## ECONOMICS

## General Instructions:

(i) All questions in both the sections are compulsory.
(ii) Marks for questions are indicated against each.
(iii) Question Nos.1-5 and 17-21 are very short answer questions carrying 1 mark each. They are required to be answered in one sentence each.
(iv) Question Nos. 6-10 and 22-26 are short answer questions carrying 3 marks each. Answer to them should normally not exceed 60 words each.
(v) Question Nos. 11-13 and 27-29 are also short answer questions carrying 4 marks each. Answer to them should normally not exceed 70 words each.
(vi) Question Nos. 14-16 and 30-32 are long answer questions carrying 6 marks each. Answer to them should normally not exceed 100 words each.
(vii) Answers should be brief and to the point and the above word limits should be adhered to as far as possible.

## QUESTION PAPER CODE 58/1/1

## SECTION - A

1. Define an indifference curve.
2. Name the characteristic which makes monopolistic competition different from perfect competition.
3. Why is demand for water inelastic?
4. State one feature of oligopoly.
5. In which market form demand curve of a firm is perfectly elastic?
6. Distinguish between 'increase in demand' and 'increase in quantity demanded' of a commodity.
7. Explain the law of diminishing marginal utility with the help of a utility schedule.

## OR

Goods X and Yare substitutes. Explain the effect of fall in price of Y on demand for X .
8. At a price of Rs. 5 per unit of commodity A, total revenue is Rs. 800. When its price rises by 20 percent, total revenue increases by Rs. 400 . Calculate its price elasticity of supply.
9. Explain the implications of freedom of entry and exit of firms under perfect competition.
10. Given below is the cost schedule of a firm. Its average fixed .cost is Rs. 20 when it produces 3 units.

| Output(units) | 1 | 2 | 3 |
| :--- | :--- | :--- | :--- |
| Average variable cost (Rs.) | 30 | 28 | 32 |

Calculate its marginal cost and average total cost at each given level of output.
11. Explain the problem of 'what to produce'.

OR
Explain any two main features of a centrally planned economy.
12. When the price of a commodity falls by Rs. 2 per unit, its quantity demanded increases by 10 units. Its price elasticity of demand is $(-) 1$. Calculate its quantity demanded at the price before change which was Rs. 10 per unit.
13. Explain the effect of increase in income of buyers of a 'normal' commodity on its equilibrium price.
14. Using indifference curves approach, explain the conditions of consumer's equilibrium.
15. State whether the following statements are true or false. Give reasons for your answer.
(a) When total revenue is constant average revenue will also be constant.
(b) Average variable cost can fall even when marginal cost is rising.
(c) When marginal product falls, average product will also fall.
16. Explain the law of variable proportions with the help of total product and marginal product curves.

## OR

Explain producer's equilibrium with the help of a marginal cost and marginal revenue schedule.

For Blind candidates in lieu of Q. No. 16.
Explain the law of variable proportions with the help of a total and marginal product schedule.

## OR

Explain producer's equilibrium with the help of a marginal cost and marginal revenue schedule.

## SECTION - B

17. State the components of money supply.
18. Give the meaning of ex-ante savings.
19. How is primary deficit calculated?
20. Give the meaning of deflationary gap.
21. State two sources of supply of foreign exchange.
22. Explain how distribution of gross domestic product is its limitation as a measure of economic welfare.

## OR

Explain the basis of classifying goods into intermediate and final goods. Give suitable examples.
23. Explain the 'lender of last resort' function of the Central Bank.
24. How can Government budget be helpful in altering distribution of income in an economy? Explain.
25. Explain the meaning of deficit in balance of payments.
26. Distinguish between devaluation and depreciation of domestic currency.
27. Explain the process of money creation by Commercial Banks.

