

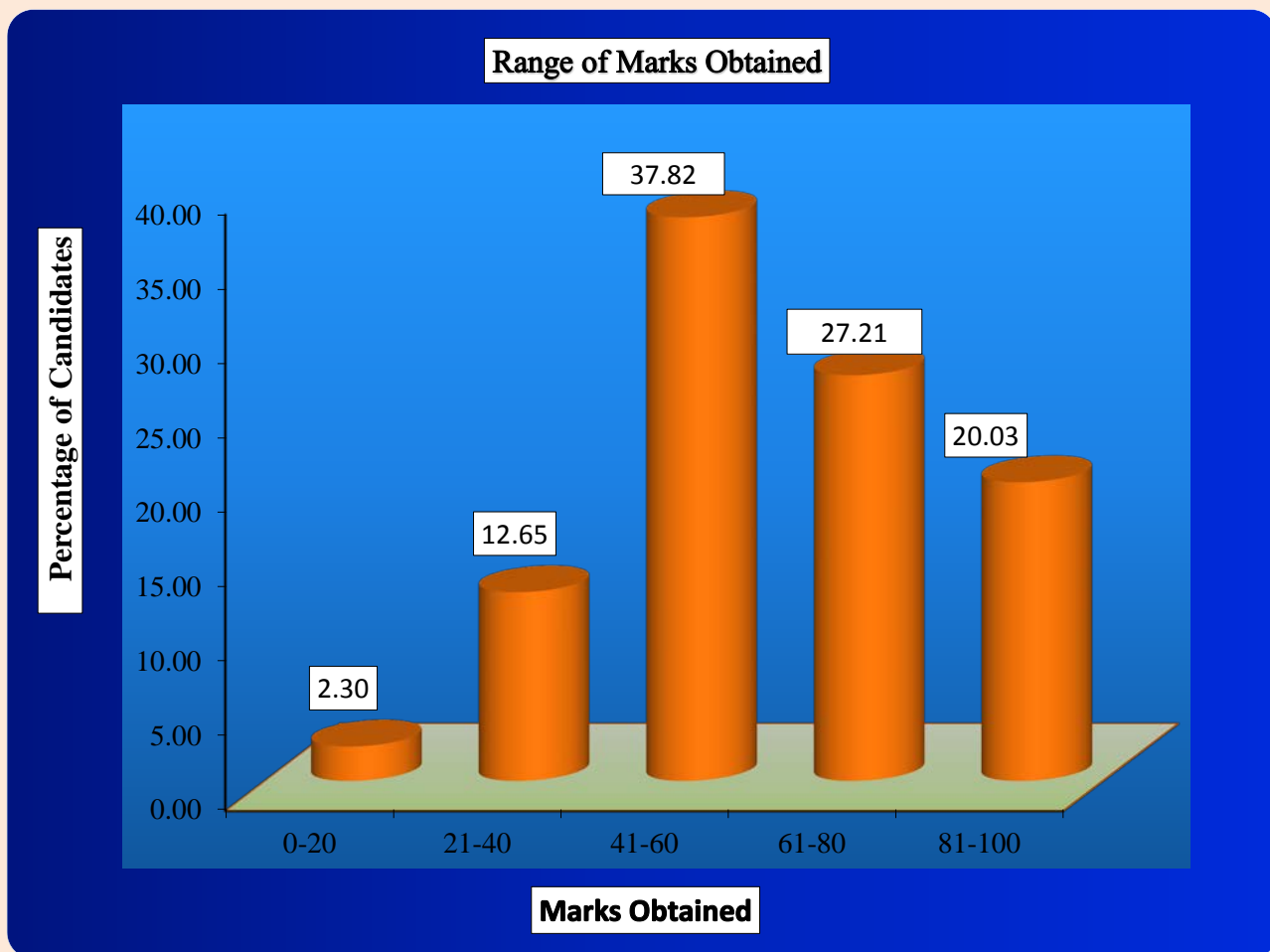
ECONOMICS

STATISTICS AT A GLANCE

Total Number of students who took the examination	30,587
Highest Marks Obtained	100
Lowest Marks Obtained	1
Mean Marks Obtained	60.32

Percentage of Candidates according to marks obtained

Details	Mark Range				
	0-20	21-40	41-60	61-80	81-100
Number of Candidates	702	3868	11567	8324	6126
Percentage of Candidates	2.30	12.65	37.82	27.21	20.03
Cumulative Number	702	4570	16137	24461	30587
Cumulative Percentage	2.30	14.94	52.76	79.97	100.00



ECONOMICS

PART I (20 Marks)

Answer *all* questions.

Question 1

Answer briefly <i>each</i> of the following questions (i) to (x):		[10×2]
(i)	What is meant by <i>income elasticity of demand</i> ?	
(ii)	<i>Technical advancement leads to cost saving</i> . With the help of a diagram, explain the effect of <i>technical advancement</i> on the supply curve.	
(iii)	Explain the meaning of M_1 and M_4 supply of money.	
(iv)	With the help of a diagram, show how the equilibrium price can remain unchanged even after a rightward shift of the demand curve.	
(v)	What is meant by <i>fiscal policy</i> ? Name <i>any two</i> instruments of <i>fiscal policy</i> .	
(vi)	Give <i>two</i> differences between <i>Current Account</i> and <i>Capital Account</i> of Balance of Payment Account.	
(vii)	What is meant by <i>budget line</i> ?	
(viii)	State whether each of the items given below is included in estimating National Income. Give a reason in each case to justify your answer.	
	(a) Expenditure on the construction of Express Highway.	
	(b) Expenditure on the purchase of an old house.	
(ix)	If the value of MPC is 0.9, find the value of multiplier.	
(x)	Explain the meaning of social cost with the help of an example.	

