is Rs 4/unit?
4. The market for pens has three consumers – A, B and C. If the individual demand for pens at a price of Rs 5/pen for A, B and C is 3 pens, 7 pens and 12 pens respectively, then what is the market demand for pens at a price of Rs 5/pen?
5. A fall in the price of lemon tarts leads to a fall in the demand for lemon cheesecake. How are the two goods related?
6. What is a change in quantity demanded called when the demand for a good falls due to a rise in its own price?
7. What is the effect on the demand curve of a normal good when the income of a consumer decreases?
8. What are substitute goods?
9. What is a demand function?
10. What is a decrease in demand?
11. What is a demand schedule?
12. What causes a downward movement along the demand curve?
13. Mention one factor that causes a rightward shift of the demand curve.
14. Which type of good may have an upward sloping demand curve?

The following questions are for 3/4 marks each:

1. Explain the law of demand with the help of a demand schedule.
2. State the assumptions of the law of demand.
3. With the help of a suitable example distinguish between normal goods and inferior goods.
4. Differentiate between substitute goods and complementary goods.
5. State any three causes of a leftward shift of a demand curve of a commodity.
6. Distinguish between individual demand schedule and market demand schedule.
7. State the change in quantity demanded of the good in column 2 when the price of the good in column 1 rises. Give reasons.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Price of</th>
<th>Demand for</th>
<th>Effect on demand</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Tennis shoes by Nike</td>
<td>Tennis shoes by Reebok</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Pencils</td>
<td>Erasers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Air travel between Delhi and Goa</td>
<td>Mayonnaise</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Distinguish between contraction of demand and decrease in demand with the help of diagrams.

9. What is an unfavourable change in taste? How does it affect the demand for a commodity?

10. With the help of a diagram, explain the impact of a rise in the price of complementary good on the demand for a commodity.

The following questions are for 6 marks each:

1. Explain with the help of diagrams the effect of the following changes on the demand of a commodity:
   (i) A fall in the price of complementary goods
   (ii) A fall in the price of substitute goods

2. Explain the effects of a change in income of a buyer on the demand for a good.

3. State three causes each for a rightward shift and a leftward shift of a demand curve.

4. Explain the term ‘change in demand’ and represent the same graphically. Also state three factors responsible for change in demand.

5. Explain with the help of diagrams the effect of the following changes on the market demand of a commodity:
   (i) The number of users increase
   (ii) A rise in the income of the buyers if the commodity is inferior

6. Distinguish between change in demand and change in quantity demanded. Use diagrams.

7. What is market demand? If there are only two consumers in the market, explain how it is derived from individual demand using a schedule.

8. State and explain three determinants of market demand.
Elasticity of Demand

The following questions are for 1 mark each:

1. What is meant by price elasticity of demand?
2. Draw a demand curve with unitary price elasticity.
3. When is the demand for a commodity called perfectly elastic?
4. What is elastic demand?
5. What is inelastic demand?
6. Draw a perfectly inelastic demand curve.
7. What will be the value of elasticity of demand if the demand curve is a vertical line parallel to the y-axis?
8. A 10% increase in price leads to a 20% fall in quantity demanded. What is the value of price elasticity of demand?
9. When is demand unitary elastic?
10. State one factor that affects the magnitude of price elasticity of demand.
11. What is the value of elasticity of demand on a rectangular hyperbola demand curve?
12. An increase in price leads to a fall in the expenditure on the commodity. What can be said about the price elasticity of demand of the commodity?
13. A decrease in price leads to a fall in the expenditure on the commodity. What can be said about the price elasticity of demand of the commodity?

The following questions are for 3/4 marks each:

1. Draw demand curves showing price elasticity of demand equal to (i) unity (ii) infinity (iii) zero.
2. Explain with the help of a diagram the geometric method of measuring the price elasticity of demand.
3. Explain how the availability of close substitutes for a good affects the price elasticity of demand of that good.
4. Explain how the nature of a good affects the price elasticity of demand.
5. If two negatively sloped straight line demand curves intersect each other, will price elasticity of demand be equal at the point of intersection? Justify.
6. Is the elasticity of demand equal at all points on a straight line demand curve? Give reasons.
7. A consumer buys 40 units of a good at a price of Rs. 4/- per unit. When price rises to Rs. 5/- per unit he buys 30 units. Comment on the price elasticity of demand by the total expenditure method.

8. A consumer buys 2,000 units of a good at a price of Rs. 10/- per unit. When the price falls he buys 2,500 units. If price elasticity of demand is -2, what is the new price?

9. A consumer buys 10 units of a good at a price of Rs. 4/- per unit. When price falls by Rs 1/- per unit, he buys 20 units. Calculate the price elasticity of demand.

10. At a price of Rs. 20/- per unit the quantity demanded of a commodity is 400 units. If the price falls by 10%, its quantity demanded rises by 90 units. Calculate its price elasticity of demand.

11. A consumer spends Rs. 250/- on a good when its price is Rs. 10/- per unit. When the price rises to Rs. 11/- per unit, he spends Rs. 240/-.

12. As a result of a 10% fall in the price of a good, its demand rises from 200 to 240 units. Find out the price elasticity of demand. Is its demand elastic?

13. Price elasticity of demand of a good is (-)2. 100 units of this good are bought at a price of Rs. 10/- a unit. How many units will be bought at a price of Rs 11/- per unit?

14. The slope of a demand curve is -0.4, calculate the elasticity of demand, if at an initial price of Rs. 5/- per unit, the initial quantity demanded was 20 units of the commodity.

15. Price elasticity of demand of good X is twice that of good Y. At a price of Rs. 4/- per unit, 10 units of good X are bought. When price of good X increases to Rs. 5/- per unit, demand falls to 5 units. Calculate price elasticity of demand for good Y. What can be said about the elasticity of goods X and Y?

The following questions are for 6 marks each:

1. Explain 3 factors affecting elasticity of demand.

2. Explain the relationship between the expenditure incurred on a commodity and its price elasticity of demand.
Production

The following questions are for 1 mark each:
1. What is meant by a production function?
2. State the law of variable proportions.
3. What is marginal product of a factor of production?
4. As the variable input is increased by one unit, the total output increases at a decreasing rate.
   What can be said about marginal product of labour?
5. What happens to marginal product when average product is at its maximum?
6. What do diminishing returns to a factor refer to?
7. How is TP derived from a MP schedule?
8. What is a market period?
9. Can total product decline?

The following questions are for 3 / 4 marks each:
1. Distinguish between variable and fixed factors of production.
2. The following table gives the TP schedule of labour. Find the corresponding AP and MP of labour.

<table>
<thead>
<tr>
<th>Units of labour</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>TP</td>
<td>0</td>
<td>15</td>
<td>35</td>
<td>50</td>
<td>40</td>
<td>48</td>
</tr>
</tbody>
</table>

3. MP can be zero or negative but AP can never be zero or negative. Explain.
4. Show the relationship between AP and MP for a given variable factor with the help of a diagram.
5. Why does the total product initially increase at an increasing rate in the short run?
6. Complete the following table assuming that there are increasing returns to a factor:

<table>
<thead>
<tr>
<th>Units of variable input</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>TP</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. [Diagram showing the relationship between total product and quantity of variable input.]
a. From which on the TP curve does the firm experience diminishing returns to a factor?

b. Why do diminishing returns occur?

8. Complete the following table:

<table>
<thead>
<tr>
<th>Units of labour</th>
<th>TP</th>
<th>AP</th>
<th>MP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td>3</td>
<td>66</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>21</td>
<td></td>
</tr>
</tbody>
</table>

The following questions are for 6 marks each:

1. Explain the phases of the Law of Variable Proportions in terms of total product. Use a diagram.

2. Explain the likely behaviour of Total Product and Marginal Product when only one input is increased while all other inputs are kept unchanged/Explain the short run law that highlights the returns to a factor.

3. Explain the Law of diminishing returns to a factor with the help of a schedule.

4. State whether the following statements are true or false. Justify your answer.
   a. Total product falls only when marginal product falls.
   b. Average product rises as long as marginal product rises.
   c. Average product is equal to marginal product when marginal product is at its maximum.
Theory of Costs

The following questions are for 1 mark each:

1. What is meant by costs in economics?
2. Define total cost.
3. What is meant by fixed cost of production?
4. If the average cost of producing 3 units of output is Rs 5, then what is the total cost of producing 3 units?
5. The MC of the 4th unit of output is Rs 10 and the total variable cost of 3 units is Rs 22. What is the TVC of 4 units of output?
6. If the economic cost of producing a pen is Rs 25 and the explicit cost is Rs 15, then what is the implicit cost?
7. Give two examples of explicit costs in a tailoring shop.
8. If the fixed cost of producing 10 units of a good is Rs 60, then what is the average fixed cost of producing 60 units?
9. The marginal cost and total cost of producing 5 units of a good are Rs. 4 and Rs. 24 respectively. What is total cost of producing 4 units?

The following questions are for 3/4 marks each:

1. Explain with the help of a diagram the relationship between total cost and marginal cost.
2. When is AVC = ATC? Explain.
3. Is total cost the sum total of marginal cost? Why?
4. Why is the AC curve U-shaped?
5. Why is the area under the AFC curve constant?
6. The following information is given about a firm:

<table>
<thead>
<tr>
<th>Output (in units)</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost (Rs)</td>
<td>150</td>
<td>300</td>
<td>420</td>
<td>600</td>
<td>790</td>
<td>1000</td>
<td>1260</td>
</tr>
</tbody>
</table>

From the above information find out:

- Average fixed cost of producing 3 units
- Average variable cost of producing 4 units
- Least average cost level of output
- Marginal cost of producing 5th unit
7. Differentiate between (a) Explicit costs and implicit costs (b) Private costs and social costs.

8. Classify the following into fixed cost and variable cost giving reasons.
   (a) Interest on capital
   (b) Call related charges in a telephone bill
   (c) Wages to permanent employees

9. A firm’s average fixed cost of producing 2 units of a good is Rs. 9 and given below is its total cost schedule. Calculate its average variable cost and marginal cost for each of the given level of output.

<table>
<thead>
<tr>
<th>Output units</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost (Rs)</td>
<td>23</td>
<td>27</td>
<td>30</td>
</tr>
</tbody>
</table>

10. Can average cost fall when marginal cost is rising? Justify your answer.

11. Differentiate between fixed costs and variable costs.

12. Calculate average cost from the following table and determine the phase of production process in which the firm is producing the goods.

<table>
<thead>
<tr>
<th>Output</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost (Rs)</td>
<td>240</td>
<td>300</td>
<td>360</td>
<td>420</td>
</tr>
</tbody>
</table>

13. Discuss the fallacies in each of the following statements:
   - AC is at its minimum, when MC is at its minimum point.
   - AFC is constant for each level of output because fixed costs never change.
   - MC is always falling when AC is falling.
   - A total cost curve always starts from the point of origin.

The following questions are for 6 marks each:

1. Why does the difference between ATC and AVC decrease with an increase in the level of output? Can these two be equal at some level of output? Explain.