## OR

How do changes in bank rate affect money creation by Commercial Banks? Explain.
28. State whether the following statements are true or false. Give reasons for your answer:
(a) When marginal propensity to consume is greater than marginal propensity to save, the value of investment multiplier will be greater than 5 .
(b) The value of marginal propensity to save can never be negative.
29. Distinguish between:
(a) Capital receipts and revenue receipts.
(b) Direct tax and indirect tax.
30. How will you treat the following while estimating national income of India?
(a) Dividend received by an Indian from his investment in shares of a foreign company.
(b) Money received by a family in India from relatives working abroad.
(c) Interest received on loans given to a friend for purchasing a car.
31. From the following data, calculate (a) Gross Domestic Product at Factor Cost and (b) Factor Income To Abroad:
(i) Compensation of employees 800
(ii) Profits 200
(iii) Dividends 50
(iv) Gross national product at market price $\quad 1,400$
(v) Rent 150
(vi) Interest 100
(vii) Gross domestic capital formation ..... 300
(viii) Net fixed capital formation ..... 200
(ix) Change in stock ..... 50
(x) Factor income from abroad ..... 60
(xi) Net indirect taxes ..... 120

## OR

Calculate Net National Product at Factor Cost and Gross National Disposable Income from the following:
(Rs. in crore)
(i) Saving of non-departmental enterprises ..... 50
(ii) Income from property and entrepreneurship accruing to the government administrative departments ..... 70
(iii) Personal tax ..... 90
(iv) National debt interest ..... 20
(v) Retained earnings of private corporate sector ..... 10
(vi) Current transfer payments by government ..... 40
(vii) Consumption of fixed capital ..... 60
(viii) Corporation tax ..... 30
(ix) Net indirect-tax ..... 80
(x) Net current transfers from rest of the world ..... (-) 10
(xi) Personal disposable income ..... 1000
32. In an economy 75 percent of the increase in income is spent on consumption. Investment is increased by Rs. 1,000 crore. Calculate:
(a) total increase in income
(b) total increase in consumption expenditure.

QUESTION PAPER CODE 58/1
SECTION - A

1. Define a budget line.
2. What is meant by inferior good in economics?
3. In which market form can a firm not influence the price of the product?
4. Define monopoly.

1
5. What can you say about the number of buyers and sellers under monopolistic competition?
6. Explain the effect of the following on the price elasticity of demand of a commodity:
(i) Number of substitutes
(ii) Nature of the commodity
7. Explain any two causes of 'increase' in demand of a commodity.

## OR

Explain the inverse relationship between price and quantity demanded of a commodity.
8. A firm's average fixed cost, when it produces 2 units, is Rs. 30. Its average total cost schedule is given below. Calculate its marginal cost and average variable cost at each level of output.

| Output(units) | 1 | 2 | 3 |
| :--- | :--- | :--- | :--- |
| Average total cost (Rs.) | 80 | 48 | 40 |

9. Total revenue is Rs. 400 when the price of the commodity is Rs. 2 per unit. When price rises to Rs. 3 per unit, the quantity supplied is 300 units, Calculate the price elasticity of supply.
10. Why is the number of firms small in an oligopoly market? Explain.
11. Explain the problem of 'how to produce'.

## OR

Distinguish between microeconomics and macroeconomics. Give examples.
12. When price of a commodity falls by Re. 1 per unit, its quantity demanded rises by 3 units. Its price elasticity of demand is (-)2. Calculate its quantity demanded if the price before the change was Rs. 10 per unit.
13. How does the equilibrium price of a 'normal' commodity change when income of its buyers falls? Explain the chain of effects.
(i) When marginal revenue is constant and not equal to zero, then total revenue will also be constant.
(ii) As soon as marginal cost starts rising, average variable cost also starts rising.
(iii) Total product always increases whether there is increasing returns or diminishing returns to a factor.
15. What are the conditions of consumer's equilibrium under the indifference curve approach? What changes will take place if the conditions are not fulfilled to reach equilibrium?
16. From the following schedule find out the level of output at which the producer is in equilibrium, using marginal cost and marginal revenue approach. Give reasons for your answer.

| Price per unit <br> (Rs.) | Output <br> (units) | Total cost <br> (Rs.) |
| :---: | :---: | :---: |
| 8 | 1 | 6 |
| 7 | 2 | 11 |
| 6 | 3 | 15 |
| 5 | 4 | 18 |
| 4 | 5 | 23 |

OR
Explain the law of returns to a factor with the help of total product and marginal product schedule.

