COURSE TITLE: INDUSTRIAL ECONOMICS AND FOREIGN TRADE

COURSE CODE: HSIR13

BRANCH: COMPUTER SCIENCE AND ENGINEERING

END SEMESTER EXAMINATION

DATE: 19/05/2021 **MAX. MARKS: 30**

TIME: 10.00 to 12.00. p.m.

PART A (5*2=10 MARKS)

ANSWER ALL QUESTIONS

1. A firm has estimated the following production function for the product

$$Q=5L-0.5L^2$$

Q= No. of products produced per hour

L= Number of workers

Using the above information, prepare a production schedule measuring total product (TP), marginal and average product. Describe the behaviour of production function based on the production schedule information.

2. Let $q=10q_1^{1/2}+5q_2^{1/2}$

Test the homogeneity of the above production function.

3. Consider the following utility functions:

$a.U(x,y)=xy$

$b.U(x,y)=x^2y^2$

$c.U(x,y)=\ln x+\ln y$

Show that each of these has a diminishing MRS but that they exhibit constant, increasing, and decreasing marginal utility, respectively. What do you conclude?

4. A firm has a cost function given by $c(y)=10y^2+1000$. Calculate the level of output at which average cost is minimized?

5. Define budget line. Originally the consumer faces the budget line $p_1x_1+p_2x_2=m$ .Then the price of good 1 becomes 8 times larger, the price of good 2 doubles, and income becomes 2 times larger. Write down an equation for the new budget line in terms of the original prices and income.

PART B (3*4=12 MARKS)

ANSWER ANY THREE

6. Explain the Hecksher-Ohlin theory of trade. How is it superior over traditional theories of trade?

7. Explain the ordinal approach to the analysis of consumer equilibrium.

8. Write a note on game theory.

9. Explain the laws of returns to scale. Describe those using iso-quants.

PART C (1*8= 8)

ANSWER BOTH QUESTIONS

10.

a. Cooperation among rivals occur most often in oligopoly. Comment on this statement. (5 marks)

b. Given Total cost function, $C=4q-q^2+2q^3$, find average cost, marginal cost and level of output at which average cost is minimum. Show that when AC is minimum AC=MC. (3 marks)