Class XII
Economics (030)
Sample Question Paper 2018-19

MM: 80   **Time Allowed: 3 hours**

General Instructions:
   i.   All questions in both sections are compulsory. However, there is internal choice in some questions.
   ii. Marks for questions are indicated against each question.
   iii. Question No.1-4 and 13-16 are very short answer questions carrying 1 mark each. They are required to be answered in one sentence.
   iv. Question No.5-6 and 17-18 are short answer questions carrying 3 marks each. Answers to them should not normally exceed 60 words each.
   v.   Question No.7-9 and 19-21 are also short answer questions carrying 4 marks each. Answers to them should not normally exceed 70 words each.
   vi. Question No.10-12 and 22-24 are long answer questions carrying 6 marks each. Answers to them should not normally exceed 100 words each
   vii. Answers should be brief and to the point and the above word limit be adhered to as far as possible.

	SECTION A – MICROECONOMICS	
1	State the reason why Total Variable Cost (TVC) curve and Total Cost (TC) curve are parallel to each other.	1
	Or	
	State the reason behind U-shape nature of Average Variable Cost curve.	
2	If the Total Revenue of a firm increases by ₹ 45,000 due to an increase in sale of Good X from 50 units to 65 units, then marginal revenue will be ₹...........................?	1

3	A Production Possibility Curve would be..................................... curve if all the available resources in an economy are equally efficient to produce both the goods.**(Choose the correct alternative)**
	    a) a straight line b) convex to origin
	    c) concave to origin d) upward sloping
		1

4	Which of the following is a variable cost?
	    a) Salary of permanent staff c) licence fees
	    b) rent of premises d) wages
		1

	Or	

	If Total Variable Cost and Total Fixed Cost of producing 10 units are ₹500 & ₹200, the value of average cost would be?
	    a) 50 b) 70
	    c) 20 d) 80	

5	Distinguish between Normative Economics and Positive Economics, with suitable examples.	3
	Or	
	Why do central problems arise? Discuss briefly.	
6	Mr. Atal Singh is consuming two goods X and Y. If he is facing a situation of $\frac{MU_X}{P_X} > \frac{MU_Y}{P_Y}$, discuss how would he reach the level of equilibrium.	3

7	Calculate and comment on nature of price elasticity of demand, if, with a rise in price of Good X from ₹ 10 to ₹ 12, the quantity demanded falls by 40%.	4
	Or	
	'As the price of a good falls, the resulting increased purchasing power may be a reason for increase in quantity demanded'. Do you agree with the given statement? Give reason for your answer.	
8	Complete the following production schedule:	4

Units of variable input	Total Physical Product (units)	Average Physical Product (units)	Marginal Physical Products (units)
1	10	10	--
2	--	11	12
3	--	--	8
4	35	--	--
5	--	--	-5

9	Elaborate the price discrimination feature of monopoly.	4
	Or	
	Why number of firms is limited in an oligopoly market? Explain.	
10	a) Explain with the help of a hypothetical numerical example the assumption of diminishing marginal rate of substitution under the ordinal apporach of theory of consumer's behaviour. b) Why should marginal rate of subsitition diminish for a stable consumer's equilibrium?	4 2
11	Suppose the market for Good X is in equilibrium. Explain the chain effect, if: a) increase in market demand is less than the decrease in market supply. b) increase in market demand is more than the increase in market supply.	6
12	Examine the effects of the following on the supply curve of a Good X, using suitable diagram: a) fall in own price of Good X. b) rise in price of factor input producing Good X.	6
	Or	
	Define Producer's Equilibrium. Discuss briefly, the conditions of producer's equilibrium, assuming that the producer can sell more units of the good by lowering the price.	

SECTION B – MACROECONOMICS

13	Calculate the value of money multiplier if the legal reserve requirements are 20%.	1
14	What is money supply?	1
	Or	
	What is meant by Reverse Repo Rate?	

