Time : Three Hours   Full Marks: 40

Questions are of value as indicated in the margin
Answer **any four** questions

1 Consider a monopolist selling a durable good. How does the selling strategy of the monopolist differ from that of an ordinary monopolist? If the monopolist were to sell the good over several periods, how would the prices change, assuming that the demand for the product remains the same in every period?   6 + 4

2 Suppose two firms producing a homogeneous product engage in price competition and set up their locations at two extreme ends of a linear city. If transport cost of theconsumers who are uniformly distributed within these two limits is quadratic what would be the demandfunction facing the two firms? What would be the equilibrium prices and profits ofthe two firms?4 + 6

3. Explain how an owner in a Cournot Oligopoly can gain by delegating /hiring a manager who is paid a compensation based on a combination of sales and profits. How are total output, prices and profits affected if both firms hire managers?   5 + 5

4. Consider a duopoly market with differentiated products where firms compete in quantities.
(a)Will the firms prefer to be a leader or follower in this Stackelberg type Quantity Leadership game?(b)Will their preference to be leader or follower remain the same under Price Leadership?   5 + 5

5 Explain the model of Dixit where a monopolist incumbent tries to deter a potential entrant from entering the market. What will be the cost faced by the entrant in trying to deter entry? Willsuch an attempt be always successful?   5 + 2 + 3

6. Show that in a market with a linear demand curve, if there are n firms with symmetric unit costs, a horizontal merger between any m < n firms where n ≥ 3 does not resultin gains for the constituent firms unless a sufficiently large number of firms merge. Is merger likely to be more profitable if there exist 'synergies'?   7 + 3

7Consider a situation where there are 2 upstream and 2 downstream firms where D1 and D2 can buy inputs from both U1 and U2. Suppose cost of one upstream firm (U1) is lower than the other (U2) show that both D1 and D2 make more profits by buying from U1.Show that if U1 and D1 integrate vertically, the profit maximizing integrated firm still sells to D2 but less than before.   10

8   How is licensing through a fixed fee different from licensing by royalty. Is one methodlikely to generate more profits for an outside innovator than the other? Explain.   4 + 6

M.A. Examination, 2022
Semester-III
Economics
Course: Paper – OP-3 (Trade Theory)

Time: 3 Hours   **Full marks: 40**

Questions are of value as indicated in the margin
Attempt **ALL the questions.**

1. (a) Mathematically deduce the Marshall-Lerner condition for stability of the trade equilibrium.
   (b) Gains from trade is usually caused by the differences in commodity prices across countries. This may be naturally viewed as price effect in trade. So, can you decompose such gains from trade into substitution and income effect?   (3+7)

OR

2. Explain why demand has no role in determining autarkic equilibrium commodity price ratio in a traditional Ricardian framework of trade in a competitive environment. If it is true for all the trading countries, then why trade occurs between them? Use proper diagram to explain your answer.   (10)

3. Consider a 2X2X2 general equilibrium model of trade where both the goods are produced by two factors of production, viz. L and K which are perfectly mobile across sectors, and fully employed. Production functions follow standard constant returns to scale (CRS) and diminishing marginal productivity (DMP) of factors. Factor intensities of the goods are, however, different. In this backdrop examine, both diagrammatically and mathematically, the output effect of a change in the endowment of L.   (10)

OR

4. Do you think that Ricardian principle of comparative cost advantage is valid even when we consider trade in intermediate inputs? How can we determine the trade pattern in such a situation?   (5+5)

5. Explain the effects of a change in the commodity price on the return to various factors of production in a Jonesian specific factor model (SFM). Also provide intuitive explanations for your mathematical results.   (6+4)

OR

6. Assume that two goods X and Y are produced in a small country. Both X and Y use a mobile factor K, whereas they use labor of different skills as specific factors. Build a specific factor competitive model of trade under the assumption of full employment and constant returns to scale in production. In such a setup, examine the condition for an increase in wage-inequality between differently skilled labor due to outward migration of any type of labor.   (10)

7. Using a monopolistically competitive model of trade with full employment assumption, where demand function is characterized by love-for-variety, argue that in the long run history matters in determining the equilibrium real wage rate.   (10)

OR

8. Consider two groups of product variety where degree of substitution among varieties is very high within the group and relatively low between the groups. Show that in such a love-for-variety structure, elasticity of demand should be same for both the groups.   (10)

MA(Economics) Examination2022
Semester-III
Economics
Course: OP-4 (Optional)
(Public Economics and Policy)

Questions are of value as indicated in the margin

Time: 3 Hours

Full Marks: 40

Answer any Four Questions

1.   (a)Discuss different ideas of social justice. Is social justice as equality necessarily efficient?