## SECTION B

17. Give the meaning of money.
18. What is meant by revenue deficit?
19. What is ex-ante aggregate demand?
20. Give the meaning of inflationary gap.
21. State two sources of demand for foreign exchange.
22. Distinguish between real and nominal gross domestic product.

## OR

Giving reasons, classify the following into intermediate and final goods:
(i) Machines purchased by a dealer of machines.
(ii) A car purchased by a household.
23. Explain the 'banker to the government' function of the central bank.
24. Explain the allocation function of a government budget.
25. Distinguish between autonomous and accommodating transactions of balance of payments account.
26. Giving two examples, explain why there is a rise in demand for a foreign currency when its price falls.
27. How does a commercial bank create money?

4

## OR

Explain how do 'open market operations' by the central bank affect money creation by commercial banks.
28. Giving reasons, state whether the following statements are true or false:
(i) When marginal propensity to consume is zero, the value of investment multiplier will also be zero.
(ii) Value of average propensity to save can never be less than zero.
29. Distinguish between:
(i) Capital expenditure and Revenue expenditure
(ii) Fiscal deficit and Primary deficit
30. How will you treat the following while estimating national income of India? Give reasons for your answer.
(i) Dividend received by a foreigner from investment in shares of an Indian company.
(ii) Profits earned by a branch of an Indian bank in Canada.
(iii) Scholarship given to Indian students studying in India by a foreign company.

## OR

Explain the problem of" double counting in estimating national income, with the help of an example. Also explain two alternative ways of avoiding the problem.
31. In an economy the equilibrium level of income is Rs. 12,000 crore. The ratio of marginal propensity to consume and marginal propensity to save is $3: 1$.
Calculate the additional investment needed to reach a new equilibrium level of marginal propensity to consume and marginal propensity to save is $3: 1$.
Calculate the additional investment needed to reach a new equilibrium level of income of Rs. 20,000 crore.
32. Calculate (a) Gross domestic product at market price, and (b) Factor income from abroad from the following data:
(Rs. in crores)
(i) Profits 500
(ii) Exports 40
(iii) Compensation of employees 1,500
(iv) Gross national product at factor cost 2,800
(v) Net current transfers from rest of the world 90
(vi) Rent 300
(vii) Interest 400
(viii) Factor income to abroad 120
(ix) Net indirect taxes 250
(x) Net domestic capital formation 650
(xi) Gross fixed capital formation 700
(xii) Change in stock 50

## Marking Scheme - Economics

Questions with * mark are higher order thinking questions.

## General Instructions

1. Please examine each part of a question carefully and allocate the marks allotted for the part as given in the marking scheme below. TOTAL MARKS FOR ANY ANSWER MAY BE PUT IN A CIRCLE ON THE LEFT SIDE WHERE THE ANSWER ENDS.
2. Expected suggested answers have been given in the Marking Scheme. To evaluate the answers the value points indicated in the marking scheme be followed.
3. For questions asking the candidate to explain or define, the detailed explanations and definitions have been indicated alongwith the value points.
4. For mere arithmetical errors, there should be minimal deduction. Only $1 / 2$ mark be deducted for such an error.
5. Wherever only two/ three or a "given" number of examples / factors / points are expected only the first two / three or expected number should be read. The rest are irrelevant and must not be examined.
6. There should be no effort at "moderation" of the marks by the evaluating teachers. The actual total marks obtained by the candidate may be of no concern to the evaluators.
7. Higher order thinking ability questions are assessing student's understanding / analytical ability.

General Note : In case of numerical question no mark is to be given if only the final answer is given.

## QUESTION PAPER CODE 58/1/1

## Q.No.

EXPECTED ANSWERS/VALUE POINTS

## Distribution <br> of marks

## Section - A

1. A curve joining all such points that represent such bundles of two goods among which the consumer is indifferent.

## OR

It is a locus of points that show such combinations of two commodities which give the consumer same satisfaction
2. Firms produce differentiated products
3. Because it is a necessity
4. (1) Few firms.
(2) Firms are interdependent in taking price and output decisions.
(3) Barriers to the entry of firms.
(4) Non-Price competition
(Any One)
5. Perfect competition.
6. When demand rises at the-same price it is called increase in demand'. When demand rises due to fall in price it is called increase in quantity demanded'.
7.

| Consumption <br> (Units) | TotalUtility <br> (Utils) | MU <br> 1 |
| :---: | :---: | :---: |
| 2 | 4 | 4 |
| 2 | 7 | 3 |
| 3 | 9 | 2 |
| 4 | 10 | 1 |

(Or any other relevant schedule)
Explanation of the law of Diminishing Marginal Utility on the basis of schedule
OR
When price of Y falls, X becomes relatively dearer. This reduces demand for X as Y will be substituted for X .
8. PRICE(Rs.)