15	.... **(choose the correct alternative)** is a revenue receipt of the government.
	    a) Funds raised by the government by issuing National Saving Certificates
	    b) Sale of 40% shares of a public sector undertaking to a private enterprise
	    c) Profits of LIC, a public enterprise
	    d) Amount borrowed from Japan for construction of Bullet Train.
		1

16	Identify which of the following statements is true?
	    a) Fiscal deficit is difference between planned revenue expenditure and planned revenue receipts
	    b) Fiscal deficit is difference between total planned expenditure and total planned receipts
	    c) Primary deficit is the difference between total planned receipt and interest payments.
	    d) Fiscal deficit is the sum of primary deficit and interest payment.
		1

17	Estimate the value of Aggregate Demand in an economy if:
	   a) Autonomous Investment (I) = ₹100 Crore.
	   b) Marginal Propensity to Save = 0.2
	   c) Level of Income (Y) = ₹4,000 crores.
	   d) Autonomous Consumption Expenditure (c) = ₹50 Crore
	
	  Or
	 In an economy C= 200+ 0.5 Y is the consumption function where C is the consumption expenditure and Y is the national income. Investment expenditure is ₹ 400 crores. Is the economy in equilibrium at an income level ₹ 1500 crores? Justify your answer.
		3

18	Explain how the level of effective demand is attained in an economy if, Aggregate Demand is more than the Aggregate Supply.	3
19	What is meant by problem of double counting? How this problem can be avoided? **Or** Discuss briefly, the circular flow of income in a two sector economy with the help of a suitable diagram.	4
20	Elaborate 'economic growth' as objective of government budget.	4

21	How the following tools can be used for credit control by the central bank in an economy:
	    a) Open Market Operations
	    b) Margin Requirements
		4

22	a) State any two precautions that must be taken into consideration while estimating national income by value added method.	2
	b) In an economy, following transactions took place. Calculate value of output and value added by Firm B:	4
	i. Firm A sold to firm B goods of ₹ 80 crore; to firm C ₹ 50 crore; to household ₹ 30 crore and goods of value ₹ 10 crore remains unsold	
	ii. Firm B sold to firm C goods of ₹ 70 crore; to firm D ₹ 40 crore; goods of value ₹ 30 crore were exported and goods of value ₹ 5 crore was sold to government.	
	Or	
	Differentiate between National Income at Current Prices and National Income at Constant Prices. Which of the two presents a better view of the economic growth of economy and why?	6
23	How an initial increase in investment affects the level of final income of the economy? Show its working with a suitable numerical example.	6
24	a) **According to recent media reports:** **'USA has accused China of currency devaluation to promote its exports'.** In the light of the given media report comment, how exports can be promoted through the Currency devaluation?	3
	b) What is meant by Current Account Deficit (CAD) and Current Account Surplus (CAS)? State their significance.	3

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Marking Scheme 2018-19

S.No.	Section A- Micro Economics	Marks
1	Total fixed cost, which remains unchanged at all given levels of output, is the reason behind vertical parallel distance between TVC curve and TC curve.	1
	Or	
	Law of Variable Proportions	
2	₹ 3,000	1
3	a) a straight line	1
4	d) wages	1
	Or	
	b) 70	

5				3
	S.No.	**Positive Economics**	**Normative Economics**	
	1.	Positive economics deals with economic issues as they are. It is based on facts and actual data.	Normative economics deals with economic issues as they ought to be. It is based on opinions and is suggestive in nature.	
	2.	Positive statements are strictly neutral towards ends.	Normative statements can only be assessed relative to beliefs and value judgements.	
	3.	e.g. growth rate is 5%; industrial output grew by 3%.	e.g. The unemployment rate should be reduced	

	Or
	Central problems are economic problems faced by each and every economy. They arise due to:
	i) **Scarcity of resources:-** Human wants are unlimited and available resources in relation to same are scarce and limited.
	ii) **Alternate uses of resources:-** Available resources can be put to multiple uses, hence, the economy has to make a choice amongst alternative uses of available resources