Comments of Examiners

- (i) Some of the candidates did not mention ‘degree of responsiveness’ of demand to change in income. Several candidates wrote ‘price’ instead of ‘income’.
- (ii) ‘Advanced technology leads to cost saving and therefore profit increase’ was not mentioned by some of the candidates. The supply curve shifts to the right – this was not shown by many candidates.

Suggestions for teachers

- Emphasize the importance of the ‘degree of responsiveness’ in the definition of elasticity.
- Explain the basic reason behind the ‘shift of the curve’ and ‘movement’ along the curve.
- Ask students to write all the components of M_1 and M_4 . Mention ‘RBI’ while teaching M_1 and ‘NSC’ while teaching M_4 .

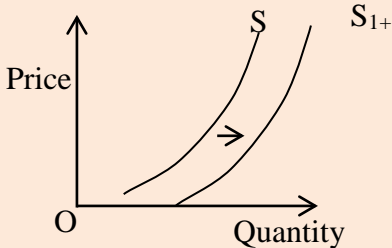
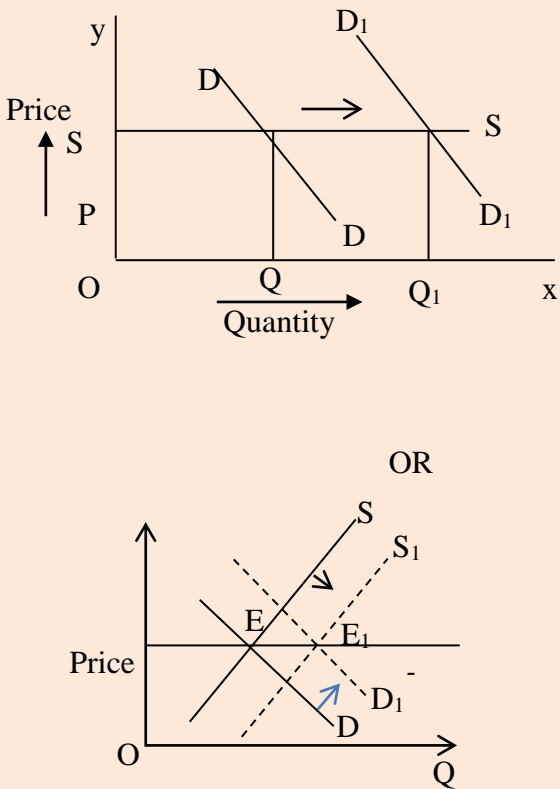
- (iii) Several candidates committed mistakes in defining M_4 . $M_4 = M_2 + TDP$ was given by some candidates, which was incorrect. In some cases, while writing components of M_1 , RBI was not mentioned and while writing the components of M_4 , NSC was not mentioned.
- (iv) A common error made by candidates, even by those who drew the correct diagrams was, not labelling the supply curve (horizontal line). Some candidates shifted only the demand curve to the right, without drawing the supply curve.
- (v) Most of the candidates wrote the definition correctly but while writing the instruments, many wrote public revenue instead of taxation.
- (vi) Differences were not given in the context of 'creation/reduction in assets and liabilities'. Many candidates gave only one difference.
- (vii) Both the parameters – 'prices of two goods' and 'income of the consumer's need to be mentioned while defining budget line. Many candidates wrote only one parameter.
- (viii) Many candidates were not able to justify their answers correctly.
- (ix) A number of candidates lost marks as they did not know the formula of multiplier.
- (x) A number of candidates did not write social cost = private cost + external cost. They explained social cost as external cost – pollution, as example. They ignored private cost.

- Develop the habit of labelling the diagrams among students. Equilibrium of market means both demand and supply curves should be present in the diagram.
- Explain to students that taxation is a component of public revenue. Taxation is an instrument of fiscal policy.
- Lay emphasis on creation / reduction in assets and liabilities while differentiating between current account and capital account of BOP.
- Explain the importance of 'prices of two goods' and 'income of the consumer' and how these two parameters can alter the position of the budget line.
- Explain each method of calculating national income in detail (as per the syllabus).
- Explain the concept of multiplier properly $K = 1/1 - MPS$ or $K = 1/1 - MPC$
- Teach the concept of 'Social' cost with different examples. Inclusion of private cost in social cost should be explained.

MARKING SCHEME

Question 1

(i)	<p><i>Income elasticity of demand:</i> It is the measure/degree of responsiveness of quantity demanded of any commodity to the change in income of the consumers.</p> <p style="text-align: center;">OR</p> <p>Income elasticity = Income elasticity = $\frac{\% \Delta \text{ in quantity demanded}}{\% \Delta \text{ in income of consumer}}$</p>
(ii)	If the producers use advanced technology in their process of production, the cost of production will come down and profit will increase. Thus total supply will increase, so

	<p>supply curve will shift to the right. Modern technology reduces cost of production.</p>  <p style="text-align: right;"><i>(explanation and diagram)</i></p>
(iii)	<p>Meaning of M_1 and M_4 supply of money.</p> <p>M_1 = Rupee/currency notes and coins with the public + demand deposit with the commercial banks + other deposits with RBI.</p> <p>$M_4 = M_1 +$ (net) time deposit with commercial banks + total deposits with Post Office (excluding NSC). OR</p> <p>$M_4 = M_3 +$ Total deposits with the post office saving organisations excluding NSCs (TDP)</p>
(iv)	<p>How the equilibrium price can remain unchanged even after a rightward shift of the demand curve:</p> 
(v)	<p><i>Fiscal policy and instruments of fiscal policy:</i></p> <p>Fiscal policy is the policy which deals with the revenue, expenditure policy and public borrowing of the Government.</p>