5
800
160

6
1200
200

$$
\mathrm{e}_{\mathrm{ss}}=\frac{\Delta \mathrm{Q}}{\Delta \mathrm{P}} \times \frac{\mathrm{P}}{\mathrm{Q}}
$$

## OUTPUT(Units)

$$
=\frac{40}{1} \times \frac{5}{160}=1.25
$$

9 The implication is that firms: will earn only normal profit in the long run. In the short run there-can be abnormal profits or losses. If there are abnormal profits, new firms enter the market. The total market supply increases, resulting in a fall in market price and fall In profits This trend continues till profits are reduced to normal.

Similarly, if there are losses, firms start exiting. The total market supply decreases resulting in a rise in market price and reduction in losses. This trend continues till losses are wiped out.
10.

| Output | AVC | AFC | TVC | MC | ATC |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (Units) | (Rs.) | (Rs.) | (Rs.) | (Rs.) | (Rs.) |
| 1 | 30 | 60 | 30 | $\underline{30}$ | $\underline{90}$ |
| 2 | 28 | 30 | 56 | $\underline{26}$ | 58 |
| 3 | 32 | 20 | 96 | 40 | 52 |

11. The economy can produce different possible combinations of the goods and services from the given resources.

The problem is that which of these combinations should the economy produce. This is the problem of choice. If more of one good is produced, then lesser resources are left for producing other goods.

## OR

$\begin{array}{lll}\text { (1) } & \text { Production or allocation of resources through planning } & 1 \\ \text { (2) } & \text { Distribution of goods and services through planning } & \\ & \text { (Explanation) } & 1 \\ & & 1\end{array}$
(Any other relevant feature)
(Any two)
*12 Given $\Delta \mathrm{P}=-2, \Delta \mathrm{Q}=10 . \mathrm{P}=10$
$\mathrm{e}=\frac{\Delta \mathrm{Q}}{\Delta \mathrm{P}} \times \frac{\mathrm{P}}{\mathrm{Q}}$

$$
11 / 2
$$

$-1=\frac{10}{-2} \times \frac{10}{Q}$
$Q=50$ units
13. - Increase in income increases demand at the given price

- This leads to excess demand.
- Leads to competition among buyers. As a result price starts rising.
- Rise in price leads to rise in supply and fall in demand.
- These changes continue till supply and demand become equal at a new equilibrium price.
- Equilibrium price rises.

14. There are two conditions:
(i) $\quad \mathrm{MRS}=$ Ratio of prices
(ii) MRS continuously falls

## Explanation:

(i) Let the two-goods be X and Y . The first condition for consumer's equilibrium is that MRS $=\mathrm{Px} /$ Py. Now suppose MRS is greater than Px/Py. It means that the consumer is willing to pay more for X than the price prevailing in the market. As a result the consumer buys more of X. This leads to fall in MRS. MRS continues to fall till it becomes equal to the ratio of prices and the equilibrium is established.
(Or, alternatively in terms of when MRS < Px/Py)
(ii) Unless MRS continuously falls, the equilibrium cannot be established.
*15 a. False because when TR is constant. AR will fall as output increases.
b True, provided MC < AVC
c. False, because AP falls only when MP<AP. AP falls not because MP falls but because MP<AP.
16.


## OR

| Price per unit (Rs.) | $\frac{\text { OUTPUT }}{\text { (Units) }}$ | $\frac{\mathrm{TR}}{(\mathrm{Rs.})}$ | $\frac{\mathrm{TC}}{(\text { Rs. })}$ | $\frac{\underline{\mathrm{MR}}}{(\mathrm{Rs} .)}$ | $\frac{\mathrm{MC}}{(\text { Rs. })}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | 1 | 8 | 6 | 8 | 6 |
| 7 | 2 | 14 | 11 | 6 | 5 |
| 6 | 3 | 18 | 15 | 4 | 4 |
| 5 | 4 | 20 | 18 | 2 | 3 |

There are two conditions of producer's equilibrium:
(i) $\mathrm{MC}=\mathrm{MR} \quad 1$
(ii) MC is greater than MR after equilibrium level of output.