2. Explain the relationship between marginal cost and average cost with the help of an appropriate diagram.

3. Calculate TFC, TVC and MC from the following TC schedule:

<table>
<thead>
<tr>
<th>Output</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost (Rs)</td>
<td>45</td>
<td>75</td>
<td>100</td>
<td>120</td>
</tr>
</tbody>
</table>
The following questions are for 1 mark each:
1. What is average revenue?
2. What is meant by marginal revenue?
3. When a firm sells its entire output at a fixed price, what will be the shape of AR and MR curves?
4. What is a price line?
5. What change will take place in marginal revenue when TR is increasing at an increasing rate?
6. What is the impact on TR when MR is zero?

The following questions are for 3/4 marks each:
1. Define marginal revenue. How is it different under perfect and imperfect market conditions?
2. Complete the following table:

<table>
<thead>
<tr>
<th>Units sold</th>
<th>Total Revenue (Rs)</th>
<th>Average Revenue (Rs)</th>
<th>Marginal Revenue (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>34</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

3. Complete the following table:

<table>
<thead>
<tr>
<th>Output (units)</th>
<th>Price (Rs)</th>
<th>Total Revenue (Rs)</th>
<th>Marginal Revenue(Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Distinguish between average revenue and marginal revenue.

5. Discuss the relationship between AR and MR when:
   a. A firm is able to sell more output only when price is lowered.
   b. A firm is able to sell more output without changing the price.

6. Explain the shape of the total revenue curve facing a perfectly competitive firm.

7. Using a diagram, explain what happens to TR when MR is:
   a) positive
   b) negative

8. What will be the effect of the following changes in TR on MR:
   a) TR increases at a decreasing rate
   b) TR increases at a constant rate

The following questions are for 6 marks each:

1. How do changes in marginal revenue affect total revenue? Explain with the help of a schedule and a diagram.

2. Complete the following table:

<table>
<thead>
<tr>
<th>Units sold</th>
<th>TR (Rs)</th>
<th>AR (Rs)</th>
<th>MR (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>19</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>-</td>
<td>9</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>34</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>-</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>-</td>
<td>-</td>
<td>5</td>
</tr>
</tbody>
</table>

3. What is total revenue of a firm? Give the meaning of average revenue and marginal revenue. What happens to average revenue when marginal revenue is (i) equal to AR, (ii) less than AR?

4. Calculate TR, AR and MR from the following table:

<table>
<thead>
<tr>
<th>Price</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand</td>
<td>90</td>
<td>80</td>
<td>70</td>
<td>60</td>
<td>50</td>
<td>40</td>
<td>30</td>
</tr>
</tbody>
</table>
Producer’s Equilibrium

The following questions are for 1 mark each:

1. Define producer’s equilibrium.
2. What happens to a firm’s profits if at the point where MC = MR its marginal cost is less than marginal revenue at the unit of output after MC=MR?
3. What is the extent of losses that a firm incurs when it produces no output?
4. What is meant by equilibrium level of output of a firm?
5. What is break-even level of output?
6. What profits, if any, does a firm earn at break-even level of output?
7. State the general profit maximizing conditions of a firm.

The following questions are for 3/4 marks each:

1. Explain what happens when the marginal revenue of a firm is greater than its marginal cost at a given level of output.
2. Explain what happens when the marginal cost of a firm is greater than its marginal revenue at a given level of output.
3. Differentiate between producer’s equilibrium and breakeven point with the help of a schedule.

The following questions are for 6 marks:

1. From the table below identify the profit maximizing level of output. Justify your answer:

<table>
<thead>
<tr>
<th>Output (units)</th>
<th>AC (Rs)</th>
<th>AR (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>
2. The following table shows the total cost schedule for a competitive firm. It is given that the price of the good is Rs 10. Calculate the total profit at each level of output. Does the firm incur loss at any level of output?

<table>
<thead>
<tr>
<th>Output (Units)</th>
<th>TC (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td>4</td>
<td>31</td>
</tr>
<tr>
<td>5</td>
<td>38</td>
</tr>
<tr>
<td>6</td>
<td>49</td>
</tr>
<tr>
<td>7</td>
<td>63</td>
</tr>
<tr>
<td>8</td>
<td>81</td>
</tr>
<tr>
<td>9</td>
<td>101</td>
</tr>
<tr>
<td>10</td>
<td>123</td>
</tr>
</tbody>
</table>

3. From the following table determine the output level where a firm achieves producer’s equilibrium. State the reasons for this level of output.

<table>
<thead>
<tr>
<th>Output (units)</th>
<th>TR (Rs)</th>
<th>AC (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>40</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>60</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>80</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>100</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>120</td>
<td>15</td>
</tr>
</tbody>
</table>

4. Using a schedule and the marginal revenue – marginal cost approach; explain the point at which a producer maximizes profits.
Supply and Elasticity of Supply

The following questions are for 1 mark each:
1. What is meant by market supply?
2. What will happen to the supply curve of cloth if new firms enter the market?
3. What will happen to the supply curve for fans if the excise duty on fans increases?
4. What does the positive sign (+) before price indicate in a supply function?
5. What is an upward movement on the supply curve called?
6. What is meant by elasticity of supply?
7. What is the value of a relatively elastic supply curve?

The following questions are for 3/4 marks each:
1. Discuss any two factors that determine the supply of a commodity.
2. Explain the impact of a rise in the price of other goods on the supply curve of a commodity. Use a diagram.
3. Distinguish between contraction and decrease in supply.
4. With the help of a diagram explain what is meant by a movement on a supply curve.
5. With the help of a diagram, explain a change in supply.
6. Explain the geometric method of measuring price elasticity of supply.
7. Discuss two factors that determine the elasticity of supply.
8. Is the value of price elasticity of supply positive or negative? Explain.

The following questions are for 6 marks:
1. Distinguish between change in quantity supplied and change in supply.
2. Explain three factors that affect elasticity of supply.
3. Using diagrams explain the impact of the following on the supply curve of wooden furniture:
   a. Wood prices increase
   b. Use of new wood cutting machines

Numerical Questions
1. Calculate the price elasticity of supply if for a 5% change in price there is a 25% change in quantity supplied.
2. From the following information calculate the market supply schedule:

<table>
<thead>
<tr>
<th>Price/unit (Rs)</th>
<th>Firm A (units)</th>
<th>Firm B (units)</th>
<th>Firm C (units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>10</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>6</td>
<td>14</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td>7</td>
<td>18</td>
<td>25</td>
<td>32</td>
</tr>
<tr>
<td>8</td>
<td>22</td>
<td>35</td>
<td>40</td>
</tr>
</tbody>
</table>

3. Given a supply function \( q_s = -10 + 2p \)
   
   a. Calculate the quantity supplied at a price of Rs 15 per unit.
   b. At what price will the firm be willing to supply 50 units?
   c. What is the price below which the firm will not supply its commodity?
   d. Calculate the price elasticity of supply at Rs 10.

4. At a market price of Rs 8 per unit, the quantity supplied of a commodity is 200 units. Its price elasticity of supply is equal to 1.5. If its price rises to Rs 10 per unit, calculate its quantity supplied at the new price.

5. When the price of a commodity falls from Rs 10 per unit to Rs 9 per unit, its quantity supplied falls by 20%. Calculate its price elasticity of supply.

6. When the market price of a good is Rs 20, a firm earns a revenue of Rs 100. The market price increases to Rs 30 per unit and the firm earns revenue of Rs 300. What is the price elasticity of supply?

7. The price elasticity of supply of a commodity is 2. When its price rises from Rs 8 to Rs 10 per unit, its quantity supplied increases by 500 units. Calculate the quantity supplied at the increased price.

8. At a price of Rs 40 per unit, the quantity supplied of a commodity is 400 units. When its price falls by 10 per cent, its quantity supplied falls by 36 units. Calculate the elasticity of supply. Is the supply elastic?

9. At a price of Rs 5 per unit a firm supplies 500 units of a commodity. When price rises by Rs 1, quantity supplied increases to 700 units. What is the elasticity of supply?

10. Two commodities A and B have the same elasticity of supply. A 20% rise in the price of commodity A leads to a rise in its supply from 400 to 500 units. What will be the percentage change in quantity supplied of commodity B if its price falls by 10%?
Market Equilibrium

The following questions are for 1 mark each:

1. What is meant by equilibrium price?
2. Give the meaning of excess demand for a product.
3. Give the meaning of excess supply of a product.
4. How does an increase in the price of a substitute good affect the equilibrium price?
5. How does an increase in input price affect the equilibrium quantity exchanged in the product market?
6. How does a favourable change in taste of a good affect the equilibrium price and quantity?
7. How does a cost saving technological progress affect the equilibrium price and quantity of a product?
8. How does an increase in excise tax rate affect the equilibrium price and the quantity of a good?
9. What is the minimum price that a producer must get for his product?
10. At what price – higher or lower than the equilibrium price – will there be an excess demand?
11. When will an increase in demand imply an increase in price but no change in quantity?
12. When will an increase in demand imply an increase in quantity demanded but no change in price?

The following questions are for 3/4 marks each:

1. How is equilibrium price determined under perfect competition? Explain with the help of a diagram.
2. Explain the process of price determination in a perfectly competitive market with a fixed number of firms. Use demand and supply schedules to support your answer.
3. What will happen in a perfectly competitive market if the prevailing price in the market is (a) above equilibrium price; (b) below equilibrium price?
4. Explain the effect of an increase in demand of a commodity on its equilibrium price and quantity. Use a diagram.
5. Explain the chain effects on demand, supply and price of a commodity caused by a leftward shift of its supply curve. Use a diagram.
6. Explain the effect of a simultaneous decrease in both demand and supply of a commodity on its equilibrium price and quantity.

7. The demand function and supply function for a good are given as follows:
   \( Q_d = 110 - 10P \) and \( Q_s = -100 + 20P \). Find equilibrium price and quantity.

8. Consider the market demand and supply schedules for chocolate bars

<table>
<thead>
<tr>
<th>Price/unit (Rs)</th>
<th>Quantity demanded (units)</th>
<th>Quantity supplied (units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>100</td>
<td>420</td>
</tr>
<tr>
<td>11</td>
<td>150</td>
<td>300</td>
</tr>
<tr>
<td>10</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>9</td>
<td>260</td>
<td>60</td>
</tr>
<tr>
<td>8</td>
<td>330</td>
<td>10</td>
</tr>
</tbody>
</table>

   a. Find the equilibrium price of chocolate bars.
   
   b. Why is a price of Rs 12 per chocolate bar not an equilibrium price?
   
   c. When the government reduces excise duty on a commodity, how does it affect its equilibrium price and quantity?

The following questions are for 6 marks each:

1. At the given market price of a commodity there is excess supply. How will the equilibrium price be reached?

2. Explain the effect of the following changes on equilibrium price and quantity of a good
   (a) cost saving technological progress.   (b) fall in price of substitute good.

3. “Equilibrium price may or may not change with shifts in both demand and supply curves” Comment.