	Instruments of Fiscal policy are: 1. Public expenditure 2. Taxation or public debt.	
(vi)	Differences between <i>Current Account</i> and <i>Capital Account</i> of Balance of Payment Account.	
	Current Account	Capital Account
	Current account is that account of BOP which records imports and exports of goods and services of the current year.	Capital account is that account of BOP which records all such transactions between the residents of a country and rest of the world which cause a change in the liability or assets of the country.
	Current account has export and import of goods, services unilateral transfers and income receipts.	This account comprises of foreign investment, external borrowings, lending, etc.
(vii)	<i>Budget line:</i> It is a negatively sloped line representing the price ratio of two goods that can be purchased in a consumer's given income. It is a straight line as the prices of the two commodities are assumed to be given while drawing it.	
(viii)	(a)	Expenditure incurred on the construction of Express Highway: Yes, because it is a part of gross fixed investment.
	(b)	Expenditure on the purchase of an old house: No, because old house is not a part of current production.
(ix)	Value of multiplier: $\text{Multiplier} = \frac{1}{1-MPC} = \frac{1}{1-0.9} = \frac{1}{0.1} = 10$ <p style="text-align: center;">Or</p> $\frac{1}{MPS} = \frac{1}{0.1} = 10$	
(x)	Meaning of social cost: Social cost refers to the cost that the society has to bear on account of the production of a commodity. It includes private cost +external cost. External cost is what the society has to bear in terms of pollution, smoke, noise pollution etc.	

PART II (60 Marks)

Answer **any five** questions.

Question 2

- (a) Explain *any two* reasons for the upward slope of the supply curve. [3]
- (b) Explain the shape of the following: [3]
- (i) Total fixed cost curve.
 - (ii) Total variable cost curve.
- (c) Explain the concept of consumer's equilibrium with the help of indifference curve analysis. [6]

Comments of Examiners

- (a) Some candidates confused “reasons” for upward slope of supply curve with “factors” affecting supply of a product. Some wrote factors affecting demand.
- (b) (i) Most of the candidates were able to draw and explain the shape of TFC. Some drew correctly but were not able to explain the shape.
- (ii) Most of the candidates were not able to draw the TVC curve correctly. They drew an upward sloping curve – Straight line from the origin.
- (c) Some common errors made by candidates were: single IC was taken and the tangency point was not shown; indifference map was not shown; points beyond equilibrium were neither shown in the diagrams, not explained to justify the conditions of consumer's equilibrium.

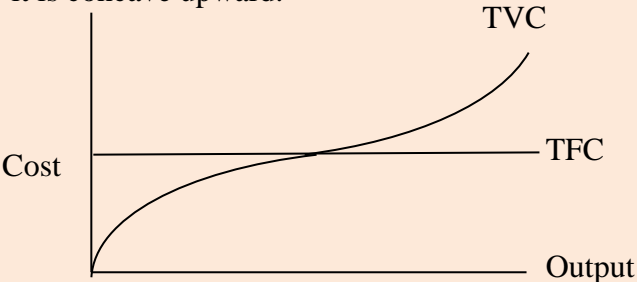
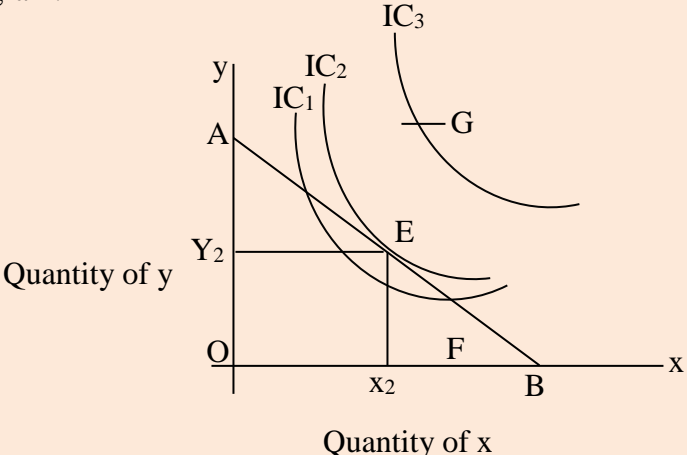
Suggestions for teachers

- Students should be taught to relate that an upward slope of the supply curve is associated with an increase in profit margin.
- Explain the shape of TFC with fixed factor which remains constant in the short run.
- Refer to the law of variable proportions while explaining the shape of TVC. It should be concave downwards and then concave upward.
- Explain the condition of equilibrium and the tangency point of the budget line and the IC as the equilibrium point. Indifference map is essential to justify the equilibrium point.

MARKING SCHEME

Question 2

- | | |
|-----|--|
| (a) | <p>Law of supply – There is positive relation between price and quantity supplied of a commodity, other things remaining constant.</p> <p>Reasons for upward slope:</p> <ul style="list-style-type: none"> Profit – as price increases, profit increases, supply increases. Other producers – other producers join in, supply increases. |
|-----|--|

(b)	(i)	<p>Total fixed cost curve:</p> <p>The total fixed cost is a straight line parallel to the x – axis.</p>
	(ii)	<p>Total variable cost curve:</p> <p>Total variable cost is a concave downward up-to a certain level of output and subsequently it is concave upward.</p> 
(c)	<p>Concept of consumer's equilibrium with the help of indifference curve:</p> <p>Definition: A situation where consumer maximizes satisfaction at a given income and market price.</p> <p>Conditions of equilibrium:</p> <p>MRS = Price ratio of two goods</p> <p>Slope of indifference curve = Slope of budget line</p> <p>Diagram:</p>  <p>Consumer is in equilibrium at 'E' point because the budget line is tangent to the indifference curve IC2. At point 'F' $MRS < \text{price ratio}$. So, the consumer is better off by moving up to point 'E'. The optimum point would always be located on the budget line.</p> <p>Point G is unattainable.</p> <p>Explanation</p>	