   (b)When a public policy is proposed for which total benefit exceed total costs but some people lose, would you insist on an actual compensation for losers before agreeing to implement the policy?

6+4=10

2.   (a)What is the difference between the summation of benefits to establish total demand for private and public goods?

   (b)'Free riding results in efficient provision of a public good". Prove the statement with a public good 'Prisoners' dilemma' example.

4+6=10

3.   For National defense as a public good, how does the Prisoners' dilemma arise both between countries and within a country?

5+5=10

4.   (a)How does the Pigouvian Tax restore efficient outcome by internalizing externalities?

   (b) If the equation of the inverse demand function in a perfectly competitive market is $P=450 - 2Q$, the equation of the private MC curve is $MC_p=30+2Q$, the marginal externality cost is $MC_e=Q$, then find, (i) the price and quantity in competitive equilibrium(ii)the socially optimum price and quantity (iii) What the rate of Pigouvian Tax per unit of output would achieve the social optimum?

4+6=10

5.   (a)Define excess burden of taxation. How do you measure it?

   (b)What is the efficient Ramsey Rule for efficient commodity Taxation in a two goods economy? How is the rule derived?4+6=10

6.   (a) Can a monopolist shift the burden of a tax per unit quantity entirely on to the consumers? Explain.

   (b)How does the shift of tax burden depend on the supply and demand elasticities?

4+6=10

7.   Discuss the advantages and limitations of a centralized government on the basis of allocation, distribution and stabilization function.

10

8.   Write Short notes: (any Two)

5+5=10

   (a) Politics of Logrolling
   (b) Voting cycle and Agenda Manipulation.
   (c) Coase Theorem.
   (d) Lindahl Mechanism

M.A. Examination, 2022
Semester-III
Economics
Course: OP- 5 (Optional)
(Advanced Econometrics-I)

Time: 3 Hours   **Full marks: 40**

Questions are of value as indicated in the margin

Answer **question 1**

1. State whether the following statements are true (T), False (F) or uncertain (U). Give reasons for the same:
   - (a) In regression models, a trichotomous explanatory variable can be represented by a dummy variable with three different values.
   - (b) Parameter estimates of Logit Model and Probit model are always identical.
   - (c) In small samples, the 2SLS procedure may lead to biased estimation.
   - (d) In the distributed lag model, the OLS procedure produces asymptotically biased estimates.

$$4 \times 4 = 16$$

Answer **question 2 OR question 3**

2. (a) What is the fundamental problem associated with the Linear probability Model?
   (b) Consider data on a sample of 750 loan applications in an Indian Bank. Out of these 500 loan applications were accepted and 250 loan applications were rejected. Considering, applicants' income, sex, marital status, education as explanatory variables, suggest a suitable econometric model to identify the factors determining the chance of applicants receiving the loan. How do you estimate such a model? How do you measure the goodness of fit of such a model?

$$2+2+6+2=12$$

3. (a) Distinguish between multinomial regression models and ordinal regression models.
   (b) Consider data on 550 individuals on their choice of three modes of travel – air, train and bus and individuals' income, location of stay, level of education, gender and location of stay. How does an individual decide among these choices? How do you estimate such a model?

$$4+8=12$$

Answer **question 4 OR question 5**

4. (a) State the rank and order condition for identification of a simultaneous equation system.

(b) In a model of the money market, the demand for money depends on the interest rate and the population while interest rate depends on the quantity of money, the discount rate and the excess reserves. Assume the money market is in equilibrium, where the demand for money equals the quantity of money. Assume the quantity of money and the interest rate are endogenous while the population, the discount rate and the excess reserve are exogenous. Each equation of the model is linear and stochastic but contains no intercept.

(i) Construct a simultaneous equation model for this problem and express the structural form equations and reduced form equations.