6	If $\frac{MU_X}{P_X} > \frac{MU_Y}{P_Y}$ marginal utility derived by spending one rupee on consumption of commodity X is greater than the marginal utility derived by spending one rupee on consumption of commodity Y.	3
	The satisfaction derived by consuming Commodity X is greater than the satisfaction derived by consuming Commodity Y.	
	Mr. Atal Singh will reallocate his income by spending more on commodity X, as he will consume	

	more units of commodity X, marginal utility derived from consumption of commodity X diminishes and alternate preposition occurs for Commodity Y, this process will continue till $\frac{MU_X}{P_X}$ becomes equal to $\frac{MU_Y}{P_Y}$.	
7	Price elasticity of demand (Ed) =$\frac{percentage\ cha\quad in\ quantity\ demanded\ of\ the\ commodity}{percentage\ change\ in\ price\ of\ the\ commodity}$ Percentage change in price =$\frac{12-1}{10}$ X 100 =$\frac{2}{10}$ X 100 = 20% Percentage change in quantity demanded = 40% Price elasticity of demand (Ed) =$\frac{percentage\ chang\quad in\ quantity\ demanded\ of\ the\ commodity}{percentage\ chang\quad in\ price\ of\ the\ commodity}$ =$\frac{40\%}{20\%}$ = 2 (minus sign is ignored as it only represents the inverse relation between price and quantity demanded.) Ed = 2 (Ed > 1, Elastic demand)	4
	Or	
	When price of a good falls the purchasing power (real income) of the consumer increases as he will able to purchase more units of the given good with the same money income. This phenomenon is called as income effect and is one of the main reasons for negative slope of demand curve.	
8		4

Variable input (in units)	Total Physical Product (in units)	Average Physical Product (in units)	Marginal Physical Products (in units)
1	10	10	**10**
2	**22**	11	12
3	**30**	**10**	8
4	35	**8.75**	**5**
5	**30**	6	-5

9	Price Discrimination – is a situation where the monopolist charges different set of prices of the commodity from different set of consumers. Monopolist being the only seller in the market can exercise this feature by charging different prices (for the products which are homogeneous or otherwise) from different consumers. For example the electricity distribution companies might charge different prices from domestic and commercial electricity users.	4
	Or	

	In an oligopoly market, certain 'barriers to entry' prevent new firms to enter the industry. Such barriers maybe:
	   i. Requirement of large capital
	
	   ii. Patents and copyrights
	
	   iii. Government Licences	

		iv. Control over important raw material	
		These barriers may prevent a new firm to enter the oligopolistic market. Firms which are able to cross these barriers are able to enter the industry.	
10		a) The assumption of diminishing marginal rate of substitution states that the consumer will be willing to sacrifice lesser units of GoodY,so as to gain additional unit of the Good X. This is an extention of law of diminishing marginal utility. Diminishingmarginal rate of substitution is the reason behind convexity of Indifference Curve to the origin. The following table shows, bundles of Good X and Y which provide same level of satisfaction to the consumer:-	4

Bundles	Units of Good X	Units of Good Y	MRS ($\Delta y / \Delta x$)
A	1	21	-
B	4	15	6Y : 1X
C	3	10	5Y : 1X
D	4	6	4Y : 1X
E	5	3	3Y : 1X

The above schedule shows that for each additional unit of Good X, consumer is willing to sacrifice lesser and lesser units of Good Y.

b)   Marginal rate of substitution (MRS) is the rate at which consumer is willing to trade-off one good for the other. It depends on the quantity of the two goods s/he is consuming. A rational consumer will sacrifice lesser units of Good Y so as to acquire additional units of Good X, due to the application of law of diminishing marginal utility.