4. Suppose the demand for Sanskriti sweatshirts increases. Simultaneously due to an increase in the price of cotton, the supply of these sweatshirts decreases. How will it affect the price and quantity sold of sweatshirts?
Forms of Market

The following questions are for 1 mark each:

1. In which market is the product homogeneous?
2. What is meant by product differentiation?
3. Under which market form does product differentiation take place?
4. Draw the AR, MR curves of a monopolistic firm in a single diagram.
5. What is the relationship between the average revenue curve and the demand curve in a monopoly market?
6. Under which market forms are there restrictions on the entry of new firms?
7. Draw the demand curve of a firm under monopoly.
8. What are selling costs?
9. What is persuasive advertising?
10. What are patent rights?
11. Define oligopoly.
12. Give two examples of monopolistic competition.
13. Which feature/features of monopolistic competition is/are monopolistic in nature?
14. Which feature/features of monopolistic competition is/are competitive in nature?
15. Which market form has an indeterminate supply curve?
16. What is meant by collusive oligopoly?

The following questions are for 3/4 marks each:

1. Explain how collusion leads to price rigidity in an oligopoly.
2. How is a perfectly competitive firm a price taker?
3. State three features of monopoly.
4. Distinguish between monopoly and monopolistic competition.
5. Why is the average revenue curve of a firm under perfect competition parallel to the X-axis and negatively sloped under monopoly?
6. Define monopolistic competition. Can a seller in such a market influence prices?
7. Why is the demand curve facing a firm under perfect competition perfectly elastic?
8. Explain ‘mutual interdependence’ in an oligopoly market.
9. Explain the importance of free exit and entry in perfect competition.
10. Explain the importance of ‘no close substitutes’ of a product in a monopoly market.
11. Differentiate between product differentiation and price discrimination.
12. Explain two factors which would make competition imperfect.
13. What is a shut down point for a perfectly competitive firm?

The following questions are for 6 marks each:
1. Explain briefly three features of perfect competition.
2. “Under perfect competition the seller is a price taker whereas under monopoly he is a price maker”. Explain.
3. Identify the market forms for the two sellers of good A and good B given the following information. Give reasons for your answer.

<table>
<thead>
<tr>
<th>Output sold (Units)</th>
<th>Price per unit of good A (Rs)</th>
<th>Price per unit of good B (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>20</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>30</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

4. Explain the features of a monopoly market. Why is the demand for a good under monopolistic competition more elastic than under monopoly?

5. A perfectly competitive firm accepts a market price equal to Rs 15.
   (a) Derive its TR schedule for an output range from 0 to 10 units.
   (b) Suppose market price increases to Rs 17, will the new TR curve be flatter or steeper? Explain

6. Explain the implications of the following:
   b. Differentiated products
   c. Large number of sellers

7. State whether the following statements are true or false. Give reasons for your answer.
   a. Under perfect competition there can be only one ruling price in the market.
   b. Firms operating under monopolistic competition have homogeneous goods.
   c. Each firm has a downward sloping demand curve under monopolistic competition.
1. What is microeconomics?  
………………………………………………………………………………………………………………….  
………………………………………………………………………………………………………………….  
………………………………………………………………………………………………………………….  

2. What is meant by “economizing of resources”?  
………………………………………………………………………………………………………………….  
………………………………………………………………………………………………………………….  
………………………………………………………………………………………………………………….  

3. A country’s resources are fully and efficiently employed. The problem of scarcity exists. What advice will be given to raise the efficiency level of the human resource to fight scarcity?  
………………………………………………………………………………………………………………….  
………………………………………………………………………………………………………………….  
………………………………………………………………………………………………………………….  

4. State one characteristic of human wants.  
………………………………………………………………………………………………………………….  
………………………………………………………………………………………………………………….  
………………………………………………………………………………………………………………….  

5. What is a Production Possibility Frontier?  
………………………………………………………………………………………………………………….  
………………………………………………………………………………………………………………….  
………………………………………………………………………………………………………………….  

6. What are economic goods?  
………………………………………………………………………………………………………………….  
………………………………………………………………………………………………………………….  
………………………………………………………………………………………………………………….  

7. What does an inward shift of the PPF reflect?  
………………………………………………………………………………………………………………….  
………………………………………………………………………………………………………………….  
………………………………………………………………………………………………………………….  

8. What does a movement along the PPF indicate?  
………………………………………………………………………………………………………………….  
………………………………………………………………………………………………………………….  
………………………………………………………………………………………………………………….  

9. How is an economic problem a problem of choice?  
………………………………………………………………………………………………………………….  
………………………………………………………………………………………………………………….  
………………………………………………………………………………………………………………….  

Max Marks: 20
10. What is opportunity cost? Explain with the help of an example. (3)

11. Economic slowdown in some parts of the world has adversely affected demand for Indian exports. What will be its effect on the production possibility frontier of India? Explain with the help of a diagram. (3)

12. Make an imaginary production possibility schedule and the corresponding curve so that the production possibility curve is a straight line. (3)
Assignment No. 2
Consumer’s Equilibrium

1. What does the area under the marginal utility curve depict? (1)

2. What is an indifference map? (1)

3. The MRS\(_{x,y}\)= (-) 5. What does this mean? (1)

4. How do prices of commodities influence the consumer’s indifference curve? (1)

5. Complete the following table: (3)

<table>
<thead>
<tr>
<th>No. of units consumed of a commodity</th>
<th>Total Utility</th>
<th>Marginal Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>
6. Chocolates sell for Rs 6 per unit. Prerna who loves chocolates has already consumed 6 bars. Her marginal utility from eating the 6th chocolate is 48 utils. Suppose that the marginal utility of one unit of money is 6 utils, should she consume more chocolates? Explain. (3)

7. Draw a schedule which shows a declining MRS_{xy}. (3)

8. Why is an indifference curve convex to the origin? (3)

9. Explain how a consumer attains equilibrium when she is faced with the choice of two commodities using the utility approach. (Use extra sheet) (4)
1. State the Law of Demand. (1)

2. What are normal goods? (1)

3. Why does the demand for petrol increase with a fall in the price of cars? (1)

4. How is a market demand curve for a commodity derived? (1)

5. How is the demand for a commodity related to the number of users? (1)

6. Research has shown that if taxes on tobacco are trebled, it may prevent 200 million deaths. Analyse the economic principles behind this data. (3)
7. Explain how a fall in income leads to a shift in the demand curve of an inferior commodity. Use a diagram. (4)

8. The demand function of a commodity x is given as \( q_x = 20 - 3P_x \). The value of \( q_x \) (in units) is given as 5, 8, 11 and 14. Determine the corresponding demand schedule. Draw the demand curve for \( q_x \). (4)

9. Explain the law of demand. (Use extra sheet) (4)
Assignment No. 4
Elasticity of Demand

1. What does an elasticity of demand = (-) 1.5 mean? (1)

2. Given that price elasticity of demand is (-) 0.2, and price rises by 10%, then what is the effect on the total expenditure incurred on that commodity? (1)

3. Price elasticity for a chocolate chip cookie is (-) 2. Forty cookies are demanded at Rs 10 per cookie. How many cookies will be bought at Rs 11 per cookie? (3)

4. Should the government increase the taxes on salt? (3)

5. Elasticity of demand of Good X is twice that of Good Y. When price of Good Y increases from Rs 4 to Rs 6 per unit, its demand falls from 400 units to 300 units. Find the price at which 100 units of Good X is demanded, if at a price of Rs 20, its demand is 80 units. (4)
6. Given \( q_x = 10 - 2p \), calculate:

(a) Elasticity of demand at a price of Rs 2 per unit.

(b) The price at which elasticity of demand is 1.

7. For each pair of commodities state which one is more price elastic? Give reasons.

<table>
<thead>
<tr>
<th>Pair of commodities</th>
<th>More price elastic commodity</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matchbox or Jimmy Choo shoes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Umbrella or DVD during rainy season</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ice-cream or strawberry ice-cream</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paracetamol tablets or pizza</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Assignment No. 5
Production

Max Marks: 20

1. As the variable input of labour is increased by one unit the total output falls. What can be said about the marginal productivity of labour? (1)

2. Distinguish between very short run, short run and long run in production. (3)

3. Explain the reasons for earning increasing returns to a factor. (3)

4. In which phase of production will a rational producer operate and why? (3)
5. Explain with the help of a schedule the relationship between average product and marginal product. (4)

6. The following is known about the firm: (6)

<table>
<thead>
<tr>
<th>Units of Labour</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Output</td>
<td>10</td>
<td>50</td>
<td>100</td>
<td>140</td>
<td>170</td>
<td>170</td>
<td>140</td>
</tr>
</tbody>
</table>

State the underlying law that brings about this change in output as input is changed. Also identify the various phases.
Assignment No. 6
Theory of Costs

Max Marks: 20

1. If total cost at zero unit of output is Rs 20 and at one unit of output is Rs 25, then what is the
total fixed cost? (1)

2. What are variable costs? (1)

3. What does the area under the marginal cost curve depict? (1)

4. If the total cost of producing 4 and 5 units of output is Rs 15 and Rs 18 respectively, then
what is the marginal cost of fifth unit of output? (1)

5. With the help of a schedule, explain the relationship between Total Cost and Marginal Cost. (3)
6. What is the shape of an AFC curve? Explain. 
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………

7. Complete the following table:

<table>
<thead>
<tr>
<th>Output (units)</th>
<th>TVC (Rs)</th>
<th>AVC (Rs)</th>
<th>MC (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>27</td>
<td>10</td>
<td>13</td>
</tr>
</tbody>
</table>

8. Are the following statements true or false? Give reasons:

(a) Marginal cost must always decline for average variable cost to fall.
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………

(b) Average total cost can never be equal to Average variable cost in the short run.
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………

(c) If marginal cost is constant, average total cost is also constant.
………………………………………………………………………………………………
………………………………………………………………………………………………

………………………………………………………………………………………………
Assignment No. 7
Theory of Revenue

1. What is the shape of the demand curve facing a perfectly competitive market? (1)

2. Why is the AR curve the demand curve of a firm? (3)

3. What change in total revenue will result in
   (a) decrease in marginal revenue? (3)
   (b) increase in marginal revenue?