(ii) Examine the identification status of each of the equations.

$$2+4+6=12$$

5. Consider the following equations:

$$Y_{1t} = \beta_{12} Y_{2t} + \gamma_{11} X_{1t} + U_{1t}$$
$$Y_{2t} = \beta_{21} Y_{1t} + \gamma_{22} X_{2t} + \gamma_{23} X_{3t} + U_{2t}$$

Given the data matrices,

$$X'X = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 20 & 0 \\ 0 & 0 & 10 \end{pmatrix}$$

$$X'Y = \begin{pmatrix} 5 & 10 \\ 40 & 20 \\ 20 & 30 \end{pmatrix}$$

Show that for the second equation ILS estimates and 2SLS estimates are identical.

12

Questions are of value as indicated in the margin

Time: 3 Hours   Full Marks: 40
Answer any Four Questions

1. Discuss in brief, the political and economic context in which development economics emerged as a separate discipline. How did this context shape the nature of this discourse?

4+6=10

2. What are the fundamental characteristics of the contemporary paradigm of development management? Do you think that this new discourse is able to resolve the traditional growth-development conflict?   7+3=10

3. Using a Kaleckian three-department model, show the formal-informal resource conflict. Can you relate it to the phenomenon of Accumulation by Dispossession? Discuss.   8+2=10

4. Critically analyse the mainstream demand-side critique of a strategy of cash transfer to solve the problem of inequality. What do you think is the fundamental problem in this context? How can you resolve this contradiction? Suggest a particular policy.   3+4+3=10

5.(a) Explain Antonio Gramsci's concept of Cultural Hegemony.
   (b) Why does Edward Said find the concept of "Orientalism" problematic?   5+5

6. How Marx conceives social transformation as a result of conflict between forces of production and relations of production.   10

7. What did Lenin mean by concentration of production? Explain the concepts of (i) Combination of Production and (ii) Socialisation of Production   2+4+4=10

8. Analyse critically any two of the following: 2x5=10
a. Employer of Last Resort strategy.
b. Conditional Cash Transfer.
c. Formal-Informal symbiosis.
d. Inclusive Growth.

Time: 3 Hours

Full marks: 40

Questions are of value as indicated in the margin

Answer any **four** questions:

1. What makes some cities more economically successful than others? Discuss the role of economic policies in shaping inter-city and intra-city differences in development outcomes.

   5+5 =10

2. Do you think that the idea of 'creatively destructive neoliberalism' is useful for understanding the path-dependent interactions between existing institutional forms and emergent neoliberal projects in the cities of developing countries?

   10

3. How far does the New Urban Policy reflect the rhetoric of New Economic Policy? How does the New Urban Policy shape the pursuit for urban growth and it's transformation?

   4+6=10

4. How does fiscal decentralization facilitate accountability in local government finance? How do the local governments bridge the gap between their revenue raising abilities and expenditure responsibilities?

   5+5 = 10

5. What are the roadblocks to urban governance reforms in India? Suggest some suitable policy options to overcome them.

   7+3 = 10

6. How does the 'informality' shape the urban planning in India? How far is the dominant discourse on 'informality' useful for understanding urban planning crisis in India?

   5+5 = 10

7. What do you understand by affordable housing in the context of Indian cities? What are the plausible interventions policy makers can make to increase the supply of "affordable housing" in India?

   3+7 = 10

8. Discuss the reasons behind the poor financial health of the Urban Local Bodies in India? Discuss the reform options to improve the financial health of the Urban Local Bodies in India.

   5+5 = 10

MA Examination 2023
Semester III
Economics
Course OP-1
(Industrial Organization)

Time 3 hrs

Full Marks 40

Questions are of value as indicated in the margin
Answer *any four* questions

1. Consider a monopolist producer selling a durable good that lasts two periods with zero depreciation. Assuming that both the consumer and producer discount the future at the same rate (δ), show that
   (a) The monopolist who decides to rent/lease the product produces only in period 1 and charges the monopoly price in every period
   (b) The monopolist who sells the product will produce both in period 1 and period 2 and charge a lower price in period 2 compared to period 1