MRS should be diminishing as additional consumption of Commodity X, symbolises fall in marginal utility due to which the consumer will not further increase its consumption. If it does not fall, s/he will keep on increasing the consumption of Commodity-X and will not reach a stable equilibrium.

[marks: 2]

11		6

Market equilibrium is determined at a point where market demand is equal to market supply.

a)   When increase in market demand is less than decrease in market supply

Chain effect: Relative increase in market demand is less than relative increase in market supply. It is a situation of excess supply. There will be competition among the sellers, to clear the unsold stock which will result in reduction in price.

This process will continue till new equilibrium point is attained. Equilibrium quantity will increase and the equilibrium price will decrease in the market.

b)   Increase in the market demand is more than increase in market supply.

Chain effect: Relative increase in market demand is greater than relative increase in market supply. It is a situation of excess demand. There will be competition among the buyers which will result in rise in price.

This process will continue till new equilibrium point is attained. Equilibrium quantity and equilibrium price will increase in the market.

12		6
	Effect on supply curve of Good X when there is a:	

i) Fall in own price of Good X -When the price of a commodity falls, it leads to reduced profit margin of the producers, forcing them to sell lesser quantity. It is called as contraction in supply. There will be movement along the same supply curve towards the origin.
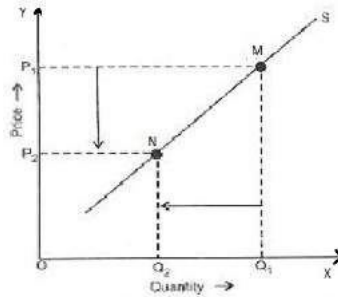
For e.g. When price falls from OP_1 to OP_2 in the given figure, quantity supplied contracts from OQ_1 to OQ_2 and the producer moves from point M to point N.

ii) Rise in price of factor input producing Good X -When price of factor input producing Good X rises, profit margin of the producers fall, forcing them to produce less quantity of Good X at the given price. Supply curve will shift leftwards.
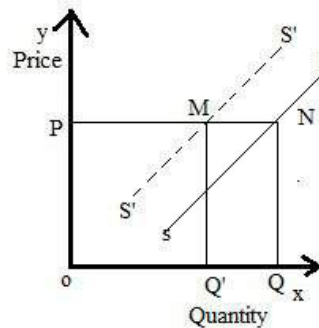
As in the figure, initially the producer was producing OQ quantity at OP price, if price of factor input increases, producer will now be willing produce less quantity say OQ' at same price. Supply curve will shift leftwards from SS to S'S'.

Or

The two conditions of producer's equilibrium are:

(i)   Marginal Cost should be equal to Marginal Revenue (MC= MR)

(ii)   Marginal Cost should be rising at the point of equilibrium.

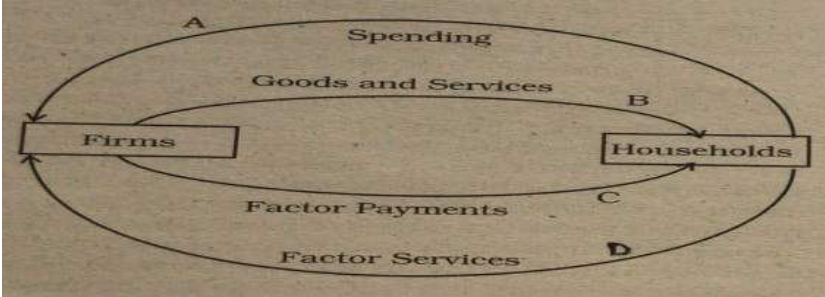| Output	Marginal Revenue (MR) (in ₹)		Marginal Cost (MC (in ₹)
1	20	<	14
2	10	<	10
3	6	<	7
4	**4**	**=**	**4**
5	2	<	6

Producer will be at equilibrium, producing 4th units of output because it satisfies both the conditions of equilibrium.