4. Complete the following table: (4)

<table>
<thead>
<tr>
<th>Output (units)</th>
<th>Price (Rs)</th>
<th>MR</th>
<th>TR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. Explain the relationship between AR and MR under imperfect competition with the help of a diagram. (4)
Assignment No. 8  
Producer's Equilibrium  
Max Marks: 15

1. At a particular level of output, a producer finds that MC< MR. What will a producer do to maximize her profits?  

2. What is the Breakeven level of output?  


4. The diagram given below shows the MC & MR curves of a producer. Study the diagram and answer the following questions:

   a. What is the profit maximizing level of output? Why?

   b. What is the profit minimization level of output? Why?
5. From the following schedule, find out the level of output at which the producer is in equilibrium. Give reasons for your answer. (6)

<table>
<thead>
<tr>
<th>Output (units)</th>
<th>Price (Rs)</th>
<th>Total Cost (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>1</td>
<td>24</td>
<td>26</td>
</tr>
<tr>
<td>2</td>
<td>24</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>24</td>
<td>72</td>
</tr>
<tr>
<td>4</td>
<td>24</td>
<td>92</td>
</tr>
<tr>
<td>5</td>
<td>24</td>
<td>115</td>
</tr>
<tr>
<td>6</td>
<td>24</td>
<td>139</td>
</tr>
<tr>
<td>7</td>
<td>24</td>
<td>165</td>
</tr>
</tbody>
</table>
Assignment No. 9
Supply and Elasticity of Supply

Max Marks: 20

1. What is meant by supply? (1)

2. What is the distinguishing feature of a supply curve of unitary elasticity? (1)

3. Demonstrate the law of supply with the help of a diagram. (3)

4. What happens to the supply of a commodity when the price of its input decreases? Explain with the help of a diagram. (3)
5. If the market price of a commodity is Rs 4, a seller is willing to sell 600 units of the commodity. When the price rises to Rs 5 how much will he sell if the elasticity of supply is unity? (3)

6. The elasticity of supply of commodity X is twice that of commodity Y. When the price of commodity X is Rs 4 per unit, the firm’s revenue is Rs 80. When price rises by Rs 2, quantity supplied rises to 25 units. How much revenue will the firm earn when commodity Y is sold at a price of Rs 25, if at an initial price of Rs 20, the quantity supplied is 80 units? (3)

7. Using a diagram explain why the upward sloping part of the marginal cost curve is a perfectly competitive firm’s supply curve. (use a continuation sheet) (6)
1. What is market equilibrium? (1)

2. Out of demand and supply which plays a greater role in the determination of market equilibrium in the market period? (1)

3. What happens to equilibrium price of a commodity if there is an ‘increase’ in its demand and ‘decrease’ in its supply? (1)

4. At a price of Rs 15 per unit of a good demand for the good is 200 units while supply is 300 units. What is the likely effect on the price of this good? (1)

5. Explain the changes that will take place in a market if market price is above equilibrium price. (3)

6. The market supply and demand are given by the equations: (3)

\[ q_d = (12 - 2p)10,000 \]
\[ q_s = (20p)1,000 \]

Find the equilibrium quantity and the equilibrium price.
7. The government enforces a price ceiling on the price of milk. Discuss the implications of this policy on the milk market. (4)

8. India is on the brink of a drought. If paddy crops fail, then discuss the impact on the equilibrium price of rice. Use a diagram. (6)
1. What is a market? (1)

2. Define monopoly. (1)

3. What is a non-collusive oligopoly? (1)

4. State the shape of the average revenue curve under imperfect competition? (1)

5. What is a cartel? (1)

6. Explain the shape of the demand curve faced by a firm under perfect competition. (3)

7. What changes will take place in a perfectly competitive market if firms are earning economic profit in the short run? (3)
8. What is meant by price discrimination? State the conditions under which a monopoly can practice price discrimination? (3)

9. Highlight the importance of selling costs under different market forms. (6)
National Income Accounting

The following questions are for 1 mark each:

1. What is meant by the household sector?
2. Give 2 examples of residents of ‘International Territory’.
3. State one reason for firms retaining a part of their profits.
4. What is meant by an economic activity?
5. What is meant by a corporation tax?
6. What are royalties?
7. What is expected obsolescence?
8. Can consumption exceed production in a year?
9. If the compensation of employee in a firm is 55% of the net value added, what accounts for the balance 45%?
10. When is:
   - Personal income equal to personal disposable income?
   - NNP at market price equal to NNP at factor cost?
   - Net factor income from abroad equal to zero?
   - Value of output equal to value added?
12. What is a GNP deflator?
14. Which sectors of an economy constitute the private sector?
15. Direct purchases abroad made by resident households are a part of…… (PFCE/GDP).
16. What are transfer payments?
17. What is investment?

The following questions are for 3/4 marks each:

1. What is meant by employer’s contribution to social security schemes? How is it treated in the estimation of national income?
2. How does change in fashion influence the consumption of fixed capital?
3. Is the import of second hand machinery included in fixed capital formation? How is it accounted for in national income?
4. Is employer’s contribution to social security, part of compensation of employee? Why?
5. Distinguish between expenditure on domestic product and expenditure by residents.
6. Do the following producing enterprises get operating surplus? Why?
   - A farmer producing food grain for self consumption.
   - Sanitary services provided by Municipal Corporation
7. Why are imports not included in the estimation of national income?
8. Why does Government of India grant subsidies to producing enterprises?
9. Is national income the sum of personal incomes? Why?
10. What type of data is required in different phases for calculation of national income?
11. What do you understand by the problem of double counting? Explain with help of an example.
12. Explain the concept of National Disposable Income.
13. Differentiate between:
   - Factor income and transfer income
   - Private income and income from domestic product accruing to the private sector
   - Value of output and value added
   - Production for self consumption and production for exchange
   - Nominal GNP and real GNP
   - Change in stock and fixed capital formation

The following questions are for 6 marks each:
1. How are factor incomes estimated to calculate national income?
2. State any 6 items that are excluded when calculating GNP, giving reasons.
3. How is nominal GNP converted to real GNP? Explain with an example. What do both reflect? Which is a better measure of welfare and why?
4. What is meant by final consumption expenditure? Mention any two precautions that must be taken while estimating GDP by the expenditure method.
5. Giving reasons explain how the following are treated in estimating national income:
   a. Wheat grown by a farmer but used for family’s consumption.
   b. Earnings of the shareholders from sale of shares.
   c. Expenditure by government on providing free education.
Money

The following questions are for 1 mark each:

1. Define money.
2. Money is used to make interest payments. Which function of money does it represent?
3. What is M1 with reference to money supply?
4. Is credit card a form of money? Why?
5. Define money supply.
6. Define barter system.
7. What is meant by ‘double coincidence of wants’?
8. When does money lose its value?
9. What is meant by purchasing power of money?
10. When there is shortage of coins in circulation shopkeepers begin to make use of their own tokens in place of coins. Do these tokens take a form of money?

The following questions are for 3/4 marks:

1. Explain any one problem faced in the barter system. How has money solved this problem?
2. Explain the “medium of exchange” function of money.
3. Explain the “unit measure of value” function of money.
4. Explain the “standard of deferred payment” function of money.
5. Explain the “store of value” function of money.
6. State the four functions of money. Describe any one of these.
7. Explain any two functions of money.
8. Explain the problem of lack of deferred payment in the barter system. How has money helped to solve this problem?
9. Lack of store of value was a drawback in the barter system. State any three difficulties faced in the barter system.
10. Describe the evolution of money.
Banking

The following questions are for 1 mark each:
1. What is a central bank?
2. Why is the central bank called a ‘lender of last resort’?
3. What is meant by credit control?
4. Define bank rate.
5. What should a central bank do to the bank rate if it wants credit to be expanded?
6. What is meant by moral suasion?

The following questions are for 3/4 marks:
1. State any 4 functions of a central bank.
2. What is meant by open market operations? Explain their effect on credit creation by commercial banks.
3. Explain the effect of an increase in the bank rate on credit creation by commercial banks.
4. State any three methods by which a central bank tries to control the quantity of credit.
5. State any three main functions of a central bank. Describe any one of them.
6. Explain the “banker’s bank” function of a central bank.
7. Distinguish between a central bank and a commercial bank.
8. Explain any one function of a central bank:
   a) Currency authority
   b) Lender of last resort.
9. Given that the legal reserve ratio is 30% and the initial deposit is Rs 5000:
   a) Calculate the value of deposit multiplier.
   b) Calculate the money created in the economy.

The following questions are for 6 marks:
1. Explain the credit creation process of commercial banks.
2. Explain the quantitative measures that a central bank uses to control credit in an economy.
Determination of Income and Employment

The following questions are for 1 mark each:

1. What happens to income when AD is greater than income?
2. What is the relation between APC and APS?
3. If the ratio of MPC to MPS is 3:2, what is the value of the multiplier?
4. What is “breakeven point” in macroeconomics?
5. Define aggregate demand.
6. Name the components of aggregate demand.
7. What is propensity to consume?
8. What will be the effect on income of an economy if there is a decrease in investment by Rs 200 crores, assuming the value of the multiplier is 5?
9. What is full employment equilibrium?
10. What is voluntary unemployment?
11. What is involuntary unemployment?
12. What is the significance of the intersection of the 45° line and the consumption curve?
13. When does a situation of deficient demand arise in an economy?
14. How does the deficient demand affect the equilibrium level of employment?
15. What effect does a sale of Government securities by the central bank have on AD?

The following questions are for 3/4 marks each:

1. What can be the minimum value of multiplier and why?
2. Explain the three components of aggregate demand.
3. Why can’t the value of MPC be greater than one?
4. State the two characteristics of consumption function.
5. Explain the concept of investment multiplier. How is it related to (a) MPC and (b) MPS
6. In an economy investment expenditure is increased by Rs 400 crores and MPC is 0.8. Calculate the total increase in income, consumption and savings.
7. Explain the components of the equation: \( S = -C_o + (1 - b)Y \).
8. Give the meaning of MPS. Can the value of APS be negative? If yes, when?
9. Explain how taxes are used to correct excess demand.
10. Explain the role of legal reserve ratio in correcting excess demand.
11. Explain the concept of deflationary gap. Use a diagram.
12. What is an inflationary gap? State two measures to correct it.
13. If planned saving is greater than planned investment, what adjustments will bring equality between the two?
14. Given a consumption function \( C = 50 + 0.8Y \) and autonomous investment of Rs50, determine the break-even level of income and the equilibrium level of income. What is the additional investment required to achieve full employment level of income of Rs 800?

The following questions are for 6 marks each:

1. Explain the meaning of involuntary unemployment and full employment.
2. On a diagram draw a straight line saving curve for an economy. From it derive the consumption curve, explaining the method of derivation. Show a point on the consumption curve at which APC is equal to one and a point where APS is negative.
3. Why must aggregate demand be equal to income at the equilibrium level of income and output? Explain with the help of a diagram.
4. Why must planned saving of households be equal to planned investment of firms at the equilibrium level of income and output? Explain with the help of a diagram.
5. The saving function of an economy is \( S = -200 + 0.25Y \). The economy is in equilibrium when income is equal to Rs 2,000. Calculate:
   i. Investment expenditure at equilibrium level of income.
   ii. Autonomous consumption.
   iii. Investment multiplier.
7. How can the problems of deficient demand be combated with the help of monetary policy?
8. Explain the concept of under employment equilibrium with the help of a diagram. Show on the same diagram the additional investment expenditure required to reach full employment equilibrium.
Government Budget and the Economy

The following questions are for 1 mark:

1. What is a Government budget?
2. What is progressive tax?
3. Give two examples of non-tax revenue receipts.
4. How does a tax differ from a fee?
5. Why is repayment of a loan a capital expenditure?
6. Why is payment of interest a revenue expenditure?
7. Why are subsidies treated as revenue expenditure?
8. Why are borrowings treated as capital receipts?
9. Define a fiscal deficit.
10. When will there be a revenue deficit in a government budget?
11. Define primary deficit.
12. Why is income tax a direct tax?
13. A Government budget shows a primary deficit of Rs 4,400 crores. The revenue expenditure on interest payment is Rs 400 crores. How much is the fiscal deficit?
14. Name two types of expenditures in the budget that can reduce income inequalities.
15. In a Government budget, revenue deficit is Rs 50,000 crores and borrowings are Rs 75,000 crores. How much is the fiscal deficit?