Question 3

- (a) The quantity demanded of a commodity at a price of [] [3]
price elasticity of demand is -2. The price falls by []
quantity demanded at the new price.
- (b) Discuss *two* differences between *cardinal utility* and *ordinal utility*. [3]
- (c) Explain how equilibrium price can be determined with the help of: [6]
- (i) Demand and supply schedule
- (ii) Demand and supply curves

Comments of Examiners

- (a) A number of candidates committed errors in attempting this part. Candidates subtracted 16 instead of adding, to get quantity demanded at new price.
- (b) The differences between cardinal utility and ordinal utility were not given clearly, e.g. Cardinal Utility – Can be measured; Ordinal Utility – Cannot be measured – this was incomplete.
- (c)(i) Most of the candidates are not able to show equilibrium with the help of schedules. They did not show excess demand and excess supply in both cases.
- (ii) In a number of cases, the demand and supply curves were wrongly labelled. Excess supply and excess demand was not shown.

Suggestions for teachers

- Explain the basic logic behind the derivation of the formula of price elasticity and the significance of the negative sign.
- Meaning of “cardinal” and “ordinal” should be explained well while teaching.
- Students should be made to understand the meaning of equilibrium as “stability” where quantity demanded = quantity supplied. In this context, excess demand and excess supply “instability” needs to be explained.
- Equilibrium means “stability”. How to achieve equilibrium (stability) from instability (excess demand and excess supply) needs to be explained.

MARKING SCHEME

Question 3

(a)	<p>The quantity demanded of a commodity at a price of ₹10 per unit is 40 units. Its price elasticity of demand is -2. The price falls by quantity demanded at the new price.</p> <p>Formulae: $ep = \frac{\Delta q}{\Delta p} \times \frac{P}{Q}$ </p> <p>Solution: $-2 = \frac{\Delta q}{-2} \times \frac{10}{40}$</p>
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	<p>OP2 – Equilibrium price OQ – Equilibrium quantity</p> <p>Explanation:</p> <p>Demand and supply curve intersect each other at one point –</p> <p>What happens when demand and supply curve are not in equilibrium.</p> <p>Excess demand and excess supply situation should be explained.</p>
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Question 4

- (a) Classify the following into fixed cost and variable cost giving a reason for your answer: [3]
- Expenses incurred on raw material
 - Interest on capital
 - Salaries to permanent employees
- (b) Draw the TR and AR curves under perfect competition with the help of a schedule. [3]
- (c) Discuss *four* differences between *perfect competition* and *monopolistic competition*. [6]

Comments of Examiners

- (a)(i) While most candidates were able to classify the expenses correctly, many lost marks in giving the reason. Very poor explanation was given by most candidates.
- (ii) Candidates were able to identify correctly. In a few cases, it was classified as variable cost.
- (iii) Candidates made mistakes in giving explanation for example: “permanent employees are permanent and so salaries is fixed”
- (b) Most of the candidates were able to draw the TR and AR curves. Most errors were found in making the schedule.
- (c) Sometimes features of “monopoly” were given instead of “monopolistic competition”. Major error was the absence of explanation of the differences. Only captions were given with no explanation.

Suggestions for teachers

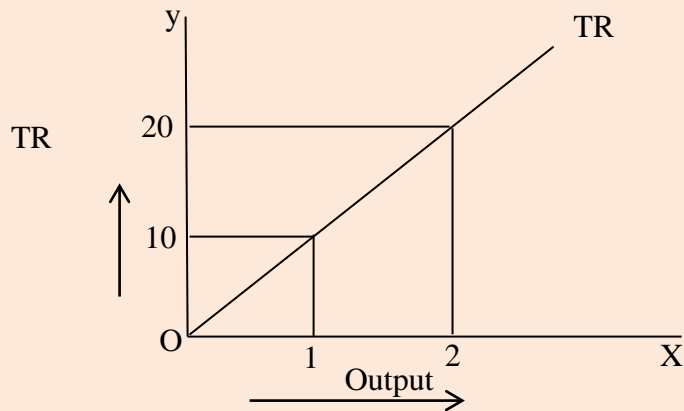
- Explain the behaviour of factors in the short run with reference to the change in output and hence the behaviour of cost.
- Explain that interest on capital is a fixed cost as the interest has to be paid even though there is no production or output in zero.
- Explain that salaries of permanent staff are fixed costs as this expenditure has to be incurred by the producers even though, there is no production.
- Explain that in perfect competition, product is homogeneous and therefore, the price remains constant. TR cannot be obtained without price and output $TR = P \times Q$. And $AR = \text{Price}$.
- Clarify the difference between “monopoly” and “monopolistic competition”.
- Teachers should also teach the students how much to explain or write when the question says “discuss/explain”.