The conditions are fulfilled at 3 units of output.
For blind candidates:
TP and MP Schedules
Explanation of law of variable proportion

## OR as above

## SECTION B

17. (i) currency and coins with public (ii) demand deposits of commercial banks.
18. It is the planned savings/expected saving.

19 Primary deficit = Fiscal deficit - interest payments
20 Excess of Aggregate supply over aggregate demand at full employment level.
21. Exports, foreign tourism, etc. (Any two)
22. If with increase in GDP inequalities of income increase poor become more poor while rich become more rich. This may lead to decline in welfare even though GDP has increased.

## OR

Goods which are purchased by a production unit from other production units and meant for resale or for using up completely during the same year are called intermediate qoods.

Goods which are purchased for consumption and investment are called final goods.
Examples: Purchased of machinery for installation in factory or any other example.
23. Lending by the central bank to the commercial banks is called the lender of the last resort function. Commercial bank borrow from central bank in times of need.
24. Through the budget government can reduce inequalities of income. It can adopt progressive taxation policy and spend more on requirements of the poor.
25. When autonomous foreign exchange payments exceed autonomous foreign exchange receipts, the difference is called balance of payments deficit.

Autonomous transactions in foreign exchange are those which are undertaken for their own sake and independent of the state of balance of payments.
26. Under fixed exchange rate regime reduction in price of domestic currency in terms of all foreign currencies is called devaluation Under flexible exchange rate regime. fall in market price of domestic currency in terms of a foreign currency is called depreciation.
27. Money creation by banks is determined by (1) Fresh deposits and (2) Legal Reserve Ratio. Suppose fresh deposit is Rs. 10000 and LRR is 20\%. Initially banks keep Rs. 2000 as cash and lend Rs. 8000. Those who borrow spend this Rs. 8000. It is assumed that this Rs. 8000 comes into banks as a fresh deposit. Banks again keep $20 \%$ of it as cash reserve and lend the rest. In this way money creation goes on. Total money creation is Rs. 50000.

$$
\text { Money creation }=\text { initial deposit } X \frac{1}{\text { LRR }}
$$

## OR

Bank rate is the rate of interest at which the central banks lends money to the commercial banks. Suppose the central bank raises the bank rate. Since borrowing by the commercial banks becomes costlier, commercial banks are forced to increase the rate of interest they charge on borrowing by public. This reduces demand for borrowing and adversely affects deposit/money creation by commercial banks.
*28. (a) True, if MPC is greater than 0.8.

## OR

False, if MPC is greater than 0.5 but not greater than 0.8
(b) True, since MPS $=\Delta \mathrm{S} / \Delta \mathrm{Y}$, The individual may at the most spend the entire $\Delta \mathrm{Y}$ so that $\Delta \mathrm{S}=0$. So, MPS can at the most be zero.
(No marks if reason is not given)
29. (a) Receipts which lead to either reduction in assets or increase in liabilities are called capital receipts. Receipts which neither reduce assets not create any liability are revenue receipts.
(b) Direct tax is a tax whose incidence and impact fall on the same person. Indirect tax is tax whose incidence and impact fall on different persons.
*30. (a) It is factor income from abroad, so will be included in N.I.
(b) It is transfer receipts, so it is not included in national income.
(c) Not included in national income because it is a non-factor receipt as the loan is not used for production but for consumption.
(No marks if reason is not given)
31. (a) GDP at fc $=(\mathrm{i})+(\mathrm{ii})+(\mathrm{v})+(\mathrm{vi})+[($ vii $)-($ viii +ix$)]$.
$=800+200+150+100+(300-200-50)$
$=\quad$ Rs. 1300 Crore.
(b) NFIFA $=$ GNP $_{\text {@ }}-$ GDP $@_{\text {MP }}$
$=\quad$ (iv) $-[\mathrm{GDP} @ \mathrm{Fc}+(\mathrm{xi})]$
$=1400-(1300+120)=-20$
FITA $=$ FIFA - NFIFA
$=60-(-20) \quad 1 / 2$
$=\quad$ Rs. 80 Crore.
(Calculation by any other method may be taken as correct)