The following questions are for 3/4 marks:

1. What is a Government budget? Name two sources each of non-tax revenue receipt and capital receipt.
2. Distinguish between (a) Revenue receipts and Capital receipts.  
   (b) Direct tax and indirect tax.
3. What is the basis of classifying Government receipt into revenue receipt and capital receipt?  
   Give an example of each.
4. What is the basis of classifying Government expenditure into revenue expenditure and capital expenditure? Explain with the help of examples.
5. Giving reasons categorize the following into revenue receipt and capital receipt:  
   i. Recovery of loans
ii. Corporation tax  
iii. Dividends on investments made by the Government  
iv. Sale of a public sector unit  
6. Giving reasons, categorize the following into revenue expenditure and capital expenditure:  
   i. Subsidies  
   ii. Grants given to state Government  
   iii. Repayment of loans  
   iv. Construction of school buildings.  
7. What is meant by revenue deficit? State two measures to reduce this deficit.  
8. Explain the meaning and implications of fiscal deficit.  
9. Define fiscal deficit. If the fiscal deficit is high, why does the government try to reduce it?  
10. ‘The fiscal deficit gives the borrowing requirement of the government’. Elucidate.  
11. What is the relationship between revenue deficit and fiscal deficit?  
12. Differentiate between plan and non plan expenditure.  
13. Is fiscal deficit necessarily inflationary?  
14. Explain the term “debt trap.”  
15. Explain briefly any two objectives of a Government budget.  
16. How can a government budget help in reallocation of resources in an economy?  
17. Calculate revenue deficit from the following data:  
   (in Rs crores)  
   a. Income tax receipts 70  
   b. Grants to state governments 65  
   c. Loans from World Bank 40  
   d. Administrative revenue 50  
   e. Expenditure on subsidies 165  
18. Name the different types of deficits in the Government of India’s budget.  
   Explain any one.  
19. Explain the measures to contain budget deficits.  
Foreign Exchange rate and Balance of Payments

The following questions are for 1 mark each:

1. Define foreign exchange.
2. Define foreign exchange rate.
3. State the relation between price and demand for foreign exchange.
4. State the relation between price and supply of foreign exchange.
5. How is the equilibrium foreign exchange rate determined?
6. What is meant by an appreciation of currency?
7. The balance of trade shows a deficit of Rs 5,000 crores and the value of imports is Rs 9,000 crores. What is the value of exports?
8. Name the two categories of transactions recorded in the current account of BOP.
9. What is included in balance of payment on the current account?
10. What is the balance of visible items in the BOP account called?
11. What does a deficit in the balance of trade indicate?
12. Define a flexible exchange rate system.
13. What is the difference between values of exports and imports of goods called?
14. When will balance of trade show a surplus?
15. What does a positive figure of net unilateral transfers in the BOP account signify?
17. What does a depreciation of the Indian rupee imply for US dollar?
18. What does a balance of payments account of a country record?
19. What is the significance of errors and omissions in the BOP account?
20. At present does any economy operate on fully fixed or floating exchange rate system?

The following questions are for 3/4 marks each:

1. Differentiate between balance of trade and balance of payments.
2. Higher the exchange rate, lower the demand for foreign exchange. Explain why?
3. Higher the foreign exchange rate, higher the supply of foreign exchange. Explain why?
4. State four sources each of demand and supply of foreign exchange.
5. How is foreign exchange rate determined? Explain with the help of a diagram.
6. State the components of (a) current account and (b) capital account of BOP.
7. Distinguish between balance on current account and balance of trade.
8. Why does a rise in foreign exchange rate cause a rise in its supply?
9. List and explain three economic factors that may lead to disequilibrium in the balance of payments of a country.
10. Differentiate between devaluation and depreciation of a currency.
11. Elaborate any three reasons that cause a deficit in the BOP accounts.
12. Show the effect of a decrease in demand for imports in the foreign exchange market.
13. Differentiate between a fixed and flexible exchange rate system.
14. Explain the functions of the foreign exchange market.
15. How is the official reserve account used to balance a balance of payments account?
16. Using a diagram explain the term ‘appreciation of domestic currency’.
17. With the help of a diagram explain how a foreign currency appreciates.
18. What is meant by visible and invisible items in the balance of payments account? Give two examples of invisible account.
19. What is the significance of speculators in the foreign currency market?
20. Distinguish between autonomous and accommodating items in the BOP.

The following questions are for 6 marks each:

1. Discuss the components of a balance of payments account.
2. How is equilibrium rate of exchange determined?
3. Explain the following:
   b. Inverse relationship between demand of foreign exchange and the price of foreign exchange.
4. Discuss the economic factors that cause disequilibrium in the Balance of Payment.
Assignment No. 12
National Income Accounting

1. Define national income. (1)

2. When can domestic income be greater than national income? (1)

3. What policy can the government implement to increase the purchase of solar lamps? (1)

4. What is meant by consumption of fixed capital? How is this different from capital loss? (3)

5. Explain the circular flow of income. (3)

Max Marks: 20
6. ‘Machine’ is always a final good. Justify your answer. (3)

………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………

7. Are the following included in the domestic income of India? Give reasons. (4)
(a) Profit earned by Tata Tea’s office located in London.
………………………………………………………………………………………………
………………………………………………………………………………………………

(b) Profit earned by Royal Bank of Scotland’s office in India.
………………………………………………………………………………………………
………………………………………………………………………………………………

(c) Income earned by an American secretary working at the Indian High Commission in Washington.
………………………………………………………………………………………………
………………………………………………………………………………………………

(d) Income earned by a resident Indian working at the United Nation’s office in Delhi.
………………………………………………………………………………………………
………………………………………………………………………………………………

8. An economy produces 2 goods—rice and milk. In 2013, the output of rice and milk were 200 kg and 650 litres respectively. These were sold at a price of Rs 20 per kg and Rs 5 respectively. In 2014 the output became 190 kg and 700 litres respectively and the prices changed to Rs 22 and Rs 7 respectively. Calculate real and nominal GDP in 2014. (4)
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
Assignment No. 13
Value Added

Please follow the presentation of the solved example given below to attempt all national income accounting assignments

From the data given below calculate net value added at factor cost

(Rs ‘000)

i. Domestic Sales 1,000

ii. Subsidies 10

iii. Purchase of raw materials and other inputs 360

iv. Exports 500

v. Depreciation of fixed capital 45

vi. Import of raw materials 60

vii. Increase in stock 120

viii. Net Indirect taxes 30

Solution:

(i) Domestic Sales 1,000

+ (iv) Exports + 500

Total sales 1500

+ (vii) Change in stock + 120

Value of output 1620

- (iii) Purchase of raw materials & other inputs - 360

Gross value added at market price 1260

- (v) Depreciation of fixed capital - 45

Net value added at market price 1215

- (viii) Net indirect taxes - 30

Net value added at factor cost 1185

1. Calculate the value added by firm P and Q from the following data:

   (Rs lakhs)

   i. Sales by firm P 80

   ii. Sales by firm Q to firm P 40

   iii. Sales by firm Q to households 60

   iv. Imports by Firm P 20

   v. Exports by firm Q 30

   vi. Opening stock of firm P 25

   vii. Closing stock of firm P 15

   viii. Opening stock of firm Q 35

   ix. Closing stock of firm Q 50

   x. Purchases by firm Q 100

2. Calculate gross value added at factor cost from the following data:

   (Rs lakhs)

   i. Net indirect tax 20

   ii. Purchase of intermediate products 120

   iii. Purchase of machines for installation 300

   iv. Sales 250

   v. Consumption of fixed capital 20
3. Estimate the gross value added at factor cost from the following data:

(Rs lakhs)

i. Sales 500
ii. Purchase of intermediate products 350
iii. Subsidies 40
iv. Exports 250
v. Consumption of fixed capital 60
vi. Change in stock 30

4. From the following data, calculate GNP at market price. All values are in Rs lakhs.

i. Value of output in primary sector 1000
ii. Net factor income from abroad (-)20
iii. Value of output in tertiary sector 700
iv. Intermediate consumption in secondary sector 400
v. Value of output in secondary sector 900
vi. Intermediate consumption in primary sector 500
vii. Intermediate consumption in tertiary sector 300

5. Calculate the gross value added at factor cost:

(Rs lakhs)

i. Excise duty 40
ii. Consumption of fixed capital 15
iii. Closing stock 20
iv. Sales 700
v. Subsidy 5
vi. Intermediate consumption 400
vii. Opening stock 10

6. Estimate the net value added at factor cost of a factory with the help of the following data:

(Rs lakhs)

i. Sales during the period 5,000
ii. Increase in stock 750
iii. Purchase of fuel from other organizations 500
iv. Purchase of raw materials from other firms 1,000
v. Imports of raw materials 500
vi. Indirect taxes 250
vii. Depreciation 700

7. Estimate NVA at factor cost from the following data:

(Rs lakhs)

i. Sales 800
ii. Change in stock 50
iii. Rent 70
iv. Purchase of raw materials from domestic market 400
v. Import of raw material 100
vi. Indirect taxes 25
vii. Depreciation 40
Assignment No. 14
Income Method

1. Find compensation of employees from the following data: (Rs Crores)
   i. Net indirect taxes 15
   ii. Gross value added at market price 125
   iii. Consumption of fixed capital 10
   iv. Operating surplus 50
   v. Mixed income of self employed 30

2. Calculate operating surplus from the following data: (Rs Crores)
   i. Mixed income 50
   ii. Rent 625
   iii. Interest 375
   iv. Royalty 25
   v. Dividends 225
   vi. Corporate tax 10
   vii. Undistributed profits 50

3. Calculate operating surplus from the following data: (Rs Crores)
   i. Value of output at market prices 12000
   ii. Indirect taxes 200
   iii. Economic subsidy 150
   iv. Compensation of employees 5000
   v. Consumption of fixed capital 250
   vi. Intermediate consumption 3500

4. Calculate National income and GNP_{MP} from the following data: (Rs Crores)
   i. Interest 25
   ii. Net factor income from abroad (-) 5
   iii. Net indirect taxes 40
   iv. Royalty 5
   v. Wages and Salaries in kind 45
   vi. Depreciation 50
   vii. Profits 30
   viii. Rent 10
   ix. Old age pension 20
   x. Compensation of employees 240
5. Calculate GNP\(_{FC}\) and NDP\(_{MP}\) from the following data: (Rs Crores)
   i. Wages and Salaries
   ii. Mixed income of self employed
   iii. Operating surplus
   iv. Undistributed profits
   v. Gross capital formation
   vi. Change in stocks
   vii. Net capital formation
   viii. Employer’s contribution to social security schemes
   ix. Net factor income from abroad
   x. Net indirect taxes

6. Calculate GNP\(_{MP}\) from the following data: (Rs Crores)
   i. Wages and Salaries
   ii. Rent
   iii. Depreciation
   iv. Net factor income from abroad
   v. Mixed income
   vi. Subsidies
   vii. Profits
   viii. Indirect taxes
   ix. Employees contribution to social security scheme
   x. Interest

7. Calculate national income from the following data: (Rs Crores)
   i. Rent
   ii. Interest
   iii. Profits
   iv. Tax on profits
   v. Employee’s contributions to social security schemes
   vi. Mixed income of self employed
   vii. Net indirect tax
   viii. Employer’s contributions to social security schemes
   ix. Compensation of employees
   x. Net factor income from abroad