MARKING SCHEME**Question 4**

(a)	Classification of fixed cost and variable cost:	
	(i)	Expenses on raw materials: Variable cost
	(ii)	Interest on capital: Fixed cost
	(iii)	Salaries to permanent employees: Fixed cost

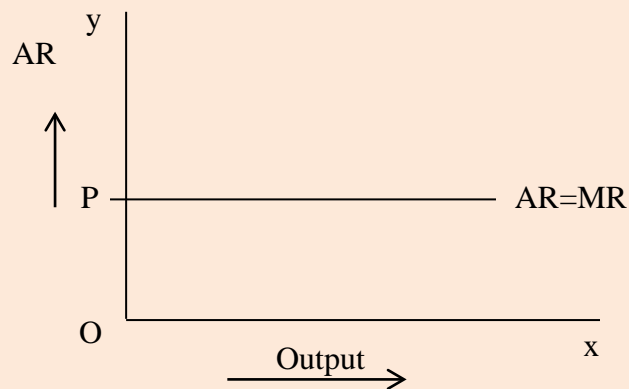
(b) TR and AR curves under perfect competition:

Shape of TR and AR in perfect market



Price is constant in nature in perfect market. So, TR curve starts from origin and goes upward. TR increases in direct proportion to output due to constant price. It increases at constant rate.

Marginal and Average revenue



AR = MR and the curve is horizontal to x axis at level of ruling price OP.

Under perfect market the firm is not required to reduce the price to sell more. So, AR is constant at all level of output. If price remains same, when more units of a product are sold then $MR = AR = P$

	Units of output(Q)	Price (in ₹)	TR = Q × Price	AR = TR/Q
	1	5	5	5
	2	5	10	5
	3	5	15	5
	4	5	20	5
	5	5	25	5
	6	5	30	5
(c)	Differences between <i>perfect competition</i> and <i>monopolistic competition</i> . <ul style="list-style-type: none"> • Type of product • Nature of influence over price • Existence of selling costs • AR and MR curves. 			

Question 5

- (a) Differentiate between *fixed factor of production* and *variable factor of production*. [3]
- (b) Show with the help of a diagram how a perfectly competitive firm earns *supernormal profit* in short run equilibrium. [3]
- (c) Explain with the help of a diagram the relationship between *total product* and *marginal product*. [6]

Comments of Examiners

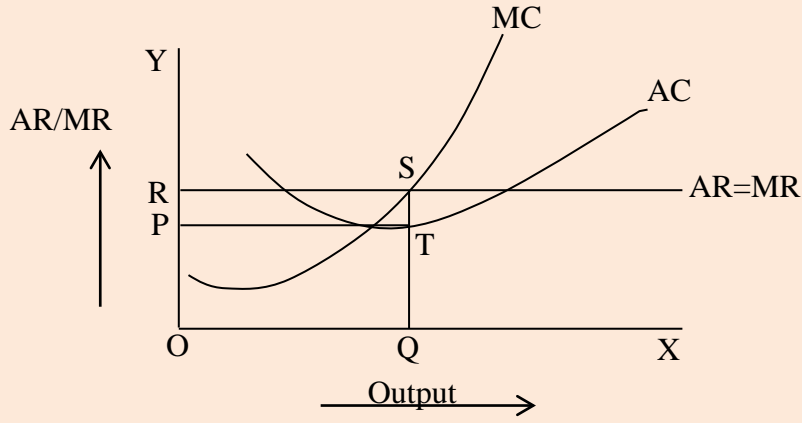
- (a) Fixed factor – remains constant with “output”
variable factor- changes with “output” – here Output was the key word. A number of candidates did not mention “output”. In several cases, fixed factor and variable factor were confused with fixed cost and variable cost.
- (b) Equilibrium point was not shown correctly by many candidates. Some common errors made by candidates were:
- MC curve did not pass through the maximum point of AC.
 - Perpendicular line from equilibrium to the X axis (output) not drawn.
 - Tangent line to AC on Y axis not shown.
- (c) TP curve not drawn correctly by many candidates. Common errors made by candidates were as follows:
- Candidate did not show the point of inflexion on TP and hence the maximum point of MP was missed out.
 - Shape of MP curve was not in conformity with TP Curve.
 - Instead of TP and MP relationship, mere explanation of law of variable proportions was written, stage wise.

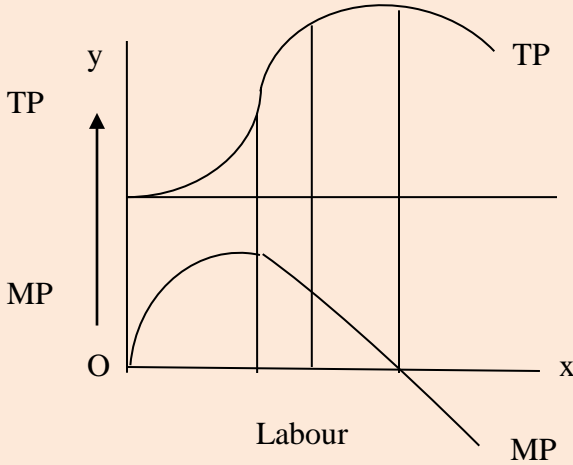
Suggestions for teachers

- Differentiate the two factors with reference to change in “output”.
- Draw line diagrams and explain each step. Equilibrium point and hence equilibrium condition, determination of output from equilibrium point and AC curve should be explained; $P > AC$, $P = AC$ and $P < AC$, should be explained to show supernormal profit and loss.
- Draw the diagram and explain the relationship of the two curve step wise. Apart from teaching the law of variable proportions, the other probable relationship of different curves should also be discussed.