(i)   If MC is less than MR i.e. at any output level less than 4 units, it is profitable for the producer to produce more units till MC becomes equal to MR.

When MC becomes greater than MR after the MR = MC condition, i.e. at 5th units, production of each additional unit is sold at a loss, which leads to decline in profits for the producer.

	Section B- Macro Economics	
13	Money Multiplier $= \dfrac{1}{LRR} = \dfrac{1}{20\%} = 5$	1
14	It refers to the total quantity of money in circulation in the economy at a given point of time. **Or** Reverse Repo Rate is the rate at which central bank of a country (RBI in India) borrows funds from commercial banks within the country.	1
15	c) Profits of LIC, a public enterprise	1
16	d) Fiscal deficit is the sum of primary deficit and interest payment.	1

17	The Aggregate Demand (AD) function is given as :
	 AD = C +I
	
	              AD = {ć +b(Y)}+I
	 ć = 50 (Given)
	                    b or MPC = 1 – MPS = 1 – 0.2 = 0.8
	 Substituting the values of c and b in AD function, we get :
	              AD = {50+ 0.8 (4000)}+100 = ₹3,350 crores
	 Aggregate Demand is ₹3,350 crores
	
	Or
		3

	No, the Economy is not in a state of equilibrium at ₹1500 crores Given Consumption function, C = 200+0.5Y Investment expenditure (I) = ₹400 crore At the equilibrium level Y= C+I Substituting the values from the question: Y= {200+0.5Y}+ 400 Y - 0.5Y= 600 0.5Y = 600 $Y = \frac{600}{0.5} = 1200$ The equilibrium level of income is ₹1200 crores. The given income ₹1500 crore is greater than equilibrium level of income. Therefore, the economy is not in equilibrium.	
18	Effective demand refers to that level of output where Aggregate demand is equal to the Aggregate supply. If Aggregate Demand exceeds Aggregate Supply, it means buyers are planning to buy more goods and services than producers are planning to produce. Thus, the inventories in hand with the producers will start falling. As a result, producers will plan to raise the production. This will increase the level of income upto the level Aggregate Demand is equal to Aggregate Supply.	3

19	The problem of double counting arises when the value of certain goods and services are counted more than once while estimating National Income by Value Added Method. This happens when the value of intermediate goods is counted in the estimation of National Income alongwith the final value of goods and services.
	Two methods to avoid the problem of double counting:
	  i. To consider only the final value of output produced.
	
	  ii. To consider only the value added of the output produced.
		4

	Or	
	Circular Flow of income in a two sector economy - Households are owners of factors of production, they provide factor services to the firms (producing units). Firms provide factor payments in exchange of their factor services. So, factor payments flow from firms (producing units) to households. Households purchase goods and services from firms (producing units) for which they make payment to them. So, consumption expenditure (spending on goods and services) flows from households to the firms.	
20	Economic Growth implies a sustainable increase in real GDP of an economy, i.e. an increase in volume of goods and services produced in an economy. Budget can be an effective tool to ensure the economic growth in a country. i) If the government provides tax rebates and other incentives for productive activities,	

		it can stimulate savings and investments in the economy.	
	ii)	Spending on infrastructure in the economy promotes the production activities across different sectors. Government expenditure is a major factor that generates demand for different types of goods and services, which induces economic growth in the economy.	4
21	i.	Open Market Operations (OMO)refers to the sale and purchase of government securities in the open market by the Central Bank (RBI). By selling such securities the Central Bank soaks liquidity from the economy and by purchasing the government securities, Central Bank releases liquidity. This is an important method of regulating the money supply (liquidity) in the market.	
	ii.	The Margin Requirement of loan refers to the difference between the current value of the security offered and amount of loan granted.	4
		When margin requirement is lowered by the Central Bank, the borrowers are able to secure larger amount of funds from the banks which will increase the money supply in the economy. Conversely, a rise in the margin requirements will contract the supply of credit in the economy.	

