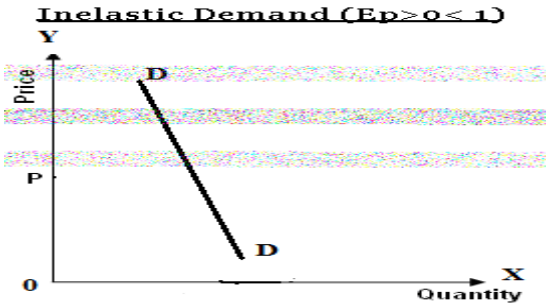
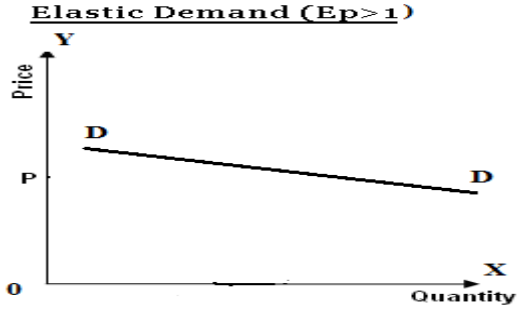
INDIAN SCHOOL MUSCAT
FINAL TERM EXAMINATION
NOVEMBER 2018
CLASS XII
Marking Scheme – ECONOMICS [THEORY]

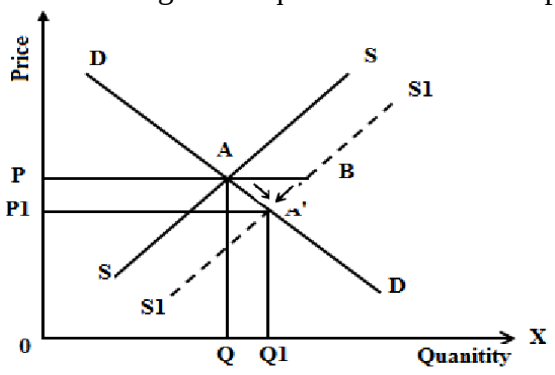
SET A

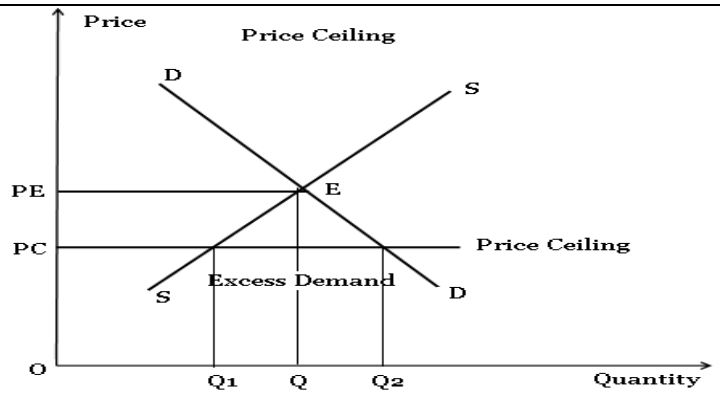
Section A: Introductory Microeconomics

Q.N	Answers	Marks (with split up)
1.	**When is total product maximum?** When marginal product is zero	1 MARK
2.	**What are explicit costs?** Expenses incurred by a producer when inputs are purchased or hired form the market. **OR** **Define marginal costs** Marginal cost is the addition made to the total cost by the production of one more unit of a variable factor input.	1 MARK 1 MARK
3.	**When 5 units of a good are sold, total revenue is ₹100. When 6 units are sold, marginal revenue is ₹8. At what price are 6 units sold? (Choose the correct alternative)** (a) ₹28 per unit (b) ₹20 per unit (c) ₹18 per unit (d) ₹12 per unit Ans: (c) ₹18 per unit	1 MARK
4.	**Why is a perfectively competitive firm called a 'price taker'?** A perfectively competitive firm is called a 'price taker' as it has to adopt the price determined by the market demand and market supply. **OR** **Why is a monopoly firm called a 'price maker'?** Monopoly is called 'price maker' because the price of the commodity sold is determined by the monopoly itself.	1 MARK 1 MARK
5.	**Define an indifference curve. Explain why an indifference curve is downward sloping from left to right.** It is the locus of point that represents different combination of two goods that give the same satisfaction to consumer. It is downward sloping because to obtain one unit of a good, the consumer must sacrifice some units of the other good so that utility level on each point of the indifference curve remains the same.	1 MARK 2 MARKS