MARKING SCHEME

Question 5

(a)	<p>Differences between fixed factor production and variable factor production:</p> <ul style="list-style-type: none"> • Fixed factor – remains constant in with output. • Variable factor change s with output. • Fixed factor can be land and machine and in short run • Variable factor – labour, raw-material and in long run, short run <p style="text-align: right;">(Any two)</p>
(b)	<p>How a competitive firm earns supernormal profit in short run: Short run equilibrium in perfect market Super normal profit or excess profit Diagram with explanation</p>  <p>Explanation: Equilibrium conditions</p> <ol style="list-style-type: none"> MR = MC MC should cut MR from below <p style="text-align: right;">(Conditions)</p> <p>In this diagram :</p> <p>TR = AR X Q = OR X OQ = Area of ORSQ</p> <p>TC = AC X Q = OP X OQ = Area of OPTQ</p> <p>TR - TC = Profit = Area of ORSQ – Area of OPTQ = Area of RSTP</p> <p>Calculation of TR and TC</p>

(c)	<p>The relationship between <i>total product</i> and <i>marginal product</i>: Relationship between TP and MP:</p> <p>(i) When TP increases at an increasing rate, MP increases. MP is maximum at the point of inflexion.</p> <p>(ii) TP increases at diminishing rate, MP falls but positive.</p> <p>(iii) When TP is maximum, MP is zero.</p> <p>(iv) When TP falls, MP becomes negative</p> 
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Question 6

- (a) Explain the *primary functions* of money. [3]
- (b) Explain the following functions of the Reserve Bank of India: [3]
- Banker to the government
 - Issue of currency notes
- (c) Explain the mechanism of credit creation by commercial banks with the help of an example. [6]

Comments of Examiners

- (a) Some candidates wrote the secondary functions of money instead of primary functions.
- (b) (i) Several candidates got confused between “banker to the banks” and ‘banker to the government’. In some cases, the explanation started properly but later candidates got confused and explained the function “lender of the last resort”.
- (ii) All the required information was not included by candidates in the answer.
- (c) Primary and derivative deposits were not explained properly by many candidates. The process of credit creation by multiple banks was not explained by candidates with or without balance sheet. Credit multiplier = $D = 1/CRR$ was incorrectly written.

Suggestions for teachers

- Explain the primary functions with reference to the inconveniences of the barter system.
- Explain the function of RBI as banker to the “Government” and also differentiate it with the RBI’s function of banker to the banks.
- All aspects like: Uniformity of the currency, control of money supply should be explained while teaching.
- Stress upon writing the meaning of primary and secondary deposits while explaining credit creation.
- Process should always be explained with the help of a numerical example and a balance sheet. Students should be encouraged to write the answers systematically.

MARKING SCHEME

Question 6

(a)	Explain the primary functions of money: Money acts as a medium of exchange. Money acts as a unit of value or common measure of value.
(b)	Functions of the Reserve Bank of India:
(i)	Banker to the government: The Central Bank maintains an account of the Government. All incomes of the Government are deposited into this account. All expenses are incurred out of this account. Government can borrow from Central Bank and the Central Bank sells the Government Bonds to the public, pays interest and repays the loan after maturity date (public debt). Advises on all financial and monetary matters
(ii)	Issue of currency notes: Reserve Bank of India has the monopoly power to issue currency notes. Control money supply, public has confidence in RBI, uniformity.
(c)	Mechanism of credit creation by commercial banks: Definition: The process of multiplication of bank deposits through extension of Loans and advances refers to the credit creation function of commercial Banks. Primary and derivative deposits:

	<p>Primary deposits – When any person or institution out of its own initiative deposits some money with the commercial banks, then a <u>Primary deposit</u> is created.</p> <p>Derivative deposits – When commercial banks give loans to any individual or institution, then an account is opened by the bank against the name of that individual or institution. This is known as <u>Derivative deposit</u>.</p> <p>Balance sheet of ‘X’ and ‘Y’ banks for explaining credit creation:</p> <p>Credit multiplier:</p> <p>For example: If CRR is 20%</p> <p>then Credit multiplier = $\frac{1}{CRR} = \frac{1}{20\%} = 5$</p>
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Question 7

- (a) *Public expenditure helps in increasing the production of an economy.* In this context, discuss any two points of importance of public expenditure. [3]
- (b) Explain *any two* causes of disequilibrium in the balance of payment. [3]
- (c) Define *fiscal deficit, primary deficit* and *revenue deficit*. Discuss their implications with reference to India. [6]

Comments of Examiners

- (a) Importance of public expenditure which are not directly or indirectly related to “increase in production”, such as, income inequality or expenditure on defense were explained by a number of candidates.
- (b) Depreciation or devaluation of domestic currency was explained by many candidates instead of appreciation of domestic currency as a reason for disequilibrium in the Balance of Payment. Some candidates gave measures to correct disequilibrium.
- (c) Some common errors made by candidates while answering this part were:
- Implications were repeated, like “debt trap”, “inflation” for all the deficits.
 - All implications were stated together for all the deficits and not separately.

Suggestions for teachers

- Encourage students to read the questions properly and carefully before they start answering them.
- Causes of Disequilibrium should be explained clearly - Exports fall and imports increase which causes unfavourable disequilibrium in BOP.
- Students should be guided to write the answer according to the requirement of the questions.