## OR

$$
\begin{array}{rlr}
\mathrm{NNP}_{\mathrm{FC}} & =(\mathrm{xi})+(\text { iii })+(\mathrm{v})+(\text { viii })-(\mathrm{iv})-(\mathrm{x})-(\mathrm{vi})+(\mathrm{ii})+(\mathrm{i}) & 1 \\
& =1000+90+10+30-20-(-10)-40+70+50 & 11 / 2 \\
& =\text { Rs. } 1200 \text { Crore. } & 1 / 2 \\
\text { GNDI } & =\mathrm{NNP}_{\mathrm{FC}}+(\mathrm{ix})+(\text { vii })+(\mathrm{x}) & 1 \\
& =1200+80+60+(-10) & 11 / 2  \tag{1}\\
& =\text { Rs. } 1330 \text { Crore. } & 1 / 2
\end{array}
$$

32. $\quad$ MPC $=\frac{3}{4}, \quad$ MPS $=\frac{1}{4}, \quad \therefore \mathrm{~K}=4$
(i) $\Delta y=\Delta I \cdot K \quad 1$

$$
=1000 \times 4 \quad 1 / 2
$$

$$
=\text { Rs. } 4000 \text { Crore } 11 / 2
$$

(ii) Given that $\Delta \mathrm{y}=\Delta \mathrm{c}+\Delta \mathrm{I}$

$$
\Delta c=\Delta y-\Delta I \quad 11 / 2
$$

$$
=4000-1000
$$1

$$
=\text { Rs. } 3000 \text { Crore }
$$$1 / 2$

## OR

$\Delta \mathrm{C}=\Delta \mathrm{Y} \times \mathrm{MPC}$ ..... $11 / 2$
$=4000 \times 0.75$ ..... 1
= Rs. 3000 Crore ..... $1 / 2$

## QUESTION PAPER CODE 58/1

## EXPECTED ANSWERS/VALUE POINTS

## Section - A

1. A line on which different points show such bundles of two goods on which total expenditure is equal to consumer's income (given his income and prices of goods)
2. A good is called inferior when with rise in income its demand falls.
3. Perfect Competition.
4. It is a market in which there is single seller of the commodity in the market.1
5. In this market form there are a large number of buyers and sellers.
6. a) The more the number of substitutes, the greater the elasticity because more choice is available to the consumer.
b) Necessities are inelastic. Other goods are relatively more elastic.
7. 8) Rise in price of substitute goods.
2) Fall in price of complementary goods.
3) Rise in income of buyers / consumers in case of normal good
4) Fall in income of buyers in case of inferior good
5) Favourable change in taste for the good
6) Any other relevant cause.

| (Any two) | $1 / 2 \times 2$ |
| ---: | ---: |
| (Explanation) | $1 \times 2$ |

## OR

A consumer is in equilibrium when $\mathrm{MU}=\mathrm{P}$.
Fall in price makes MU > P. This induces the consumer to buy more. So, when price falls demand rises.
(any other relevant explanation may also be awarded)
8. OUTPUT ATC TC AFC TFC TVC $\underline{\text { AVC }}$ MC (Units) (Rs.) (Rs.) (Rs.) (Rs.) (Rs.) (Rs.) (Rs.)

| 1 | 80 | 80 | 60 | 60 | 20 | $\underline{20}$ | $\underline{20}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | 48 | 96 | 30 | 60 | 36 | $\underline{18}$ | $\underline{16}$ |
| 3 | 40 | 120 | 20 | 60 | 60 | $\underline{20}$ | $\underline{24}$ |

9. PRICE TR $\underline{\text { SS }}$

2400200
3 - 300
$e_{s}=\frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$
$=\quad \frac{100}{1} \times \frac{2}{200}$
$=1$
10. Number of firms is small in Oligopoly because of barriers to entry into industry. Patents, large capital requirement, control over crucial raw material etc. prevent new firms from entering.
11. i) Problem of choice of technique of production.
ii) Two Techniques
(a) Labour Intensive
(b) Capital Intensive
(Explanation)