   4+6

2. Consider a situation where a consumer with taste parameter (or 'type') obtains net utility
   $$U = \theta s - p$$ if she buys 1 unit (maximum) and $U = 0$ if she does not
   from consuming quality s at price p. Consumers are distributed in the economy according to Cumulative distribution function $F(\theta)$, on $(0, \infty)$ with $F(0) = 0$ and $F(\infty) = 1.$
   If there are two firms in the market offering qualities $\theta_1, \theta_2, \theta_2 > \theta_1$, then (assuming that every consumer buys 1 unit and there is sufficient consumer heterogeneity)
   (a) Find the demand function of each firm
   (b) Show that the firm selling the higher quality makes more profits

   4+6

3 (a) Show in a model of Singh-Vives type of product differentiation that the reaction functions of two firms producing substitute goods and engaged in Bertrand price competition are both upward sloping.
   (b) Will the result remain the same if the goods are complements?

   6 + 4

4. (a) Explain the double marginalization problem whereby the vertical integration of an upstream and a downstream monopoly generates greater profits than if they operate separately.
   (b) Does the problem persist under a vertical duopoly. Explain.

   4 + 6

5. Discuss how an incumbent monopolist can deter entry by a potential entrant when there is asymmetric information regarding costs in the Limit Pricing Model of Milgrom and Roberts. Specifically explain how in a Pooling Equilibrium the low cost (inefficient) monopolist charges a first period price that is lower than its ordinary monopoly price to deter entry.

10

6. Consider a market with a linear inverse demand curve

$$p = aq - bQ, \qquad Q = \sum_{i=1}^{n} q_i$$

And $n \geq 3$ firms with identical unit cost c and who engage in Cournot quantity competition. If any $m \leq n$ of these firms merge (horizontally), then

(a) The profits of the unmerged/ standalone firms always increase

(b) The joint profits of merged firms are often smaller than the sum of their premerger profit unless a high enough number of firms merge

4+6

7. Consider a monopolist selling in a market with two types of consumers – 'low demand type' with probability x and 'high demand type' with probability $1 - x$. The monopolist cannot distinguish between these two types of consumers but must sell to both types (to be profitable). Explain why the optimal payment scheme devised by the monopolist

(a) will yield lower profits compared to the case where he is able to clearly identify the two types

(b) the high demand type will always obtain some positive consumers' surplus

4+6

8. (a) Distinguish between drastic and non-drastic innovation.

   (b) If the original patent holder for an innovation is not a producer in an oligopoly market, explain why

   i. the patent holder makes the greatest profit by licensing the innovation to one firm in case of drastic innovation so that the market ends up as a monopoly

   ii. in case of a non-drastic innovation the patent holder gains by licensing the innovation to more than one producer.

   2+4+4

2

M.A. Examination, 2023
Semester-III
Economics
Paper – OP-3
(Trade Theory)

Time: 3 Hours   **Full marks: 40**

Questions are of value as indicated in the margin

*Question **no. 1 is compulsory**. Attempt **any THREE** from the remaining questions*

1. (a) Mathematically establish the Marshall-Lerner condition for trade
   equilibrium.   5
   (b) Briefly explain the phenomenon of Dutch disease.   5

2. Using simple Ricardian model, do you think that one can also explain the
   possibility of trade in case of intermediate inputs being vertically integrated
   to produce the final good.   10

3. Formulate a standard specific factors model of trade with two goods and
   three factors of production to argue that emigration of workers, which are
   specific factors in the production set up, may not necessarily aggravate wage
   inequality in a small open economy.   10

4. Both mathematically and diagrammatically examine the magnification effects
   in Rybczynski arguments?   10

5. "In an imperfectly competitive trade model history matters in determining
   the equilibrium real wage rate in the long run." – Elucidate.   10

Time : 3 Hours   **Full Marks: 40**

Questions are of value as indicated in the margin

Answer any four from the following

10x4=40

1. (a) Discuss the different ideas of social justice. Is social justice as equality necessarily efficient?

    (b) Show using a prisoners' dilemma example, absence of rule of law produces inefficiency.

6+4=10

2.. (a) What is an information problem in the context of optimal provision of a public good?

    (b) Does government intervention necessarily solve the problem? Explain.

    (c) What did Lindahl propose to solve the information problem?

2+3+5=10

3. (a) Can free riding be impossible? Explain it with an appropriate example.