6.	**Are the following statements 'true' or 'false'? give reasons** **(a) At a higher price than equilibrium price there is excess demand.** **(b) If both demand and supply increase simultaneously in same proportion, equilibrium price will also increase.** **(c) Price floor the minimum allowable price above equilibrium price.** Ans: False: There is excess supply at a price higher than equilibrium price False: Equilibrium price will remain constant. Equilibrium quantity exchanged will increase. True: Price floor is the minimum allowable price above equilibrium price fixed by the government to support producers.	1 x 3 = 3 MARKS
7.	**'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.** 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. (ANY OTHER VALUE POINT)	3 MARKS FOR EXPLANATION
8.	**Explain how changes in prices of other products influence the supply of a given product.** Suppose the price of the other products rises. It makes the production of these products more profitable because their cost is unchanged. As a result, the firm shifts its resources from the given product to the production of the other products. Supply of the given product falls. Similarly, fall in the price of other products increases the supply of the given product. **OR** **Explain how changes in prices of inputs influence the supply of a product.** Changes in the price of raw material and remuneration of factors (rent, wages, etc.) influence the cost of production of a commodity and thereby supply. When the price of inputs fall, marginal cost falls. Price of the product remaining unchanged, fall in the marginal cost leads to rise in profits. Rise in profits induces the producer to increase supply. Similarly, a rise in price of inputs will lead to fall in supply.	2 MARKS FOR INCREASE 2 MARKS FOR DECREASE 2 MARKS FOR INCREASE 2 MARKS FOR DECREASE
9.	**Elaborate the 'price discrimination' feature of monopoly.** Ans: 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. **OR** **Why is number of firms limited in an oligopoly market? Explain.** Ans: In an oligopoly market, certain 'barriers to entry' prevent new firms to enter the industry. Such barriers maybe:	4 MARKS FOR EXPLANATION

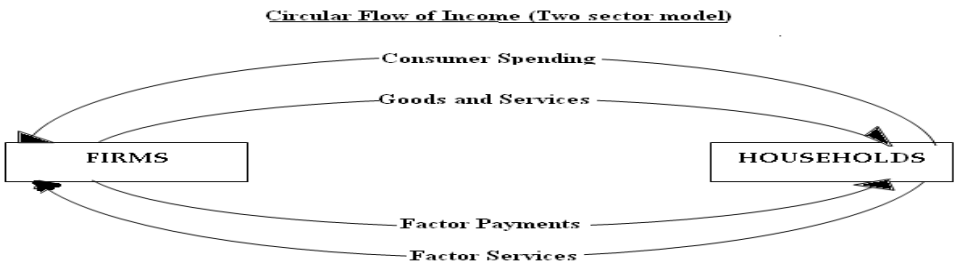
	(a) Requirement of large capital (b) Patents and copyrights (c) Government Licences (d) Control over important raw material These barriers may prevent a new firm to enter the oligopolistic market. Firms which are able to cross these barriers are able to enter the industry.	4 MARKS FOR EXPLANATION
10.	**Explain the following degrees of price elasticity of demand with the help of an example and suitable diagrams.** **(a) Inelastic demand** **(b) Highly elastic demand** **Inelastic Demand (Ep>0< 1):** When percentage change in quantity demanded is less than the percentage change in price. Demand is said to be less than elastic. **Example:** Price Elasticity of demand = $\frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in price}}$ **Suppose: (ANY SUITABLE EXAMPLE)** Percentage change in quantity demanded is 10% and percentage change in price is 20% $= \frac{10\%}{20\%} = \frac{1}{2} = 0.5 \quad Ep < 1$ **Diagram:**  **Highly Elastic Demand (Ep>1<infinity):** When percentage change in quantity demanded is more than percentage change in price. Demand is said to be more than unit elastic. **Example: (ANY SUITABLE EXAMPLE)** Price Elasticity of demand = $\frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in price}}$ **Suppose** Percentage change in quantity demanded is 30% and percentage change in price is 20% $= \frac{30\%}{20\%} = 1.5 \quad Ep > 1$  	2 MARKS FOR DEFINITION 2 MARKS FOR EXAMPLE 2 MARKS FOR DIAGRAM WITH PROPER LABELS