## OR

Micro economics deals with behaviour of individual economic agents
Macro economic deals with aggregates of the economy

## Examples

Micro Eco: Consumer's equilibrium etc. $1 / 2$
Macro Eco:National Income etc. 1⁄2
*12. $\Delta \mathrm{P}=-1, \Delta \mathrm{Q}=3$
$e=\frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$
$-2=\frac{3}{-1} \times \frac{10}{Q}$
$\mathrm{Q}=15$ units
13. When income falls demand falls.

- Supply remaining unchanged, there is excess supply at the given-price.
- This leads to competition among sellers leading to fall in price.
- As a result demand starts rising and supply starts falling.
- These changes continue till a new equilibrium price is established where demand equals supply.
- Equilibrium price falls.
*14 a) False. When MR is constant and not equal to zero, it may be positive or negative TR increases when MR is positive and decreases when it is negative.
b) False. AVC will rise only when $\mathrm{MC}>\mathrm{AVC}$ whether MC is rising or falling.
c) False. TP increases under Increasing Returns. It also increases under Diminishing returns till MP is positive. TP falls under Diminishing returns when MP is negative.
(Note : No marks are to be awarded if reason is not stated).

15. There are two conditions:
(i) $\mathrm{MRS}=$ Ratio of prices
(ii) MRS continuously falls

## Explanation:

(i) Let the two goods be X and Y . The first condition for consumer's equilibrium is that MRS = Px / Py. Now suppose, MRS is greater than Px/Py. It means that the consumer is willing to pay more for X than the price prevailing in the market. As a result the consumer buys more of X. This leads to fall in MRS. MRS continues to fall till it becomes equal to the ratio of prices and the equilibrium is established.
(Or, alternatively in terms of when MRS < Px/Py)
(ii) Unless MRS continuously falls, the equilibrium cannot be established.
16. $\begin{array}{llllll}\text { OUTPUT } & \underline{\text { PRICE }} & \underline{\mathrm{TC}} & \underline{\mathrm{TR}} & \underline{\mathrm{MC}} & \underline{\mathrm{MR}} \\ \text { (Units) } & \text { (Rs.) } & \text { (Rs.) } & \text { (Rs.) } & \begin{array}{l}\text { (Rs.) }\end{array} & \text { (Rs.) }\end{array}$

| 1 | 8 | 6 | 8 | 6 | 8 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | 7 | 11 | 14 | 5 | 6 |
| 3 | 6 | 15 | 18 | 4 | 4 |
| 4 | 5 | 18 | 20 | 3 | 2 |
| 5 | 4 | 23 | 20 | 5 | 0 |

3 Units will be produced because at this level of output $\mathrm{MC}=\mathrm{MR}$ and after this level of output MC>MR.

## OR

| Units of variable <br> factor | TP <br> (Units) | MP <br> (Units) |
| :---: | :---: | :---: |
| 1 | 2 | 2 |
| 2 | 6 | 4 |
| 3 | 9 | 3 |
| 4 | 9 | 0 |
| 5 | 6 | -3 |

When more and more units of a variable factor are employed with fixed factors, MP and TP change in the following manner:
a. MP increases and TP increases at an increasing rate (upto 2 units of variable factor)
b. MP falls and is positive and TP increases at a decreasing rate. (from 3rd to 4th unit of variable factor)
c. MP falls and is negative, TP falls, (after 4 units of variable factor)

## Section-B

17. It is anything that serves as medium of exchange.
18. Excess of revenue expenditure over revenue receipts.
19. It is planned aggregate demand.
20. The excess of aggregate demand over aggregate supply at full employment level.
21. Imports, tourists going abroad etc.
(any two)
$1 / 2 \times 2$
22 Value of GDP at constant prices is called real GDP. Value of GDP at current year
prices is called nominal GDP.
OR
i) Intermediate as purchased for resale. $11 / 2$
ii) Final as purchased for consumption. $11 / 2$
22. It acts as banker to the government. It accepts deposits from government and give loans to the government.
23. Govt. uses budgetary policy to allocate resources. This is done by imposing higher rate of taxation on goods whose production is to be discouraged and subsidies provided on goods whose production is to be promoted.
24. Autonomous transactions are done for some economic consideration such as profit. Such transactions are independent of the state of B.O.P.