MARKING SCHEME

Question 7

(a)	Income generation, efficiency through public expenditure education, health services etc., production of raw materials, development of basic and key industries.- all these will increase production.(<i>any two to be explained</i>)
(b)	<p>Causes of disequilibrium in BOP:</p> <ul style="list-style-type: none"> • Fall in demand in domestic product in the foreign market • Demand for foreign goods increases

	<ul style="list-style-type: none"> Supply of raw materials for exports reduces, etc. <p>(Any two to be explained briefly. Any other relevant point also accepted)</p>
(c)	<p>Revenue deficit – is the excess of revenue expenditure over its revenue receipts. Revenue Deficit = Revenue expenditure – Revenue receipt. Fiscal deficit – total budget expenditure over total budget receipts excluding borrowings. Fiscal deficit = Total budgetary expenditure – Revenue receipt – capital receipt (excluding borrowing) Primary deficit is the difference between fiscal deficit and interest payment. Primary deficit = Fiscal deficit – interest payment. Implications: Revenue deficit – implication is borrowing or disinvestment. It is a warning to the government to cut down its expenditure. Fiscal Deficit – implications – it measures the total borrowing requirement. It creates problem of interest payment and repayment of debt. Primary deficit – implication – interest payment of past to be noted. The extent to which the Government in adding to the pile of existing debt during the budgetary year.</p>

Question 8

- (a) Show the relationship between *APC* and *APS*. [3]
- (b) Explain the difference between *induced investment* and *autonomous investment*. [3]
- (c) Discuss the main components of *aggregate demand* in an economy with the help of a diagram. [6]

Comments of Examiners

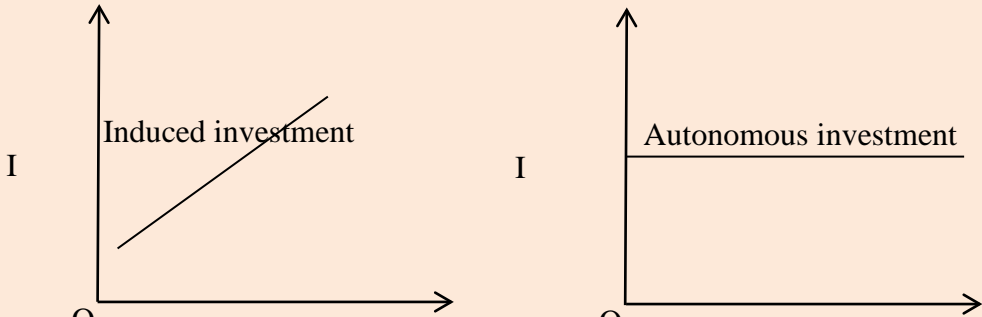
- (a) A number of candidates wrote the definition of APC and APS instead of deriving the relationship between the two. Some candidates wrote $APC + APS = 1$ but were not able to derive it.
- (b) Induced and autonomous investments were defined in an erratic manner by many candidates, without considering income. Some candidates gave the definition correctly but did not give the diagram.
- (c) The explanation for “private consumption” expenditure and “investment” expenditure was not given correctly by many candidates. In a number of cases, incorrect diagrams were given – candidates were confused with the diagrams related to deficit demand and surplus demand (deflationary gap/inflationary gap). $C+I$ curve was not drawn correctly by the candidates.

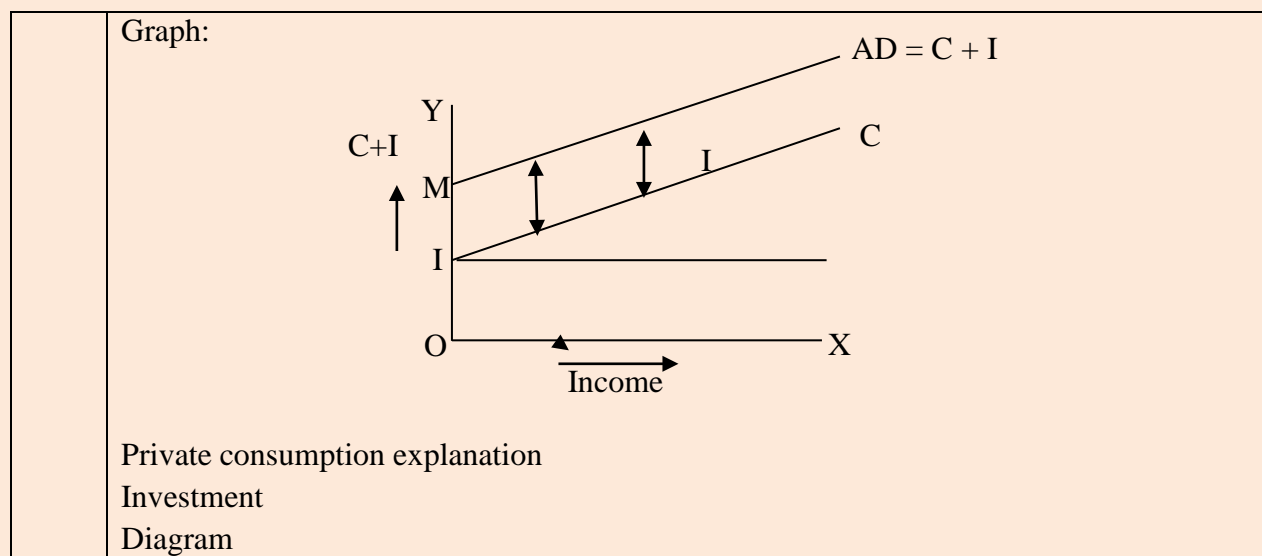
Suggestions for teachers

- Explain to students by writing the equation $Y = C + S$ and then explain the derivation, by dividing the equation with y .
- Students should be made to understand how investment is related to income. Use diagrams to explain the difference.
- Explain each component of aggregate demand and lay emphasis on “private consumption” expenditure and “investment” expenditure. The component, “consumption” should start from Y axis. $C+I$ is a parallel shift of the C curve.