    (b) Can free riding be efficient? Give an example and logically explain why it is so.   5+5=10

4. (a) What is the relation between single-peaked preferences and stability in majority voting equilibrium?

    (b) Show how multi-peaked preferences give rise to voting cycle.

    (c) "Public spending determined by a median preference pleases only the median voter" Does this statement suggest that the median voter is dictating public choice? Can the choice by the median voter be efficient? Explain.

3+3+4=10

5. (a) How is Coasean approach different from Pigouvian approach in internalizing external costs in production?

    (b) The equation of the inverse demand function in a perfectly competitive market is P=400 – 2Q, the equation of the private MC curve is MC_p=25+2Q, the marginal externality cost is MC_e=Q.Then find, (i) What is the price and quantity in competitive equilibrium? (ii) What is the socially optimum price and quantity? (iii) What rate of Pigouvian Tax per unit of output will achieve the socially optimum?

4+6=10

6. (a) What is the efficient Ramsey Rule for efficient commodity taxation in a two good economy? How is the rule derived?

    (b) Is Ramsey rule progressive? Explain. Explain the concepts of Vertical and Horizontal Equity.

5+5=10

7. (a) Can a monopolist shift the entire burden of a unit tax on the consumers? Explain..

    (b) How does the shift of tax burden depend on the supply and demand elasticities?   4+6=10

8. Discuss the advantages and limitations of a centralized government on the basis of allocation, distribution and stabilization function.

10

Time: 3 Hours

Full marks: 40

Questions are of value as indicated in the margin

Answer **question 1**

1. State whether the following statements are true (T), False (F) or uncertain (U). Give reasons for the same:
   (a) In regression models, a trichotomous explanatory variable can be represented by three dummy variables.
   (b) In a Tobit Model, Tobit coefficient of a regressor gives the marginal impact of that regressor on the mean value of the observed regressand.
   (c) The problem of simultaneity does not arise in a recursive simultaneous equation model.
   (d) The OLS method can be applied for estimation of an autoregressive model.

   $4 \times 4 = 16$

Answer **question 2 OR question 3**

2. (a) Suppose a researcher have data on medical expenditure, income and family size of a sample of 500 individuals. Some of them who did not have any ailments or did not bother to go to the doctor even if they had ailments, had no medical expenditures. Suggest a suitable econometric model to identify the determinants of medical expenditure. How do you estimate such a model?
   (b) Can you use the conventionally computed R^2 to measure the goodness of fit in case of qualitative response regression models? Justify your answer.

   $2+7+3=12$

3. (a) Consider data on 1000 individuals on their choice of occupation – self-employment, casual labour and industrial worker and individuals' income, location of stay, level of education, and gender. Suggest a suitable econometric model for determination of occupational choices? How do you estimate such a model?
   (b) How do you compute the marginal effects in a Logit regression model?

   $2+7+3=12$

Answer **question 4 OR question 5**

4. (a) Consider the following equations:
$$Y_{1t} = 3Y_{2t} - 2X_{1t} + X_{2t} + u_{1t}$$
$$Y_{2t} = Y_{3t} + X_{3t} + u_{2t}$$
$$Y_{3t} = Y_{1t} - Y_{2t} - 2X_{3t} + u_{3t}$$
Check the identification status of these equations.

(b) Consider the following SKM of income determination:

$$C_t = \beta_0 + \beta_1 Y_t + U_t$$

$$Y_t = C_t + I_t$$

Can you apply OLS method to estimate β_1? Justify your answer.

$$7.5 + 4.5 = 12$$

5. (a) Consider the following equations:
$$Y_{1t} = \beta_{12} Y_{2t} + \gamma_{11}X_{1t} + \gamma_{12}X_{2t} + U_{1t}$$
$$Y_{2t} = \beta_{21} Y_{1t} + \gamma_{23}X_{3t} + U_{2t}$$
Given the data matrices,

$$X'X = \begin{pmatrix} 10 & 0 & 0 \\ 0 & 5 & 0 \\ 0 & 0 & 10 \end{pmatrix}$$

$$X'Y = \begin{pmatrix} 10 & 20 \\ 20 & 10 \\ 30 & 20 \end{pmatrix}$$

Find out the 2SLS estimates of the parameters of the second equation.
(b) Consider a simultaneous equation system of G endogenous and K exogenous variables. Derive the 3SLS estimates of the parameters of the system.

