

Roll No:

INSTITUTE FOR SOCIAL AND ECONOMIC CHANGE
BANGALORE
SUBJECT: ECONOMICS
Pattern Question Paper - 2021

Duration: Three hours

Max. Marks: 100

General Instructions :

PART - A (40 Marks)

[Note: Answer all the 40 questions. Each question carries 1 mark].

1. A firm under perfect competition faces for its product
 - a. A horizontal demand curve
 - b. A downward sloping demand curve
 - c. An upward rising demand curve
 - d. A vertical demand curve

2. The Engel curve passes through the tangency point of
 - a. Budget line and indifference curve
 - b. Price line and iso-cost curve
 - c. Iso-quant and budget line
 - d. None of these

3. Price increases from 10 to 12 rupees and the price elasticity of demand is -0.5. The quantity demanded was 500 units. What will it be now?
 - a. 550 units
 - b. 500 units
 - c. 450 units
 - d. 490 units

4. An outward shift of the production possibility frontier may be caused by :
 - a. An increase in demand
 - b. More government spending
 - c. Better training of employees
 - d. Productive inefficiency

5. In monopolistic competition firms profit maximise where:
 - a. Marginal revenue = Average revenue
 - b. Marginal revenue = Marginal cost
 - c. Marginal revenue = Average cost

- d. Marginal revenue = Total cost
6. If the cross price elasticity of demand is positive between two goods, they are called
- complements
 - substitutes
 - normal goods
 - inferior goods
7. Inverse demand function expresses
- Quantities as a function of prices
 - Quantities as a function of prices and income
 - Prices as a function of quantities
 - Price ratios as a function of quantity ratios
8. A social welfare function defined by the sum of utilities of every member of society is called
- Benthamite social welfare function
 - Rawlsian social welfare function
 - Millian social welfare function
 - Sen's social welfare function
9. Okun's law postulates a –
- Positive relationship between unemployment and real gross domestic product
 - Negative relationship between unemployment and real gross domestic product
 - Positive relationship between money supply and price level
 - Negative relationship between money supply and rate of interest
10. The aggregate demand curves slopes downwards because an increase in price level leads to
- Reduction in real balances and increase in interest rate
 - Increase in the interest rate and reduction in aggregate spending
 - Reduction in real balances alone
 - Reduction in real balances, increase in interest rate and reduction in aggregate spending

PART - B (60 Marks)

Note: Answer any four of the following questions - each question carries equal 5 marks.

[Note: All answers must be technical by using appropriate diagrams and/or equations].

1. Distinguish the profit maximizing condition of a competitive firm between short and long run ?
2. Explain the derivation of ordinary demand curve from the price consumption curve by using the technique of indifference curves?
3. What do mean by returns to scale in production? Explain under what conditions a Cobb-Douglas production exhibits those returns to scale?
4. The graph below shows the perfectly competitive market for Cement in Country India. In the graph the letters correspond to points, not areas. MPC denotes marginal private cost and MSB denotes marginal social benefit.

(a) Using the labeling on the graph, identify the area representing each of the following at the market equilibrium.

(i) The consumer surplus

(ii) The producer surplus

(b) Assume that the production of each unit of Cement bag creates a negative externality equal to $(p_5 - p_2)$.

Using the labeling on the graph, identify the socially optimal quantity.

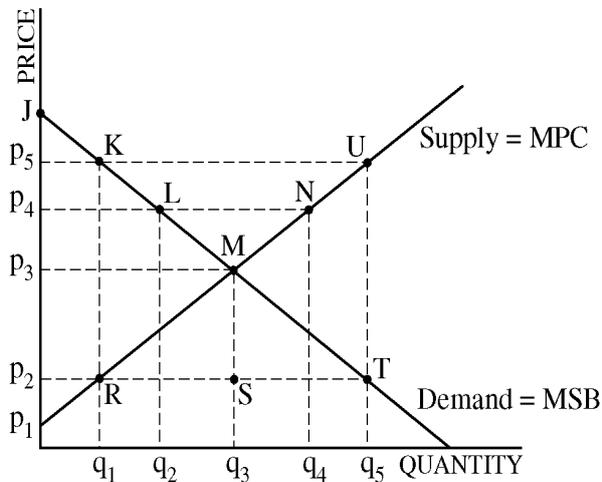
(c) Assume that the government imposes a per-unit tax of $(p_5 - p_2)$ to correct for the

negative externality.