11.	**Giving reason, identify the equilibrium level of output and find profit at each unit of output using marginal cost and marginal revenue approach from the following data.** **Output (units) 1 2 3 4 5** **Total Revenue (₹) 14 28 42 56 70** **Total Cost (₹) 14 26 40 56 74** **Output (units) / Total Revenue (₹) / Total Cost (₹) / Marginal Revenue (₹) / Marginal Cost (₹)** 1 / 14 / 13 / 14 / 14 2 / 28 / 26 / 14 / 12 **3 / 42 / 40 / 14 / 14** 4 / 56 / 56 / 14 / 16 5 / 70 / 74 / 14 / 18 The producer is at equilibrium at 3 units of output because: i) MR = MC at the third unit of output ii) MC>MR beyond equilibrium Therefore, both the profit maximisation (Equilibrium) conditions are fulfilled at the 3re unit of output. Profit = Total revenue – Total cost = ₹42 - ₹40 = ₹2 Profit is ₹2 at equilibrium	2 MARKS FOR THE SCHEDULE 2 MARKS FOR THE CONDITIONS OF EQUILIBRIUM 2 MARKS FOR IDENTIFYING AND CALCULATING PROFIT
12.	**The market for a commodity X is in equilibrium. The price of its inputs fall. Explain with the help of a diagram its chain of effects on equilibrium price and equilibrium quantity exchanged.** When the price of input fall, supply increases. Supply curve shifts from SS to S_1S_1 and at equilibrium price OP there is excess supply. Equal to AB. This will result in competition among sellers. Price starts falling and there will be expansion of demand and a contraction in supply. These changes will continue till the new price OP1 is reached. Market will be again in equilibrium at a lower price OP_1.  **OR** **What is meant by 'price ceiling'? Explain the consequences of price ceiling. (Use diagram)** Price ceiling is maximum allowable price for a good or service fixed by the government below the market equilibrium. The government imposes an upper limit on price of a good is called a price ceiling. It is generally imposed on necessities to make the good available for the poor section also.	3 MARKS FOR EXPLANATION 3 MARKS FOR DIAGRAM WITH PROPER LABELS

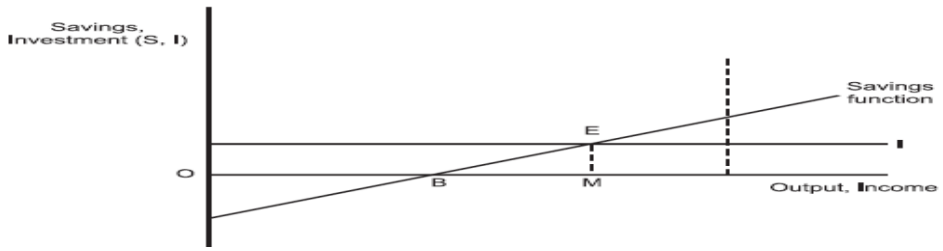
	 PE is the equilibrium price at which DD=SS. If this price is too high for the poor section of the population, government fixes a Price Ceiling. It creates "Excess Demand" because Demand is Greater than Supply. Consequences (a) Shortages: - At a lower price PC, demand increases to Q2, but supply falls to Q1. This will create a shortage of Q1 Q2 for the good in the market. (b) Ration coupons: - In order to ensure the availability of the good equally to all government has to adopt rationing by giving a fixed quantity of the good to everyone. Each consumer has to stand in a long queue to buy goods. (c) Black marketing: - Some seller will hoard stocks and try to sell at a price higher the PC. Some consumers are willing to pay a higher price. This may create Black marketing. (d)	