$$6 + 6 = 12$$

MA Examination 2023
Semester III
Economics
Course OP - 6
(Political Economy of Development)

Time: 3 Hours   Full Marks: 40

Questions are of value as indicated in the margin
Answer any four questions

1. Critically discuss Marx's theorization of community based Asiatic mode of production as 'oriental despotism' and the role of colonial imperialism to move the society towards capitalism.   7+3=10

2. Do you think that the corporate led high growth rate in a developing country like India has initiated any process of inclusive development following the theory of trickle down? Critically discuss.   10

3. Compare and contrast Chinese and Indian experience of growth and development during the last few decades of globalization.   10

4. Differentiate between 'comparative advantage' and 'competitive advantage' in the context of the theorization of globalization and trade liberalization.   10

5. What are the fundamental tenets of the paradigm of development management? Discuss in detail.   10

6. Using a macroeconomic model, show the conflict between the formal and informal sectors of a developing economy.   10

7. Using a macroeconomic model, show the contradiction between the strategies of development management and modern industrialization. How can this conflict be mitigated?   7+3=10

8. Differentiate between "pure enterprise " and "combined enterprise" with example. Why do combined enterprises have an edge over pure enterprises? Trace the phases of evolution of monopoly concentration of production in European economic history during the second half of 19th century with examples.   3+3+4=10

M.A. Examination, 2024
Semester-III
Economics
Course: ECPO 05 (Regular)/OP- 05 (Back) (Optional)
(Advanced Econometrics-I)

Time: 3 Hours

Full marks: 40

Questions are of value as indicated in the margin

Answer **question 1**

1. State whether the following statements are true (T), False (F) or uncertain (U). Give reasons for the same:
   (a) Among the qualitative response regression models, parameter estimates of Logit Model and Probit model are always identical.
   (b) In a Tobit Model, the Tobit coefficient of a regressor gives the marginal impact of that regressor on the mean value of the observed regressand.
   (c) Application of the 2SLS method to an equation in simultaneous equation system produce biased estimation.
   (d) In the distributed lag model, the OLS procedure produces asymptotically biased estimates.

   4 X 4 =16

Answer **question 2 OR question 3**

2. (a) Suppose a researcher is interested to identify the socio-economic variables that influence denying mortgage application by a bank. She/he has data on the status of mortgage applications along with family income, loan liability, gender and caste of 1500 individuals. Suggest a suitable econometric model for this problem. How do you estimate such a model?
   (b) How do you calculate the marginal effect of family income?
   (c) How do you measure the goodness of fit of such model?   7 +2 +3=12

3. (a) Consider data on 1182 individuals on their choice of fishing mode – beach, private boat and charter boat along with their income, location of stay, level of education, and gender. Suggest a suitable econometric model for determination of fishing modes? How do you estimate such a model?

   3 +9 =12

4. (a) In a model of the agriculture economy, agricultural productivity depends on agricultural income, fertilizer use and land under irrigation; agricultural income depends on agricultural productivity and access to market. Assume that the agricultural productivity and agricultural income are endogenous variables (Y) and the rest are exogenous variables (X). Each equation of the model is linear and stochastic but contains no intercept.

   (i)   Construct a simultaneous equation model for this problem and express the structural form equations and reduced form equations.

   (ii) Examine the identification status of each of the equations.

   (b)   Given the data matrices,

$$X'X = \begin{pmatrix} n & 0 & 0 \\ 0 & n & n \\ 0 & n & 2n \end{pmatrix}$$

$$X'Y = \begin{pmatrix} n & n \\ n & 3n \\ 0 & 4n \end{pmatrix}$$

   Find out the 2SLS estimates of the parameters of the second equation.

$$4 + 4 + 4 = 12$$

5. (a) How do you estimate a recursive simultaneous equation model?
   (b) Consider a simultaneous equation system of G endogenous and K exogenous variables. Derive the 3SLS estimates of the parameters of the system.

$$4 + 8 = 12$$

Time: 3 Hours

Full marks: 40

*Attempt **any FOUR**. Questions are of value as indicated in the margin*

1. Consider a monopoly market characterized by the linear demand curve $q = 1 - p$ where valuation of the product is denoted by θ with $\theta \in [0,1]$. The consumer buys the product if $\theta \geq p$. Marginal cost of production is assumed as zero. In this setup compare consumer surplus (CS), producer surplus (PS), and dead weight loss (DWL) under uniform pricing and group pricing. (10)

