GURU NANAK INSTITUTE OF TECHNOLOGY
An Autonomous Institute under MAKAUT
2020-2021
ECONOMICS FOR ENGINEERS
HU502

TIME ALLOTTED: 3 HOURS   **FULL MARKS: 70**

The figures in the margin indicate full marks.

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

GROUP – A
(Multiple Choice Type Questions)

Answer any *ten* from the following, choosing the correct alternative of each question: **10×1=10**

		Marks	CO No.

1. i) Economic problems arise because
  a) resources are limited
  b) human wants are unlimited   1   CO1
  c) both (a) & (b)
  d) none of these

  ii) The Demand Curve for normal goods
  a) rises upwards
  b) slopes downwards   1   CO1,2
  c) is parallel to X axis
  d) is parallel to Y axis

  iii) Car & petrol together is an example of
  a) substitute goods
  b) complementary goods   1   CO1
  c) supplementary goods
  d) none of these

  iv) A change in demand occurs due to
  a) increase in price
  b) decrease in price   1   CO2
  c) change in non-price determinants of demand
  d) none of these

  v) When the demand curve is horizontal, price elasticity of demand is
  a) zero
  b) infinity   1   CO3
  c) 1
  d) none of these

  vi) When the demand curve is vertical, price elasticity of demand is
  a) 1
  b) infinity
  c) zero   1   CO1,2
  d) none of these

vii) Which of the following is an inferior good?
   a) Giffen good
   b) perishable good
   c) luxury good
   d) speculative good

   1   CO1

viii) The LRAC curve is also known as
   a) envelope curve
   b) planning curve
   c) both (a) & (b)
   d) neither (a) nor (b)

   1   CO2,4

ix) Who gains from inflation
   a) producer
   b) consumer
   c) both
   d) none

   1   CO2

x) Which stage of the short-run will a rational producer operate in?
   a) stage I
   b) stage IV
   c) stage III
   d) stage II

   1   CO1

xi) If a firm uses 70% of its capacity, further increase in variable inputs will lead to
   a) increase in output
   b) decrease in output
   c) decrease in output till full capacity is utilized
   d) increase in output till full capacity is utilized

   1   CO1,2

xii) Which of the following is NOT a feature of perfect competition?
   a) no firm can influence the market
   b) products are heterogeneous
   c) large no of buyers & sellers
   d) none of these

   1   CO1,2

GROUP – B
(Short Answer Type Questions)
(Answer any *three* of the following) **3x5=15**

2. What do you think is the market structure of Indian Automobile industry? Explain mentioning the key features of that market.   5   CO1

3. The demand function for a good is Q = 24-3P. Find the theoretical maximum quantity demanded and the theoretical maximum price.   5   C02,3

4. The Production Function for an agricultural product is TP= $18L^2 – L^3$. How much labour should be employed to get the maximum output?   5   CO3,4

5. Mention the major exceptions to the Law of Demand.   5   CO1

6. Graphically show the relationship between the total cost and the fixed and variable costs.   5   CO2

GROUP – B
(Long Answer Type Questions)
(Answer any *three* of the following) **(3x15)**

7.	a)	Discuss the short run curves with relevant example and diagram.	10	CO1,2
	b)	Explain the relationship of Income of a consumer with the quantity demanded of a product.	5	CO1
8.	a)	Complete the following table:	10	CO2,3

UNITS	TFC	TVC	TC	AVC	ATC	MC
0			60			
1		40				
2			130			
3						8
4					30.25	
5				10		
6						45

	b)	State the different phases of a business cycle.	5	CO2
9.	a)	From the following information calculate the Profit: Sales = Rs 80,000 Variable Cost = Rs 60,000 Break-even Sales = Rs 60,000	5	CO3,4

	b)	From the following information calculate the Sales required to earn a profit of Rs 1,20,000:
		    Sales : Rs 6,00,000
		    FC : Rs 1,80,000
		    VC : Rs 3,75,000
			5	CO3,4

	c)	Explain the impact on profitability of a firm due to changes in costs and revenue.	5	CO1,2
10.	a)	Explain the short run production function with suitable diagram.	10	CO1,2
	b)	From the following information calculate (i) BEP in units and (ii) Sales required to earn a profit of Rs 6000 : Fixed Cost : Rs 4500 Variable Cost : Rs 7500 Sales : Rs 15,000 Units Sold: 5000 units	5	CO2,3
11.		Write short notes on *any three* :	3x5	
	a)	Recession	5	CO2
	b)	GDP & GNP	5	CO2
	c)	Anti inflationary policy	5	CO2
	d)	Importance of Margin of Safety	5	CO3
	e)	Movement along the demand curve	5	CO1