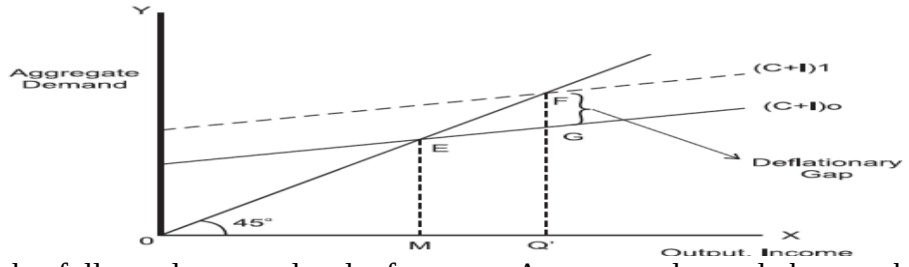
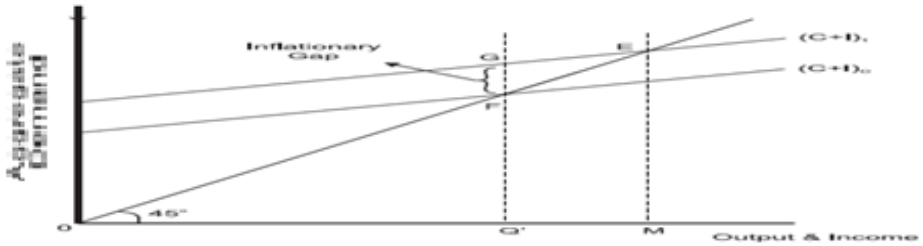
Section B: Introductory Macroeconomics

13.	**Define capital goods.** Capital goods are the goods which are used to produce other goods.	1 MARK
14.	**What is cash reserve ratio?** Cash reserve ratio (CRR) is the ratio of bank deposits which a bank is required to keep with the central bank. **OR** **What is statutory liquidity ratio?** Statutory liquidity ratio (SLR) is the fraction of total deposits of a commercial bank which it has to keep with itself in the form of specified liquid assets by the direction of the central bank.	1 MARK 1 MARK
15.	**Define marginal propensity to consume.** Marginal propensity to consume (MPC) is the ratio of change in consumption expenditure to change in income	1 MARK
16.	**Aggregate demand is represented by ---------- curve in the determination of income analysis. (Choose the correct alternative)** (a) Consumption + Saving + Investment (b) Consumption + Saving (c) Saving + Investment (d) Consumption + Investment Ans: (d) Consumption + Investment	1 MARK

