MA/M.Sc. 1st Semester Examination, 2019

ECONOMICS

PAPER —ECO-101(Gr. A + B)

Full Marks : 40

Time : 2 hours

The figures in the right-hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

Write the answers to Questions of each Groups in separate books

GROUP — A

[Marks : 20]

1. Answer any *two* questions :   2 × 2

   (a) Define the notion of Pareto optimality.

(*b*) Are second order conditions for an optimization problem always sufficient and not necessary ? Give brief arguments.

(*c*) Define ownership externality. Give an example.

(*d*) What do you mean by the leverage condition of a firm ?

2. Answer any *two* questions : 4 × 2

(*a*) Define team production. Explain the necessity of organizing team production under a firm.

(*b*) Why is the Production Possibility Frontier (PPF) negatively sloped and concave to the origin ? Under what conditions can it be convex to the origin ?

(*c*) By what single condition and how will you be able to define a perfectly competitive market ?

(*d*) What are the main reasons behind the existence of firms in an otherwise market economy ?

3. Answer any *one* question :   8 × 1

(*a*) Derive the first order condition(s) for maximization of social welfare in a two-individual two-commodity society where one of the two commodities is a public good. Also show how in such a situation the market system fails to attain this maximum social welfare situation.   6 + 2

(*b*) What do you mean by optimum size of a firm ? Explain various aspects involved in the determination of this optimum size.   2 + 6

GROUP — B

[Marks : 20]

4. Answer any *two* questions :   2 × 2

(*a*) Why do mergers occur ?

(*b*) What is a concentrated industry ?

(*c*) What is Blockaded entry ?

(*d*) What is four-firm concentration ratio ?

5. Answer any *two* questions :   4 × 2

(*a*) A bicycle industry consists of seven firms. Firms 1, 2, 3, 4 each has 10% market share, and firms 5, 6, 7 each has 20% market share. Calculate the Herfindahl Hirschman Index(I_{HH}) for this industry. Now suppose that firms 1 and 2 merge , so that the new firm will have a market share of 20%. Calculate the post merger I_{HH}. Also calculate the change in the I_{HH} caused by merger i.e. find ΔI_{HH}.

(*b*) Distinguish between Deterred entry and Accommodated entry.

(*c*) Distinguish between horizontal and vertical merger.

(*d*) Show with the help of a model that even in presence of partial recovery, sunk cost create entry barrier.

6. Answer any *one* question :   8 × 1

(*a*) Show, under a Cournot duopoly structure,

that a merger among firms leading to an increase in concentration does not necessarily imply an overall welfare reduction. [Given that the per unit costs of production are 1 and 4 units respectively and the demand equation is $p = 10 - Q$]

(b) Determine the contestable market equilibrium with the help of a suitable diagram.

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