8. Calculate GDP\(_{MP}\) and GNP\(_{FC}\) from the following data: (Rs Crores)
   i. Operating surplus
   ii. Profit
   iii. Wages and salaries in cash
   iv. Interest
   v. Consumption of fixed capital
   vi. Net factor income from abroad
   vii. Value of benefits in kind provided to employees
   viii. Indirect tax
   ix. Subsidies
Assignment No. 15  
Income and Expenditure Method

For the following numerical, calculations should be based on both methods except for question1:

1. On the basis of the following information calculate GDP at MP and NDP at FC:
   (Rs Crores)
   i. Private consumption expenditure 15,000
   ii. Private fixed investment (gross) 1,500
   iii. Changes in inventories 1,400
   iv. Government consumption expenditure 3,500
   v. Consumption of fixed capital 700
   vi. Net exports 1,600
   vii. Indirect taxes 2,000
   viii. Subsidies 1,200

2. On the basis of the following data calculate NDP at FC:
   (Rs Crores)
   i. Compensation of employees 5,200
   ii. Government consumption expenditure 1,500
   iii. Net indirect taxes 1,400
   iv. Operating surplus 2,000
   v. Net exports (-) 400
   vi. Gross fixed capital formation 2,500
   vii. Private consumption expenditure 12,000
   viii. Net increase in stocks 400
   ix. Net factor income from abroad 400
   x. Consumption of fixed capital 1,000
   xi. Mixed income of self-employed 6,400

3. From the data below calculate GDP and MP and NNP at FC:
   (Rs Crores)
   i. Government final consumption expenditure 7,340
   ii. Indirect taxes 8,840
   iii. Gross fixed capital formation 13,300
   iv. Mixed income of self-employed 29,300
   v. Subsidies 1,100
   vi. Changes in stock 3,200
   vii. Rent, interest and profits 9,600
   viii. Consumption of fixed capital 4,100
   ix. Private consumption expenditure 52,200
   x. Import of goods and services 5,700
   xi. Export of goods and services 4,800
   xii. Net factor income from abroad (-) 300
   xiii. Compensation of employees 24,400
4. Estimate GDP at FC:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (Rs Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Personal consumption expenditure</td>
<td>700</td>
</tr>
<tr>
<td>ii. Wages and salaries</td>
<td>700</td>
</tr>
<tr>
<td>iii. Employers’ contribution to social security schemes</td>
<td>100</td>
</tr>
<tr>
<td>iv. Gross business fixed investment</td>
<td>60</td>
</tr>
<tr>
<td>v. Profits</td>
<td>100</td>
</tr>
<tr>
<td>vi. Gross residential construction investment</td>
<td>60</td>
</tr>
<tr>
<td>vii. Government purchases of goods and services</td>
<td>240</td>
</tr>
<tr>
<td>viii. Rent</td>
<td>50</td>
</tr>
<tr>
<td>ix. Inventory investment</td>
<td>50</td>
</tr>
<tr>
<td>x. Exports</td>
<td>40</td>
</tr>
<tr>
<td>xi. Interest</td>
<td>50</td>
</tr>
<tr>
<td>xii. Imports</td>
<td>20</td>
</tr>
<tr>
<td>xiii. Net factor income from abroad</td>
<td>-10</td>
</tr>
<tr>
<td>xiv. Mixed income</td>
<td>100</td>
</tr>
<tr>
<td>xv. Depreciation</td>
<td>20</td>
</tr>
<tr>
<td>xvi. Subsidies</td>
<td>10</td>
</tr>
<tr>
<td>xvii. Indirect taxes</td>
<td>20</td>
</tr>
</tbody>
</table>

5. From the following data calculate NDP at MP and NNP at FC:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (Rs Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Personal consumption expenditure</td>
<td>410</td>
</tr>
<tr>
<td>ii. Wages and salaries</td>
<td>140</td>
</tr>
<tr>
<td>iii. Employers’ contribution to social security schemes</td>
<td>100</td>
</tr>
<tr>
<td>iv. Gross business fixed investment</td>
<td>130</td>
</tr>
<tr>
<td>v. Profits</td>
<td>10</td>
</tr>
<tr>
<td>vi. Gross residential construction investment</td>
<td>60</td>
</tr>
<tr>
<td>vii. Government purchases of goods and services</td>
<td>115</td>
</tr>
<tr>
<td>viii. Rent</td>
<td>50</td>
</tr>
<tr>
<td>ix. Inventory investment</td>
<td>35</td>
</tr>
<tr>
<td>x. Exports</td>
<td>50</td>
</tr>
<tr>
<td>xi. Interest</td>
<td>40</td>
</tr>
<tr>
<td>xii. Imports</td>
<td>60</td>
</tr>
<tr>
<td>xiii. Net factor income from abroad</td>
<td>-5</td>
</tr>
<tr>
<td>xiv. Mixed income</td>
<td>280</td>
</tr>
<tr>
<td>xv. Depreciation</td>
<td>40</td>
</tr>
<tr>
<td>xvi. Subsidies</td>
<td>10</td>
</tr>
<tr>
<td>xvii. Indirect taxes</td>
<td>90</td>
</tr>
</tbody>
</table>
Assignment No. 16
Personal Disposable Income

1. Calculate from the following data:
   (i) Gross national disposable income
   (ii) Private Income
   (iii) Personal Disposable Income (Rs Crore)

<table>
<thead>
<tr>
<th>Description</th>
<th>Value (Rs Crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Gross national product at factor cost</td>
<td>400</td>
</tr>
<tr>
<td>ii. Net factor income from abroad</td>
<td>20</td>
</tr>
<tr>
<td>iii. Consumption of fixed capital</td>
<td>30</td>
</tr>
<tr>
<td>iv. Indirect taxes</td>
<td>50</td>
</tr>
<tr>
<td>v. Subsidies</td>
<td>10</td>
</tr>
<tr>
<td>vi. Current transfers from the rest of the world</td>
<td>20</td>
</tr>
<tr>
<td>vii. Income from property and entrepreneurship accruing to govt administrative departments</td>
<td>35</td>
</tr>
<tr>
<td>viii. Savings of non departmental enterprises</td>
<td>15</td>
</tr>
<tr>
<td>ix. National debt interest</td>
<td>45</td>
</tr>
<tr>
<td>x. Current transfers from government administrative departments</td>
<td>60</td>
</tr>
<tr>
<td>xi. Savings of private corporate sector</td>
<td>40</td>
</tr>
</tbody>
</table>

2. Calculate (a) Private Income (b) Personal income and (c) Personal disposable income from the following data:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value (Rs Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. National income</td>
<td>2,500</td>
</tr>
<tr>
<td>ii. Corporate profit tax</td>
<td>25</td>
</tr>
<tr>
<td>iii. National debt interest</td>
<td>30</td>
</tr>
<tr>
<td>iv. Direct personal taxes</td>
<td>75</td>
</tr>
<tr>
<td>v. Savings of private corporate sector</td>
<td>50</td>
</tr>
<tr>
<td>xii. Income from property and entrepreneurship accruing to govt administrative departments</td>
<td>75</td>
</tr>
<tr>
<td>xiii. Current transfers from government administrative departments</td>
<td>70</td>
</tr>
<tr>
<td>xiv. Savings of non departmental enterprises</td>
<td>10</td>
</tr>
<tr>
<td>xv. Current transfers from the rest of the world</td>
<td>30</td>
</tr>
</tbody>
</table>

3. Estimate personal disposable income from the data given below: (Rs Crores)

<table>
<thead>
<tr>
<th>Description</th>
<th>Value (Rs Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Miscellaneous receipts of government from households</td>
<td>10</td>
</tr>
<tr>
<td>ii. Corporate profit tax</td>
<td>30</td>
</tr>
<tr>
<td>iii. Retained earnings of private corporate sector</td>
<td>21</td>
</tr>
<tr>
<td>iv. Direct taxes paid by households</td>
<td>40</td>
</tr>
<tr>
<td>v. Private income</td>
<td>300</td>
</tr>
<tr>
<td>vi. Net current transfers from the rest of the world</td>
<td>5</td>
</tr>
<tr>
<td>vii. Net factor income from abroad</td>
<td>10</td>
</tr>
</tbody>
</table>
4. From the following data calculate:

(a) Personal disposable income
(b) National income

<table>
<thead>
<tr>
<th>Description</th>
<th>Value (Rs Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Consumption of fixed capital</td>
<td>180</td>
</tr>
<tr>
<td>ii. Net indirect taxes</td>
<td>500</td>
</tr>
<tr>
<td>iii. Private income</td>
<td>4,000</td>
</tr>
<tr>
<td>iv. Mixed income of self employed</td>
<td>1,200</td>
</tr>
<tr>
<td>v. Net factor income from abroad</td>
<td>(-) 50</td>
</tr>
<tr>
<td>vi. Compensation of employees</td>
<td>1,300</td>
</tr>
<tr>
<td>vii. Net retained earnings of private enterprises</td>
<td>200</td>
</tr>
<tr>
<td>viii. Profit</td>
<td>600</td>
</tr>
<tr>
<td>ix. Rent</td>
<td>400</td>
</tr>
<tr>
<td>x. Corporate tax</td>
<td>700</td>
</tr>
<tr>
<td>xi. Interest</td>
<td>(-) 100</td>
</tr>
<tr>
<td>xii. Net exports</td>
<td>150</td>
</tr>
<tr>
<td>xiii. Direct taxes paid by households</td>
<td></td>
</tr>
</tbody>
</table>

5. Calculate private income from the following data:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value (Rs Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Income from domestic product accruing to private sector</td>
<td>245</td>
</tr>
<tr>
<td>ii. Net current transfers from government</td>
<td>10</td>
</tr>
<tr>
<td>iii. Net current transfers paid to the rest of the world</td>
<td>4</td>
</tr>
<tr>
<td>iv. National debt interest</td>
<td>10</td>
</tr>
<tr>
<td>v. Net factor income from abroad</td>
<td>(-) 3</td>
</tr>
<tr>
<td>vi. Allowance for depreciation</td>
<td>2</td>
</tr>
</tbody>
</table>

6. Estimate Net National Product at market price from the following data:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value (Rs Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Net indirect taxes</td>
<td>5,500</td>
</tr>
<tr>
<td>ii. Corporate tax</td>
<td>1,200</td>
</tr>
<tr>
<td>iii. Part of national income accruing to the government sector</td>
<td>1,550</td>
</tr>
<tr>
<td>iv. Net factor income from abroad</td>
<td>(-) 150</td>
</tr>
<tr>
<td>v. Interest on national debt</td>
<td>450</td>
</tr>
<tr>
<td>vi. Undistributed corporate profits</td>
<td>2,500</td>
</tr>
<tr>
<td>vii. Direct personal taxes</td>
<td>1,650</td>
</tr>
<tr>
<td>viii. Net current transfers from abroad</td>
<td>(-) 200</td>
</tr>
<tr>
<td>ix. Transfer payment by government</td>
<td>1,600</td>
</tr>
<tr>
<td>x. Personal consumption expenditure</td>
<td>50,000</td>
</tr>
<tr>
<td>xi. Personal savings</td>
<td>9,600</td>
</tr>
</tbody>
</table>

7. Estimate corporate tax from the following data:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value (Rs Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Private income</td>
<td>5,000</td>
</tr>
<tr>
<td>ii. Personal disposable income</td>
<td>3,500</td>
</tr>
<tr>
<td>iii. Retained earnings of corporate</td>
<td>550</td>
</tr>
<tr>
<td>iv. Direct taxes paid by households</td>
<td>500</td>
</tr>
</tbody>
</table>
1. What are demand deposits?  