Using the labeling on the graph, identify the area representing each of the following.

(i) The consumer surplus

(ii) The deadweight loss



5. Write a note on Baumol's sales revenue maximization models?
6. Suppose the market demand for pizza is given by $Q_d = 300 - 20P$ and the market supply for pizza is given by $Q_s = 20P - 100$, where P = price (per pizza).
 - a. Graph the supply and demand schedules for pizza using \$5 through \$15 as the value of P .
 - b. In equilibrium, how many pizzas would be sold and at what price?
 - c. What would happen if suppliers set the price of pizza at \$15?
 - d. Find the new equilibrium price and quantity of pizza.

[Note: Answer any four of the following questions - each question carries equal 5 marks].

1. Write the equation of a simple aggregate demand curve (required to draw the IS curve) and show diagrammatically. What happens in case of a aggregate demand curve if the marginal propensity to consume is greater than unity? Explain if we are going to face any problem. How a change in interest rate is going to affect the aggregate demand curve? 2+ 2+ 1
2. Consider a simple standard Mundell-Fleming model (open economy) :

IS- Curve relation: $Y = C (Y-T) + I (r) + G + NX (e)$
LM Curve relation : $M/P = L (r, Y)$
 $r = r^*$, fixed at the level of world interest rate.
Y aggregate income, C: Consumption, I: investment, G: Govt. Purchases, NX net exports, e: exchange rate, i.e, amount of foreign currency per unit of Indian rupee.
Net export depends negatively on exchange rate; Investment depends negatively on interest rate.
 - a) For the above economy show the IS and LM curves (Y against e) . Explain their shapes clearly. 3
 - b) If there is a tax cut what happens to income and exchange rate. 2
3. What is liquidity trap? How output changes if central bank increases money supply in a liquidity trap situation. Explain clearly using IS-LM framework and diagram. 1+4
4. What is crowding out effect? Explain (with IS-LM model) a situation when fiscal policy has full crowding out effect.
5. Discuss the circumstances under which change in government expenditure will have zero multiplier effect on income. Explain in words why this can happen and how likely you think this is.

PART-C

6. Suppose we have an economy described by the following functions:

$$C = 50 + 0.8YD$$

$$\bar{I} = 70, \quad \bar{G} = 200, \quad \bar{TR} = 100, \quad t = 0.20$$

- a. Calculate the equilibrium level of income and the multiplier in this model
- b. Calculate also the budget surplus
- c. Suppose that t increases to 0.25, what is the new equilibrium income? The new multiplier?
- d. Calculate the change in budget surplus. Would you expect the change in the surplus to be more or less if $MPC = 0.9$ rather than 0.8?

PART - D

[Note: Answer any three of the following questions - each question carries equal 5 marks].

1. What does a contingency table actually depict? You can give an example to explain this. Explain in words what the null and alternative hypotheses are when you organize information in a contingency table. What is the name of the test statistic that you use to test the hypothesis?
2. How do you find out the marginal contribution of adding new variable in the regression model ?
3. Where does the Central Limit Theorem figure into hypothesis testing in regression models?
4. What are the consequences of Multicollinearity? Explain Klien's rule of thumb procedure for detecting Multicollinearity.
5. Consider the following modified Keynesian model of income determination:

$$C_t = \beta_{10} + \beta_{11}Y_t + u_{1t}$$

$$I_t = \beta_{20} + \beta_{21}Y_t + \beta_{22}Y_{t-1} + u_{2t}$$

$$Y_t = C_t + I_t + G_t$$

Where, C = consumption expenditure

I = investment expenditure

Y = income

G = government expenditure

G_t and Y_{t-1} are assumed predetermined

- a. Obtain the reduced form equations and determine which of the preceding equations are identified (either just or over)
- b. Which method will you use to estimate the parameters of the over identified equation?

PART - E

[Note: Answer any two of the following questions - each question carries equal 7.5 marks].

1. Discuss the expansionary fiscal policy measures initiated by Government of India during the recent global recession and how beneficial these measures have been in reviving the economy?
2. What is your understanding of the public sector disinvestment policy in India? Discuss the broad measures and their implications?
3. IT sector has contributed significantly to India's economic growth. Do you agree with this statement, justify?
4. Discuss the recent concerns on the official estimates of poverty in India. Analytically discuss the salient features of the expert group to review the methodology for estimation of poverty (Suresh Tendulkar Committee (2009)?