22	a) Precautions of value added method are:
	    i) Value of sale and purchase of second hand goods is not considered while estimating value added as the value of second hand goods is already accounted during the year they were produced.
	
	    ii) Value of intermediate goods is not included in the estimation of value added because value of intermediate goods is reflected in the value of final goods.
		3

	b) Value of output of firm B= Sales of firm B to firm C+ Sales of firm B to firm D + Exports
	                              +Sales of firm B to Government
	= 70+40+30+5
	  = ₹145 crores
	Value Added by Firm B= Value of output by Firm B – Purchases by Firm B from firm A
	= 145 -80
	= ₹65 crore
		3

	Or	
	National Income at Constant Prices: When national product is estimated on the basis of prices prevailing in the base year, it is called national income at constant prices or real national income. **National Income at Current Prices**: When national product is estimated on the basis of prices prevailing in the current year, it is called national income at current prices or nominal national income. National income at constant prices = $$\frac{\text{National income at current prices}}{\text{Price index of current year}} \times \text{Price index of base year}$$ National income at constant prices reflects the real growth of an economy because it increases only when there is an increase in real national output over a period of time. National income at current prices may increase due to increase in prices of goods and services during the current year, thus it does not reflect the true picture of economic growth.	6

23	Initial increase in investment increases the final income of the economy. Investment multiplier explains this effect;	6

Multiplier (k) is the ratio of the increase in National Income (ΔY) due to a given increase in investments (ΔI).

$k = \{\frac{\Delta Y}{\Delta I}\}$

For eg. If an additional investment of ₹ 1,000 crores is made by government for a bullet train project in a country; this extra investment will generate an extra income of ₹1,000 crore, as expenditure of one is income for another. Also, it is assumed that Marginal Propensity to Consume of the country is 0.8.

An additional investment of ₹1,000 crores (ΔI) made by government will generate an extra income of ₹1,000 crores in first round. If MPC of this country is 0.8, the nationals who are receiving this additional income will spend 80% portion of this additional income, i.e. ₹ 800 crores which in return becomes additional income during third round. Similarly, in third round ₹ 640 crores of income is generated.
Consumption expenditure in every round will be 0.8 times of additional income received from previous round.

Round	Increase in Investment (ΔI) (₹Crore)	Increase in Income (ΔY) (₹Crore)	Increase in Consumption (ΔC)(₹ Crore) (ΔY X 0.8)	Increase in Saving (₹Crore) (ΔS = ΔY - ΔC)
1st	1,000	1000	800 (1000X0.8)	200
2nd	--	800	640 (800X0.8)	160
3rd	--	640	512 (640 X 0.80)	128
4th	--	512	409.6 (512 X 0.8)	102.4
--	--	--	--	--
∞	--	--	--	--
Total	1,000	5,000	4,000	1,000

Thus, additional investment of ₹1,000 crores leads to total increase of ₹5,000 crores $\{1000 \times \frac{1}{1-0.8}\}$ in Income.

As a result Multiplier (k) is $\frac{\Delta Y}{\Delta I} = \frac{5000}{1000} = 5$.

24	a) USA has a valid point of argument as devaluation of a currency encourages exports of a country. As exported goods become cheaper in the international market giving a competitive edge for the goods of domestic country (China). Devaluation of the value of domestic currency promotes the exports of the country and may adversely impact the production and sale of importing country (USA).	3

b)	Current Account Deficit (CAD) is a situation that arises when the receipts on current account are less than the payments on current account. In simple words, Current Account Deficit (CAD) arises when the value of exports of goods and services is less than the value of imports of goods and services. Current Account surplus (CAS) is a situation that arises when the receipts on current account is more than the payments on current account. In simple words, Current Account Surplus (CAS) arises when the value of exports of goods and services is more than the value of imports of goods and services. CAD signifies that the nation is a borrower from rest of the world, whereas, CAS signifies that the nation is a lender to the rest of the world.	3