17.	**Distinguish between factor payment and transfer payment.** <table><tr><th>Transfer Payment</th><th>Factor Payment</th></tr><tr><td>Payments made where there are no goods and services received in exchange.</td><td>Payments to factors of production in return for their services rendered to production process.</td></tr><tr><td>These are not a part of national income but a part of personal income.</td><td>These are a part of national income</td></tr><tr><td>These are unilateral payments</td><td>These are bilateral payments.</td></tr><tr><td>E.g. donations, gifts, old age pension etc.</td><td>E.g. Compensation of employees, rent, interest and profits.</td></tr></table>**OR** **What is meant by problem of double counting? How this problem can be avoided?** Ans: 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 along with the final value of goods and services. Two methods to avoid the problem of double counting: (a) To consider only the final value of output produced. (b) To consider only the value added of the output produced.	1 MARKS X 3 = 3 MARKS 1 ½ MARKS + 1 ½ MARKS = 3 MARKS
18.	**Explain the 'banker to government' function of the central bank.** The Central Bank acts as a banker to both Central and State governments as it carries out all the banking business of the government and the government keeps its cash balances on current account with the Central Bank. It accepts receipts and makes payments for the government and carries out exchange, remittance and other banking operations. It provides short-term credit to the government and also has the responsibility of managing the public debt by managing all new issues of government loans. It also advises the government on banking and financial matters.	3 MARKS FOR EXPLANATION
19.	**Discuss briefly, the circular flow of income in a two sector economy with the help of a suitable diagram.** 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.	1 MARK FOR DEFINITION 3 MARKS FOR EXPALANATION AND DIAGRAM

20.	**What do you mean by credit/money creation? Explain the process of money creation by the commercial banks with the help of a numerical example.** Money creation is a process in which a commercial bank creates total deposits many times the initial deposits. The capacity of commercial bank to create depends on two factors: (a) Amount of initial fresh deposit (b) Legal reserve ratio LRR Money Multiplier = Initial fresh deposit X 1/LRR **Process of money/credit creation (Numerical Example)** Suppose (i) Initial Deposit = ₹ 1000 (ii) LRR = 20% As required, the bank keeps 20% i.e. ₹ 200 as cash reserve and lend the remaining ₹ 800. Those who borrow use the money for making payments. As assumed those who receive these payments put the money back into their bank accounts. This creates a fresh deposit of ₹ 800. The bank again keep 20% i.e. ₹ 160 and lend ₹ 640. In this way the money goes on multiplying leading to total money creation of ₹ 5000. Total Deposits Created = Initial fresh deposit X 1/LRR = ₹1000 X 1/(20/100) = ₹1000 X 5 Total Deposits Created = ₹ 5000	1 MARK FOR DEFINITIO N 3 MARKS FOR EXAMPLE
21.	**In an economy the marginal propensity to consume is 0.75. Investment expenditure in the economy increases by ₹75crore. Calculate the value of multiplier total increase in national income.** $K = \frac{\Delta Y}{\Delta I}$ OR $\frac{\Delta Y}{\Delta I} = \frac{1}{1 - MPC}$ OR $\frac{\Delta Y}{75} = \frac{1}{1 - 0.75}$ $\frac{\Delta Y}{75} = \frac{1}{0.25}$ OR $0.25\Delta Y = 75$ OR $\Delta Y = \frac{75}{0.25} = ₹\ 300$ crores **Change in income (ΔY) =₹ 300 crores** $K = \frac{\Delta Y}{\Delta I} = \frac{300}{75} = 4$ **Investment multiplier (K) = 4** **OR** **An economy is in equilibrium. Its consumption function is C=300 +0.8Y and investment expenditure is ₹700 crores. Find national income and consumption expenditure at equilibrium.** C= 300+0.8 Y, I = 700 At equilibrium Y = C+I Y = 300+0.8Y+700 Y – 0.8y = 300 + 700 Let Y= 1 0.2y = 1000 Y = 1000/0.2 Y = ₹ 5000 crores C = 300 + 0.8y = 300 + 0.8 X 5000 = 300 + 4000 C = ₹ 4300 crores	2 MARKS FOR CHANGE IN INCOME 2 MARKS FOR MULTIPLIE R 2 MARKS FOR INCOME 2 MARKS FOR CONSUMPT ION