Accommodating, transactions are undertaken to cover the deficit/surplus in balance of payments.
26. When price of foreign currency falls, imports are cheaper. So more demand for Foreign Exchange by importers.

Tourism abroad is promoted as it becomes cheaper. So demand for foreign currency rises.
(or any other example) (any two)
27. Money creation by banks is determined by (1) Fresh deposits and (2) Legal Reserve Ratio. Suppose fresh deposit is Rs. 10000 and LRR is 20\%. Initially banks keep Rs. 2000 as cash and lend Rs. 8000. Those who borrow spend this Rs. 8000. It is assumed that this Rs. 8000 comes into banks as a fresh deposit. Banks again keep $20 \%$ of it as cash reserve and lend the rest. In this way money creation goes on. Total money creation is Rs. 50000.

$$
\text { Money creation }=\text { initial deposit } \mathrm{X} \frac{1}{\mathrm{LRR}}
$$

OR
Open market operations refers to the buying and selling of securities by the Central Bank from and to the general public. Sale of securities by the Central Bank leads to flow of money out of commercial banks and into the Central bank. This reduces effective deposits with commercial banks and checks money creation reducing aggregate demand and investment.
*28 (i) False. When MPC $=0$, Multiplier $=\frac{1}{1-\mathrm{MPC}}=\frac{1}{1-0}=1$
(ii) False. APS or S/Y can be negative when S is negative At low level of income consumption expenditure is more than income
29. (i) - Capital expenditure is the expenditure that either reduces liabilities or creates assets.

- Revenue expenditure is the expenditure that neither reduces liability nor creates assets.
(ii) - Fiscal deficit is the excess of total budget expenditure over total budget receipts excluding borrowings.
- Primary deficit is Fiscal deficit less interest payments.

30 (i) It is factor income to abroad, so it will be deducted from NDP to get NNP.
(ii) It is factor income from abroad, so it is included in NI.
(iii) It is a transfer payment. So, it is not included in NI.
(No marks if reason is not given)

## OR

- Counting the value of goods or services more than once when estimating NI is the problem of double counting.
- Example: Suppose a farmer produces wheat worth Rs. 1000 . He sells this to the baker who converts the wheat into bread and sells it to the grocier for Rs. 2000. The value of total output here would be Rs. 3000 and this includes the value of wheat two times.
- Methods of avoiding double counting are
i) Value of final goods only to be included. 1
ii) Use value added method.

31. $\operatorname{MPC}=0.75 ; \Delta \mathrm{Y}$ needed $=8000$ Crores.
$\mathrm{K}=\frac{1}{1-\mathrm{MPC}}=\frac{1}{1-0.75}=4$
$\Delta \mathrm{Y}=\Delta \mathrm{I} . \mathrm{K}$.
$8000=\Delta \mathrm{I}$ x 4
$\Delta \mathrm{I}=2000$
(Solution in any other way may be awarded)
32. (a) GOP @ MP $=(\mathrm{i})+(\mathrm{iii})+(\mathrm{vi})+(\mathrm{vii})+(\mathrm{ix})+(\mathrm{xi}+\mathrm{xii}-\mathrm{x})$

$$
\begin{array}{lr}
=500+1500+300+400+250+(700+50-650) & 11 / 2 \\
=3050 \text { Crores } & 1 / 2
\end{array}
$$

(b) NFIA $=\mathrm{GNP}_{\mathrm{FC}}-\mathrm{GOP}_{\mathrm{FC}}$

$$
\begin{aligned}
& =(\mathrm{iv})-(3050-\mathrm{ix}) \\
& =2800-3050+250=0
\end{aligned}
$$

$$
\text { FIFA }=\text { NFIA }+ \text { FIT A } 1 / 2
$$

$$
=\mathrm{NFIA}+(\text { viii })=0+120
$$

$$
=120 \text { Crores. } 1 / 2
$$

(Calculation by other method may also be awarded)