2. What is meant by standard of deferred payments?  

3. Differentiate between fiat and fiduciary money.  

4. How does money solve the problem of lack of double coincidence of wants?
5. Read the case study below and answer the question that follow it:

In a village there are 5 people – each one producing one commodity of rice, pulses, shoes, books and clothes. The rice producer finds it difficult to remember how many bags of rice are required to exchange for 3 books. He also finds that over time his rice gets eaten by pests. One day the 5 producers get together and decide that to simplify exchange, they will accept shells in return for their goods.

(1) Identify the two problems of barter discussed in the paragraph above. (1)
(2) What form of money is used in the village? (1)
(3) How does money solve the problem of barter? (1)

6. What are the components of M1? Explain in brief. (4)
Assignment No. 18
Banking

1. What is meant by Statutory Liquidity Ratio?  
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………

2. What is meant by reverse repo rate?  
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………

3. How does a central bank act as a banker to the government?  
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………

4. On 2\textsuperscript{nd} February 2016, Raghuram Rajan, the Governor of RBI, cut SLR by 0.5%. Analyse the impact of this policy measure on the Indian economy.  
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
5. Answer the following: (3)

(a) If the initial deposit is Rs 500 and the money created in the economy through the banking system is twice this amount, then calculate the legal reserve ratio.

(b) Given an initial deposit of Rs 1,000 and a legal reserve ratio of 20%, calculate:

a. Deposit multiplier

b. Money created in the economy through the banking system (4)
Assignment No. 19

Tools of Macroeconomics

1. What is the implication of full employment in an economy? (1)

2. Complete the following table: (4)

<table>
<thead>
<tr>
<th>Income</th>
<th>Consumption</th>
<th>APC</th>
<th>MPC</th>
<th>APS</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>140</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>180</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Explain the consumption function $C = C_0 + bY$. (4)
4. Derive the savings function curve from the consumption function curve. Draw a schedule and also explain the derivation. (6)
Assignment No. 20
Equilibrium

1. What is an investment multiplier?  
   ……………………………………………………………………………………………………………………………
   ……………………………………………………………………………………………………………………………

2. What happens to income in an economy if the planned saving exceeds planned investment?  
   ……………………………………………………………………………………………………………………………

3. As a result of an increase in investment by Rs 200 crores, income increases by Rs 200 crores. Find the value of MPC and MPS.  
   ……………………………………………………………………………………………………………………………
   ……………………………………………………………………………………………………………………………
   ……………………………………………………………………………………………………………………………
   ……………………………………………………………………………………………………………………………

4. With the help of an example show the working of the investment multiplier?  
   ……………………………………………………………………………………………………………………………
   ……………………………………………………………………………………………………………………………
   ……………………………………………………………………………………………………………………………
   ……………………………………………………………………………………………………………………………
   ……………………………………………………………………………………………………………………………
   ……………………………………………………………………………………………………………………………
   ……………………………………………………………………………………………………………………………
   ……………………………………………………………………………………………………………………………
   ……………………………………………………………………………………………………………………………
   ……………………………………………………………………………………………………………………………
   ……………………………………………………………………………………………………………………………
5. In an economy the autonomous investment is Rs 700 crores and the consumption function is \( C = 100 + 0.8Y \). Calculate the following:

a. The equilibrium level of income.

b. Level of realized investment at an income of Rs 3,000 crores.

c. Level of unplanned investment or disinvestment at an income of Rs 3,000 crores. (3)

6. Explain how an economy achieves equilibrium level of income using the aggregate demand and income approach. (6)
Assignment No. 21
Deficient & Excess Demand

1. What is meant by excess demand? (1)
   ..........................................................................................................................

2. What should happen to bank rate in order to reduce the inflationary gap? (1)
   ..........................................................................................................................

3. Explain three fiscal measures that the government should undertake in order to correct a situation of deficient demand. (3)
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................

4. Explain under employment equilibrium with a suitable diagram. (4)
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................

Max Marks: 15
5. Explain inflationary gap with the help of a diagram. What happens to income, employment and prices under this situation? (6)
1. What is meant by a tax? (1)

………………………………………………………………………………………………………………
……………………………………………………………………………………………………………….

2. If fiscal deficit is Rs 40,000 crores, interest payment is Rs 5,000 crores and subsidies are Rs 10,000 crores, what is the primary deficit? (1)

………………………………………………………………………………………………………………
……………………………………………………………………………………………………………….

3. What is the significance of a revenue deficit? (3)

………………………………………………………………………………………………………………
………………………………………………………………………………………………………………
………………………………………………………………………………………………………………
………………………………………………………………………………………………………………
………………………………………………………………………………………………………………

4. Classify the following central government receipts into revenue receipts and capital receipts. On what basis have they been classified? (1+4)

Revenue receipts

………………………………………………………………………………………………………………

Capital receipts

………………………………………………………………………………………………………………

(a) Interest received on a developmental loan given to the Nepal government

(b) Dividend earned on investment in ONGC

(c) Public debt raised by the central government

(d) Fee received for issuing a license to a pharmaceutical company to start operations

(e) A 20 year loan received by the Indian government from the World Bank to improve rural infrastructure

(f) Receipts from disinvestment of equity holding in MarutiUdyog Ltd

(g) Receipts from sale of Indira VikasPatra

(h) Payment received from a firm refusing to comply by the Court’s orders
5. Classify the following central government expenditure into revenue expenditure and capital expenditure. On what basis have you classified? (1+4)

Revenue expenditure .............................................................................................................

Capital expenditure .............................................................................................................
(a) Expenditure incurred on servicing interest on government borrowing..........................
(b) Food subsidy granted to BPL families............................................................................
(c) Grants extended to state government............................................................................
(d) Investment in shares of a bluechip company in the capital market............................
(e) Pension payment made to retired government personnel............................................
(f) Scholarships awarded to deserving students.................................................................
(g) Expenditure incurred on construction of the Golden Quadrilateral Highway project ....
(h) Wages paid to personnel working on the Golden Quadrilateral Highway project .......

6. Define fiscal deficit. What is its significance in the economy? Calculate fiscal deficit from the following data - (5)

(Rs crores)

i. Revenue receipts 2037
ii. Revenue expenditure 2811
iii. Capital receipts 1348
iv. Capital expenditure 574
v. Recoveries of loans and other receipts 235
vi. Borrowings and other liabilities 1113
vii. Interest payments 1013

........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
Assignment No. 23  
Foreign exchange and Balance of Payments

Max Marks: 15

1. What is meant by a foreign exchange rate? (1)

2. What is the value of the official reserves account of the BOP, if the balance on the current and capital account is (-) Rs 4,324 crore? (1)

3. What is a balance of trade account? (1)

4. Discuss how domestic inflation and developmental activities impact a country’s balance of payments situation. (4)
5. Using a diagram explain the term “appreciation of domestic currency”.

(Space for diagram later)

6. Differentiate between autonomous and accommodating entries of the balance of payment account.
Practice Paper

Time: 3 hrs
Max Marks: 100

General Instructions:

i. All questions are compulsory.
ii. 1 mark questions are required to be answered in one sentence.
iii. 3 mark questions are required to be answered in 60 words each.
iv. 4 mark questions are required to be answered in 70 words each.
v. 6 mark questions are required to be answered in 100 words each.
vi. Answers should be brief and to the point and the above word limit should be adhered to as far as possible.
vii. This paper has 4 printed sides and 30 questions.

Marks will be deducted if the answers are not properly numbered. Best of Luck!

Section A: Microeconomics

1. There is a market for pens. Sellers in this market are free to enter and exit and can influence their price due to product differentiation. This market represents:
   a. Perfect competition
   b. Monopoly
   c. Monopolistic competition
   d. Oligopoly

2. Which point on the diagram reflects consumer’s equilibrium?
   a. A
   b. B
   c. C
   d. P

3. Read the given statements:
   1. Demand is perfectly elastic and supply increases.
   2. Demand is relatively elastic and supply decreases.
   3. Demand increases in the same proportion as supply increases.
   4. Demand decreases in the same proportion as supply increases.

   Under which situations will the equilibrium price remain constant?
   a. 1 and 4
   b. 2 and 3
   c. 2 and 4
   d. 1 and 3
4. A falling marginal product leads to
   a. Total product increasing   b. Total product decreasing
   c. Total product increasing at a diminishing rate   d. either b. or c.

5. A firm is at an output level where its marginal cost is greater than the marginal revenue. Output of the firm will:
   a. Increase   b. Decrease   c. Stay the same   d. None of the above

6. Explain the problem of how output produced gets distributed in an economy.

7. A consumer consumes milk and biscuits. The price of milk is Rs 4 per litre and that of biscuits is Rs 10 per packet. If the consumer has Rs 200, then:
   a. Construct the budget line.
   b. What should \( \text{MRS} \) biscuits, milk be so that the consumer is in equilibrium?
   c. Is the bundle 6 litres of milk and 8 packets of biscuits affordable?

8. How are the concepts of scarcity and opportunity cost shown on a production possibility curve?
   OR
   Explain the shape of a production possibility curve.

9. The elasticity of supply of a commodity X is 0.5. When the price is Rs 5 per unit, the supply is 20 units. What will be the supply if price rises by Rs 7? What kind of relationship does price of a commodity and its supply share?

10. What is meant by total revenue? State its relationship with marginal revenue.
    OR
    What is meant by total cost? State its relationship with marginal cost.

11. Compare and contrast features of oligopoly and monopoly.

12. The government sets a price ceiling on the sale of milk as it wants more children to consume milk. Discuss whether this initiative will meet its objective. Use a diagram.
    OR
    The government sets a minimum wage for labour so that they can have a comfortable standard of living. Discuss the implications of this objective. Use a diagram.

13. What is meant by a movement along a demand curve and shift of the demand curve? Use a diagram.

14. Which of the following commodity in each pair has a more elastic demand? Give reasons for your answer.
   a. Demand for chocolate icecream vs Demand for icecream.
   b. Expenditure on a pen vs Expenditure on a washing machine.
   c. Demand for cars vs Demand for petrol for cars.

15. Using a schedule, state the returns earned by a factor in the short run.
Section B: Macroeconomics

16. Which of the following statements is true of government receipts?  
   a. Taxes are a liability for the government.  
   b. The recent sale of SAIL shares is a form of asset creation.  
   c. Passport fee is a form of revenue receipts.  
   d. All capital receipts increase the liability of the government.

17. “India’s balance of payments is in deficit.” What does this statement mean?  

18. What is meant by balance of trade?  

19. When the current account of the balance of payments has a surplus of INR 143,000 crores:  
   a. The capital account has a deficit of INR 143,000 crores.  
   b. The balance of payments account has a surplus of INR 143,000 crores.  
   c. The balance of payments account has a deficit of INR 143,000 crores.  
   d. The balance of payments account is in balance.

20. Which of the following statements is incorrect?  
   a. Money includes currency and demand deposits.  
   b. Money is a stock concept.  
   c. Money creation happens by a central bank.  
   d. Money is a legal tender.