2. Consider the Hotelling location model of Oligopoly with two sellers selling a homogenous product, with reservation value r, to consumers located at $x \in [0,1]$. In order to purchase goods buyers need to spend τ amount of transportation cost per unit of distance. Calculate the Nash equilibrium profit of both the firms when neither firms acquire information about the consumer and their location. (10)

3. The indirect utility function is $v = u(\theta, s) - p$ where θ = consumers' preference; s = quality of the product; p = price of the product. Also assume that λ proportion of H-type customers are having θ_2 as preference which is higher than $(1 - \lambda)$ proportion of L-type customers' preference, θ_1. Note that $0 \leq \lambda \leq 1$. The costs of producing exogenously given quality of the product are c_1 and c_2 for qualities s_1 and s_2, respectively. In this context, explain why menu pricing is not optimal when pricing is based on different quality levels, and consumers' net satisfaction depends on quality and prices. (10)

4. Say, there are two goods A and B with valuation θ_A and θ_B, respectively. The valuations are independent and uniform over [0,1] for consumers distributed uniformly over the unit square with a density $f(\theta_A, \theta_B)$. Compare the prices and profits under separate selling and under bundling. Also check the number of marginal consumers in these two cases. (10)

5. Consider the differentiated product model of Singh and Vives (1984). How do the demand curves look like in the two models? Show that prices will be higher when firms compete in qualities than when they choose to compete in prices. (2+8)

6. Consider a market with an incumbent monopolist and a potential entrant planning to enter the market. Assume that if the incumbent behaves like an ordinary monopolist, the entrant will always enter the market. In your model what actions can the monopolist take to deter the entrant? When will such an action be successful?

(2+8)

7. Show that in a market with a linear demand curve, if there are n firms with the same constant unit costs, a horizontal merger between any $m < n$ firms where $n \geq 3$ results in (a) gains for non-merged firms but (b) does not result in gains for the constituent firms unless m is large relative to n . Is merger likely to be more profitable if there exist 'synergies'?

(2+6+2)

8. Distinguish between 'drastic' and 'non-drastic' innovation. Why does a firm in possession of a drastic innovation (inside innovator) unlikely to license it to a competitor but one with a non- drastic innovation does so? How is licensing through a fixed fee different from licensing by royalty. Is one method likely to generate more profits for an outside innovator than the other? Explain.

(2+2+2+4)

Time: 3 Hours   Full marks: 40

*Attempt **any FOUR**. Questions are of value as indicated in the margin*

1. (a) Mathematically derive the Marshall-Lerner condition for stability of trade equilibrium.
   (b) Explain why demand has no role in determining the relative price in an autarkic equilibrium in a standard Ricardian model.

                                                                        (5+5)

2. Do you think that Ricardian principle of comparative cost advantage is valid even when we consider trade in intermediate inputs? How can we determine the trade pattern in such a situation?   (5+5)

3. Elaborate how one can determine the equilibrium wage ratio of two trading countries, and the marginal good in a generalized Ricardian model where labor is used as a single factor of production to produce n number of commodities?   (10)

4. Consider a 2X2X2 general equilibrium model of trade where both the goods are produced by two factors of production, viz. L and K which are perfectly mobile across sectors, and fully employed. Production functions follow standard constant returns to scale (CRS) and diminishing marginal productivity (DMP) of factors. Factor intensities of the goods are, however, different. In this backdrop examine, both diagrammatically and mathematically, the output effect of a change in the endowment of L.   (10)

5. Assume that two goods X and Y are produced in a small country. Both X and Y use a mobile factor K, whereas they use labor of different skills as specific factors. Build a specific factor competitive model of trade under the assumption of full employment and constant returns to scale in production. In such a setup, examine the condition for an increase in wage-inequality between differently skilled labor due to outward migration of any one type of labor.   (10)

6. In the basic set up of question (5) additionally assume that both X and Y also requires the service of interemediation to conduct their business. Intermediation requires both types of labor as inputs. Also note that differently skilled labors are used in fixed proportion to produce intermediation activities. In this backdrop, derive the effect on the size of the intermediation sector due to a change in the cost of intermediation.