MARKING SCHEME

Question 8

(a)	<p>The relationship between APC and APS:</p> $APC + APS = 1$ $Y = C + S$ <p>Dividing both sides by Y we get,</p> $\frac{Y}{Y} = \frac{C}{Y} + \frac{S}{Y}$ $\rightarrow 1 = APC + APS$ <p>or $APC = 1 - APS$</p> <p>or $APS = 1 - APC$</p> <p>Thus, the sum of APC and APS is always equal to unity.</p>
(b)	<p>The difference between <i>induced</i> and <i>autonomous investment</i>. Autonomous investment is the one that is not affected by the change in the level of income or output. Therefore, it is income inelastic and may change because of non-income factors. Induced investment is the one which is undertaken as a result of change in the level of income. It varies directly with the change in income.</p> <div data-bbox="324 1050 1299 1365"></div>
(c)	<p>Main components of aggregate demand in an economy:</p> <p>Components of aggregate demand:</p> $AD = C + I + G + (X - M)$ <ol style="list-style-type: none">1. Private consumption demand (C)2. Private investment demand (I)3. Government demand for goods and services (G)4. Net export demand (X - M)



Question 9

- (a) Explain the following components of domestic factor income: [3]
- Compensation of employees
 - Operating surplus
- (b) Distinguish between *private income* and *personal income*. [3]
- (c) From the following data, calculate GNP_{MP} and National Income by using value added method: [6]

	<u>₹ in crores</u>
(i) Gross value of output in primary sector (at FC)	950
(ii) Gross value of output in secondary sector (at FC)	470
(iii) Gross value of output in tertiary sector (at FC)	500
(iv) Value of intermediate goods in primary sector	360
(v) Value of intermediate goods in secondary sector	200
(vi) Value of intermediate goods in tertiary sector	175
(vii) Depreciation	20
(viii) Indirect tax	35
(ix) Subsidy	10
(x) Net factor income from abroad	4

Comments of Examiners

- (a) (i) All the three aspects – wages and salaries in kind, wages and salaries in cash and employer’s contribution to social security were not written by a number of candidates.
- (ii) In most of the answers given by candidates, operating surplus was not defined correctly. Candidates only mentioned the components as rent, interest, profit.
- (b) Income accrued to the private sector was the key/basic phrase, which was found to be missing in many answers.
- In some cases, personal income was defined in the micro sense – income of a person.
 - While deriving private income from NDP_{FC} or NNP_{FC} certain entries were found to be missing; similarly, while deriving personal income from private income, certain entries were missing.
- (c) A number of candidates made mistakes in calculation. The question was already given at factor cost which a number of candidates overlooked.

Suggestions for teachers

- Students should be made to understand why these items are collectively called “compensation of employees”.
- Students should be taught why these components are a part of ‘operating surplus’; meaning of operating surplus should also be explained.
- Students should be given practice in writing and presenting the answer.
- When the difference between two variables has been asked, students should be told to write corresponding points of both the variables while writing the difference.
- Ask students to be more alert while reading the question.
- Students should be asked to practice different numericals on the estimation of national income and other aggregates

MARKING SCHEME

Question 9

(a)	(i)	Compensation of employees: payment made to labours in terms of wages, and salaries in cash, in kind and contribution to social security by the employers.	
	(ii)	Operating surplus: is the income earned from property and entrepreneurship, rent, interest, profit, etc.	
(b)	Distinguish between <i>private income</i> and <i>personal income</i> .		
	Personal Income		Private Income
	1. Income of all individuals received from all sources.		1. Income accruing to the private sector from all sources.
	2. It does not include corporate savings and corporate taxes.		3. It includes corporate savings and corporate taxes.

	<p style="text-align: center;">OR</p> <p>Private income – Undistributed Profits – Net retained earnings of foreign companies – Corporate taxes = Personal Income</p>
(c)	<p>Gross value added at factor cost = GVA_{fc} in primary sector + GVA_{fc} in secondary sector + GVA_{FC} of tertiary sector.</p> $= (950 - 360) + (470 - 200) + (500 - 175)$ $= 590 + 270 + 325$ $= 1185 \text{ Cr}$ <p>$GDP_{mp} = GVA_{fc}$ in all sectors + Indirect tax – Subsidy</p> $= 1185 + 35 - 10$ $= 1210 \text{ Cr.}$ <p>$GNP_{mp} = GDP_{mp} + NFIA = 1210 + 4 = 1214$</p> <p>$NNP_{fc} \text{ or } NI = GDP_{mp} - \text{Depreciation} + NFIA - NIT$</p> $= 1210 - 20 + 4 - 25$ $= 1169 \text{ Cr.}$

GENERAL COMMENTS

(a) Topics found difficult by candidates:

- Q1 (iii) meaning of M_1 and M_4
- Q3 (a) Numerical on price elasticity or demand.
- Q3 (b) Difference between cardinal and ordinal utility.
- Q5 (b) Diagram on super normal profit.
- Q6 (c) Credit creation by commercial banks
- Q9 (c) Numerical on national income.

(b) Concepts in which candidates got confused:

- Current account and capital account difference with those of budget
- Social Cost – expenditure of government for social welfare QI (x)
- Reasons for upward slope of supply curve with determinants of supply. Q2 (a)
- Monopolistic competition and monopoly market Q4 (c)
- Implications of primary deficit, with implications of fiscal deficit/ implications of revenue deficit Q 8 (c)

(c) Suggestions for candidates:

- Revise the work done in the class regularly.
- Try to understand the meaning of each terminology taught in the class and its significance.

- Do not resort to selective study.
- Avoid memorizing the relationships or the shapes of different curves without using or drawing the diagrams.
- Practice numericals on elasticity of demand and on methods of calculating rational income and other aggregates.
- Read the question paper thoroughly before answering it.
- Develop the habit of answering the questions in a systematic manner and within the time constraint.
- Develop the habit of writing the answers in a systematic manner.