22. State any three precautions of using the income method for calculating national income.  
   OR  
   Give the meaning of:  
   a. Consumption of capital  
   b. Stock variable  
   c. Domestic income

23. Explain how cash reserve ratio is used as a tool to control the money supply in an economy.  

24. The government wants to reduce the fiscal deficit in the economy. It decides to substantially increase taxes on automobiles and reduce its expenditure on SarvShikshaAbhiyan. Comment on the government’s policy initiative using economic principles.  

25. Differentiate between fixed and flexible exchange rate mechanisms.
26. If the legal reserve ratio in the economy is 20%, then:
   a. Find the deposit multiplier. Calculate the amount of credit created in the economy, if the initial deposit is Rs 7,500.
   
   OR

   With an initial deposit of Rs 1,000, the economy creates a credit of Rs 10,000. Calculate:
   a. Legal reserve ratio
   b. Credit created if the initial deposit is Rs 750.

27. Explain the problem of double counting with the help of an example. How can the problem be avoided?

28. What is meant by excess demand? What happens to prices under a situation of excess demand?
The consumption function is \( C = 40 + 0.6Y \). If the equilibrium level of income is 300, find:
   a. Investment
   b. Investment multiplier
   
   OR

   What is meant by planned investment? How is it related to planned saving?
The saving function is \( S = -60 + 0.8Y \). Calculate:
   a. The equilibrium level of income if planned investment is 100.
   b. The level of unplanned investment at an income of 300.

29. Explain the problem of underemployment equilibrium with the help of a diagram.

30. Calculate (a) Personal disposable income (b) GDP at market price from the following data:
   (Rs. Crores)
   
   i. Corporate profit tax 10
   ii. Net factor income to abroad 5
   iii. Net current transfers from the rest of the world 20
   iv. Direct taxes paid by households 15
   v. Retained earnings of private corporate sector 10
   vi. Income from property and entrepreneurship accruing to government administrative departments 70
   vii. National debt interest 30
   viii. Net current transfers from the government 45
   ix. Savings of non-departmental enterprises 30
   x. Private income 300
   xi. Consumption of fixed capital 50
   xii. Indirect taxes 75
   xiii. Subsidies 60
Practice Paper Marking Scheme
Section 1 Microeconomics

1. (c) (1)
2. (b) (1)
3. (d) (1)
4. (d) (1)
5. (b) (1)

6. Problem “For whom to produce” (1)
   Output produced is sold and the revenue earned is distributed to factors of production (1)
   With purchasing power in their hands, buy other goods and services produced in the economy (1)
   This is how output produced gets distributed.

7. (a) 4Milk + 10 Biscuits = 200 (1)
   or
   Diagram (1)
   Milk
   50
   \[
   \begin{array}{c}
   \text{Biscuits} \\
   \text{20} \\
   \text{20}
   \end{array}
   \]

     \[
     \text{MRS}_{bm} = \frac{P_b}{P_m} = \frac{10}{4} = 2.5
     \]

     \[
     6(4) + 8(10) = 24 + 80 = 104 < 200 \text{ Therefore, affordable.} \]

8. (a) Diagram (1)
   • Scarcity is shown on x and y axis as there is a fix quantity of goods that can be produced. In the diagram, OX unit of A and OY unit of Y (1)
   • Opportunity cost is shown by a movement along the PPC (1)
     When one unit of X is increased, ∆Y units of Y have to be sacrificed, thus OC of X is ∆Y units of good Y (1)

   OR (1)
   • Downward sloping - To produce more of one good, reduce the production of good 2 so that all resources are employed (1/2) + (1)
   • Concave to the origin – Increasing MRT due to factors not been perfectly substitutable (1/2) + (1)

9. \[ Es = \frac{\Delta Q}{\Delta P} * \frac{P}{Q} \] (1)
   \[ 0.5 = \frac{(X-20)}{7} * \frac{5}{20} \] (1)
   \[ X = 34 \text{ units} \] (1)
   Direct relationship (1)
10. • TR is the amount of money earned when certain units of output are sold. (1/2)
  • TR = P * Q (1/2)
  • Relationship between TR and MR
    (1) TR increasing at a diminishing rate, MR decreasing and positive (1)
    (2) TR is maximum, MR = 0 (1)
    (3) TR is declining, MR decreases and become negative. (1)

OR

• Total cost is the expenditure incurred by a firm on hiring or purchasing or using their own factors of production (1/2)
  • TC = TFC + TVC (1/2)
  • Relationship between TC and MC
    (1) TC increases at a diminishing rate, MC decreases (1)
    (2) TC is at the point of inflexion, MC minimum (1)
    (3) TC increases at an increasing rate, MC increases (1)

11. • Compare (Similarity) (any 2) (2)
  (1) Barriers to entry
  (2) Supernormal profit in long run

• Contrast (Differences) (any 2) (2)

<table>
<thead>
<tr>
<th>Monopoly</th>
<th>Oligopoly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single seller</td>
<td>Few sellers</td>
</tr>
<tr>
<td>Price discrimination</td>
<td>Non price competition/sticky prices</td>
</tr>
<tr>
<td>Selling costs not required</td>
<td>Selling costs required</td>
</tr>
</tbody>
</table>

12. • Diagram (1)

• Price ceiling: Setting the price lower than equilibrium price (1)
  o Leads to demand expanding, supply contracting at equilibrium level (1/2)
  o Qs < Qd: Shortage of milk (1/2)
- Hoarding and black marketing
- Amount supplied OQs < equilibrium quantity of OQ1
- Therefore, lesser children get access to milk
- Government objective not met.

OR

- Minimum Wage: Floor price: Setting the price higher than equilibrium price
  - Demand for labour declines and supply of labour increases
  - Unemployment (Qs - Qd): Lesser number of people employed
  - Therefore, good policy for those employed
  - General welfare of the economy is lower.

13.

<table>
<thead>
<tr>
<th>Movement along the demand curve</th>
<th>Shift of the demand curve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagram Price</td>
<td>Diagram Price</td>
</tr>
<tr>
<td>Expansion</td>
<td>Decrease Increase</td>
</tr>
<tr>
<td>Contraction</td>
<td>Demand</td>
</tr>
<tr>
<td>Cause: Due to change in price of own commodity other factors remaining constant</td>
<td>Cause: Due to change in other factors i.e. income, tastes and preferences etc. price remaining constant</td>
</tr>
<tr>
<td>Expansion: More is demanded at a lower price</td>
<td>Increase in demand: More is demanded at the same price</td>
</tr>
<tr>
<td>Contraction: Less is demanded at a higher price</td>
<td>Decrease in demand: Less is demanded at the same price</td>
</tr>
<tr>
<td>Upward / Downward movement along the same curve</td>
<td>Rightward / Leftward shift of the demand curve.</td>
</tr>
</tbody>
</table>

14.

(a) Chocolate icecream – more narrowly defined
(b) Expenditure on washing machine – Larger percentage of the household budget
(c) Cars – Large number of substitutes or demand for tyres is relatively inelastic for a car owner
15. 
- Schedule (2)
- Returns earned by a factor (1)
  (a) Increasing rate – TP increases at an increasing rate, MP increases - Causes (3)
  (b) Diminishing rate – TP increases at a diminishing rate, MP declines but positive – Causes
  (c) TP is declining , MP is negative – Causes
(Refer to schedule)

Section B Macroeconomics

16. (c)
17. Autonomous inflows < autonomous outflows (1)
18. Balance of the export and export of goods (1)
19. (d) (1)
20. (c) (1)
21. Borrowings can be good or bad
   - Good if used for creation of assets (1)
   - Bad if used for wasteful expenditure (1)
   - Bad if fiscal deficit is a very high percentage of GDP (> 6%) (1)
22. Precautions of the income method (Any 3)
   - Transfer earnings not included (1)
   - Income from second hand goods not included (1)
   - Income from sale of financial assets not included (1)
   - Imputed value of own account production and owner occupied dwelling included

OR
Consumption of fixed capital: wear and tear and expected obsolescence of plant and machinery (1)
Stock variable: measured at a point of time. (1)
Domestic income: Income earned by factors of production with the domestic territory (1)
23. CRR is the percentage of deposits that a commercial bank needs to keep as cash with the central bank (1)
   CRR increases → less to lend → money supply falls (1)
   CRR decreases → more to lend → money supply increases (1)
24. Fiscal deficit = total expenditure – Total receipts (other than borrowings)
   - Tax on automobile increases → price of automobile increases (2)
   - Demand for automobile decreases
   - Given, it’s a luxury, demand is relatively elastic
   - Therefore, revenue will fall
   - Therefore, tax collection will fall
   - So revenue generation may not increase
   - Cutting expenditure on SarvShikshaAbhiyan (2)
   - Decrease expenditure on human capital formation
- Adversely impact human skills in the future
- So decrease expenditure not a good idea
- Therefore, policy initiatives are not appropriate to reduce fiscal deficit.

25.  

<table>
<thead>
<tr>
<th>Fixed exchange rate</th>
<th>Flexible exchange rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange rate decided by the government</td>
<td>Exchange rate determined by forces of market</td>
</tr>
<tr>
<td>Central banks reserves play an important role in maintaining official exchange rate</td>
<td>Central banks reserves do not play a role in maintaining official exchange rate</td>
</tr>
<tr>
<td>Changes in exchange rate leads to revaluation/devaluation of currency</td>
<td>Changes in exchange rate leads to appreciation/depreciation of currency</td>
</tr>
</tbody>
</table>

26.  

LRR = 20%  
(a) Deposit multiplier = 1/LRR  
= 1/0.2 = 5  
(b) Credit creation = 1/LRR (initial deposit)  
= 5 * 7500 = Rs 37500  

OR  
(a) Money created = 1/LRR (initial deposit)  
10,000 = 1/LRR (1000)  
LRR = 10%  
(b) Credit creation = 1/LRR (initial deposit)  
= 10 (750) = Rs 7500  

27.  

- Counting the value of a good/service more than once in estimating national income  
- Leads to overestimation of national income  
- Example to explain  
- Can be avoided – taking only final goods/services  
  - Value added at each stage of production  

28.  

Excess demand is a situation when current AD is greater than effective AD  
Price level increases  
AD = Y  
C+I = Y  
40 + 0.6 Y + I = Y  
40 + 180 + I = 300  
I = 80  

K = 1/mpc  
= 1/0.4 = 2.5  

OR  
- Planned investment is the desired level of investment that firms wish to make at given levels of income  
Planned investment = Planned savings at equilibrium level of income
S = -60 + 0.8Y
(a) S = I
-60 + 0.8 Y = 100
Y = 200
(b) S = -60 +0.8 (300)
S = 180
At any income level, actual saving = actual investment
Therefore, actual investment = 180
Therefore unplanned investment = 80

29. Diagram

At point E : AD = Y
Equilibrium level of income is OY*
Full employment income is OYf
Since OY* <OYf; there is unemployment at OY*
Therefore, OY* is underemployment equilibrium caused by deficient demand.
Problem is that there is unemployment
But economy cant achieve full employment as OY* is equilibrium level

30. (a) Personal disposable income = x-i-v-iv
= 300-10-10-15
= 265
(b)GDP mp = x-vii-iii-viii+i+i+i+ix+xi+xi-xii-xiii
= 300-30-45-20+5+70+30+50+75-60 = 375