                                                                          (10)

7. Use a monopolistically competitive model of trade with full employment assumption where demand function is characterized by love-for variety, argue why and how labor growth causes real wage to rise in the long run.   (10)

Time: 3 Hours

Full marks: 40

Questions are of value as indicated in the margin

Answer any **four** questions:

1. How do agglomeration economies affect the development of cities? Discuss, in brief, the major problems that the policy makers face in managing urban growth in the developing countries.

    5+5 =10

2. Do you think that the idea of 'creatively destructive neoliberalism' is useful for understanding the path-dependent interactions between existing institutional forms and emergent neoliberal projects in the cities of developing countries?   10

3. Critically evaluate the New Urban Policy (NUP) from the perspective of economic growth and competitiveness.
                                                                                                    10

4. How does the 'informality' shape the urban planning in India? How far the dominant discourse on 'informality' is useful for understanding urban planning crisis in India?
                                                                                    5+5 = 10

5. How do the theories of fiscal federalism lend support to decentralization? Is there any necessary correlation among decentralization and the improvement in local accountability and governance mechanisms?

                                                                                            4+6=10

6. How are the urban areas defined in India? What are the roadblocks to urban governance reforms in India? Suggest some suitable policy options to overcome them.
                                                                            2+4+4 = 10

7. Do you think that the in-situ upgradation of existing housing stock must remain a key part of housing policies in India? How far providing property rights would be useful to address the shortages of 'affordable housing' in Indian cites?
                                                                                    5+5 = 10

8. Discuss the reasons behind the poor financial health of the Urban Local Bodies in India. How can the revenue generation capacity of the Urban Local Bodies be strengthened in India?

                                                                                    5+5 = 10

Time: 3 hours   Full Marks: 40

Questions are of value as indicated in the margin
Answer any four of the following

1.   (a)   What is the difference between the summation of benefits to establish total demand for private and public goods?

(b)   Show that in the presence of prisoners' dilemma, efficient provision of a public good is not a Nash equilibrium.   4+6=10

2.   (a)   Define a volunteer type public good with examples.   4+6=10

(b)   Show that in case of a volunteer type public good, free riding is efficient.

3.   For national defense as a public good, how does the prisoners' dilemma arise between countries and within countries?   5+5=10

4.   (a)   Briefly explain the Coasean position on externalities.   4+6=10

(b)   How is a Coasean bargain qualitatively different from a Pigouvian tax?

5.   (a)   What is the difference between statutory incidence and economic incidence of a tax?

(b)   Show that in competitive markets, incidence depends on the elasticity of demand and supply.   4+6=10

6.   (a)   What is excess burden of a tax?

(b)   How do you measure the excess burden of a tax?

(c)   What is the relationship between elasticity and excess burden?   2+6+2=10

7.   Put your arguments in favor of a centralized system of governance in light of stabilization and distribution function.   5+5=10

8.   Write short notes (any two)   5+5=10

(a)   Efficiency and Social Justice

(b)   Voting cycle and agenda manipulation.

(c)   Weakest –link Public good.

(d)   Clarke Tax

Time: Three Hours

Full Marks: 40

Questions are of value as indicated in the margin.

Answer *any four* questions.

1. Discuss in brief the basic tenets of traditional development economics. What are the fundamental criticisms of Sen against it? 6+4=10

2. Discuss in brief the Capability Approach to economic development. What are its criticisms? 6+4=10

3. Using a macroeconomic model, analyse the efficacy of the MGNREG Programme. 10

4. What is meant by Concentration of Production? Give an account of concentration of production in the process of growth of large enterprises in Germany and USA. 3+7=10

5. (a) Define "pure enterprises" and "combined enterprises" as conceived by Lenin.

   (b) What do you mean by "combination of production"?

   (c) Why did "combination of production" become necessary for the growth of giant enterprises?

   2+2+6 = 10

6. Explain Karl Popper's criticism of Marxism as 'historicist' and 'falisified'. 10

7. Expand the idea of Lenin, Lukacs, Gramsci and Althusser in reshaping the concept of Marxian ideology. 10

8. Critically discuss Marx and Engels' concept of ideology. 10