22.	**Calculate gross national product at market price from the following data:** |		₹ Crores
1.	Rent	100
2.	Social security contributions by employers	47
3.	Mixed income of self emp o ed	600
4.	Gross domestic capital formation	140
5.	Royalty	20
6.	Interest	110
7	Compensation of employees	500
8.	Net domestic capital formation	120
9.	Net factor income from abroad	(-) 10
10.	Net indirect tax	150
11.	Profit	200 | Depreciation = Gross Domestic Capital Formation – Net Domestic Capital Formation = 140 – 120 = ₹ 20 crores GNPmp = Compensation of Employees + Rent + Royalty + Interest + Profits + Mixed Income of Self-Employed + Net Factor Income from Abroad + Depreciation + Net Indirect Taxes = 500 + 100 + 20 + 110 + 200 + 600 + (-) 10 + 20 + 150 = 1700 – 10 = ₹ 1690 crores	1 MARK FOR FINDING DEPRECIATION 5 MARKS FOR FINDING GNPmp
23.	**Explain the determination of equilibrium level of income in the economy using Savings-Investment approach. What adjustments will be made if the economy is not at equilibrium? (Use diagram)** **<u>Savings plus Investment Approach (S+I Approach)</u>** Each point on the savings function shows the desired or planned savings at that income level. The investment demand curve is a horizontal line. At equilibrium, firms plan to invest exactly the same amount regardless of the level of output equal to what households plan to save every year.  **<u>Adjustment Mechanism</u>** When economy is at a level of output where savings is greater than investment, it will create an undesired, unplanned build-up of inventories of unsold goods. To reduce the unsold inventories to the desired level firms will cut back production and reduce employment. The effect of this will be to reduce output until the economy returns to equilibrium and there is no further tendency to change. When the economy is at a level of output where savings is less than investment it will cause an unplanned, undesired reduction in inventories of unsold goods. The actual level of investment will be less than the planned level of investment. In order to increase inventories, firms will increase production and increase employment. The effect of this will be to increase output till the economy returns to equilibrium and there is no further tendency to change.	3 MARKS FOR EQUILIBRIUM 3 MARKS FOR ADJUSTMENT MECHANISM

24.	**Explain the meaning of 'deficient demand' using a diagram. What monetary policy measures are suggested to remedy the situation of deficient demand?** Deficient demand or deflationary gap is when AD at a level of output is less than the full employment level of output OR AD < AS. Total demand for goods and services is not sufficient to meet the full employment output. This gives rise to deflationary gap.  Q* is the full employment level of output. Aggregate demand that establish full employment output is Q*F. Aggregate demand curve that establish full employment is $(C+I)_1$. The actual aggregate demand in the economy $(C+I)_0$ is less than the planned income and output by FG. This is deflationary gap. **Monetary policy** Legal Reserve Ratio: Reducing the percentage of LRR will give banks more financial resources to create credit and increase money supply. This will in turn push up consumption expenditure and Investment expenditure. **Reduction of Repo Rate:** Reducing Repo Rate will enable banks to take more short term loans from central bank. This will increase availability of credit at lower interest rates. At a lower rate of interest business men will take more loans to invest. **OR** **Explain the meaning of 'excess demand' using a diagram. What fiscal policy measures are suggested to remedy the situation of excess demand?** Excess demand refers to a situation when aggregate demand (AD) at a level of output is in excess of aggregate supply (AS) corresponding to full employment in the economy. It causes inflationary gap in the economy. Excess demand gives rise to an inflationary gap; which causes a rise in the price level or inflation.  Q* is the full employment level of output. Aggregate demand that establish full employment output is Q*F. Aggregate demand curve that establish full employment is $(C+I)_0$. The actual aggregate demand in the economy is $(C+I)_1$ is greater than the planned income and output by FG. This is inflationary gap. **Fiscal measures:** (a) **Reduce government expenditure** by an amount equal to the excess demand in the economy. This will push down AD till equilibrium is attained (b) **Increase rate of personal tax:** This will reduce disposable income and push down consumption expenditure and investments till equilibrium is attained	4 MARKS FOR DEFICIENT DEMAND AND DIAGRAM 2 MARKS FOR MONETARY POLICY 4 MARKS FOR EXCESS DEMAND AND DIAGRAM 2 MARKS FOR FISCAL POLICY