Tut Test 3

ECON F211: Principles of Economics

Time Duration: 30 Minutes **Date**: 30/Mar/2021

Maximum Marks: 30

Instructions:

- All questions are compulsory
- Each question carries one mark each
- Questions will be locked and one question will be visible at one time

Question 1: A Smartphone manufacturing company has a monopoly on the sale of a specialized model of smart phone. If it sells two units of its production its total revenue is \$1,200, and if it sells three units its total revenue is \$1,400. The marginal revenue of the third unit sold is

- a) \$200
- b) \$300
- c) \$400
- d) \$1,300

Answer: (A)

Question 2: In which aspect, Monopoly is similar to the Perfect competition?

- a) Earnings by selling
- b) Cost of production
- c) Competition
- d) None of these

Answer: (B)

Question 3: A Smartphone manufacturing company has a monopoly over the production of a specialized model of a smart phone. The Company will find it profitable to increase the production of specialized model as long as marginal cost

- a) is less than marginal revenue
- b) equals marginal revenue
- c) is greater than marginal revenue
- d) is positive

Question 4: A clothing manufacturer produced 5000 sweatshirts, but sold only 4000 of them.

The remaining 1000 sweaters would be classified as

- a) a loss to the firm.
- b) part of the firm's tangible capital.
- c) part of the firm's intangible capital.
- d) a factor of production.

Answer: (B)

Question 5: Following profit maximizing behavior, two firms are producing the homogeneous product in a Cournot type economy with symmetric cost conditions and sharing the total market demand. Given the market demand function: P = 80-Q and Total Cost function: TC = 40Q, what would be the amount of output produced by both the firms? Where $Q = q_1 + q_2$.

- a) 30/3, 30/3
- b) 40/2, 40/2
- c) 40/3, 40/3
- d) None of these

Answer: (C)

If P = 80-Q and cost remains same then

$$q1 = 20 - \frac{1}{2} q2$$

$$q2 = 20 - \frac{1}{2} q1$$

$$q1 = q2 = 40/3$$

Total output (Q) = 80/3

Price = 160/3 [80-80/3]

Question 6: Firms in imperfectly competitive markets are

- a) more efficient than firms in perfectly competitive industries
- b) price makers
- c) price takers
- d) completely inefficient

Question 7: Following profit maximizing behavior, two firms are producing the homogeneous product in a Cournot type economy with symmetric cost conditions and sharing the total market demand. Given the market demand function: P = 100-Q and Total Cost function: TC = 40Q, what would be the market price. Where $Q = q_1 + q_2$.

- a) 60
- b) 40
- c) 30
- d) None of these

Answer: (A)

Use MR1 – MC1

$$q1 = 30 - \frac{1}{2} q2$$

$$q2 = 30 - \frac{1}{2} q1$$

$$q1 = q2 = 20$$

Total output (Q) = 40

Price = 60 [100-40]

Question 8: Monopolies, oligopolies, and monopolistic competitive industries all:

- a) earn positive profits in the long run
- b) have market power
- c) are completely unconstrained in their pricing
- d) raise price and quantity over what would occur in perfect competition in order to maximize their profits

Answer: (b)

Question 9: Marginal revenue of a firm in monopoly represents the:

- a) Average revenue of the firm
- b) Total revenue of the firm
- c) Change in total revenue that results as a firm moves along the segment of the demand curve that lies exactly above it
- d) Change in total revenue that results due to decrease in cost of production

Question 10: Imperfect competition and market power

- a) are major sources of inefficiency.
- b) result in higher output than in perfect competition.
- c) are always the result of product differentiation.
- d) result from diseconomies of scale.

Answer: (a)

Question 11: When a monopolist sells two units of output its total revenue is \$600. When a monopolist sells three units of output its total revenue is \$630. In order to sell three units of output instead of only two, the monopolist must

- a) increase its price by \$30 per unit.
- b) decrease its price by \$90 per unit.
- c) make no change in price and increase output by one unit.
- d) decrease its price by \$30 per unit.

Answer: (b)

Justification of Question (above)5: Because by selling two units' firm is getting 600 and in this way per unit price becomes 300. For selling three if it is getting 630 in total then per unit price would decrease by 90 per unit i.e. 210 per unit price.

Question 12: The major distinguishing characteristic of oligopoly is that

- a) firms produce differentiated products.
- b) firms can influence the price of their product.
- c) entry into the industry easy.
- d) firms are interdependent.

Answer: (d)

Question 13: Market power refers to a firm's ability to

- a) raise price without losing all sales of its product.
- b) charge any price it likes.
- c) sell any amount of output it desires at the market-determined price.
- d) monopolize a market completely.

Answer: (a)

Question 14: Which of the following is *not* an assumption of the Cournot model?

- a) There are two firms in an industry.
- b) Each firm takes the output of the other firm as given.
- c) Both firms maximize profits.
- d) If the first firm cuts price, the second firm will follow and if the first raises price, the second will not follow.

Question 15: As the inventory of a firm falls

- a) there is no change in its capital.
- b) its intangible capital decreases.
- c) its tangible capital decreases.
- d) its social capital increases.

Answer: (C)

Question 16: What would be the shape of the demand curve facing an individual producer of wheat?

- a) Downward sloping
- b) Horizontal
- c) Vertical
- d) Upward sloping

Answer: (B)

Question 17: What could be the shape of the demand curve for Corona Vaccine while considering the virus life threatening?

- a) Downward sloping
- b) Horizontal
- c) Vertical
- d) Upward sloping

Answer: (C)

Question 18: Given the demand function for a firm: P=10-Q, prepare the demand schedule and find out the price (**P**) at which firm's marginal revenue will remain positive:

- a) Price greater than or equal to INR 5
- b) Price less than INR 5
- c) All prices
- d) Prices between INR 4 and INR 8

Question 19: Given the demand function for a firm: P=10-Q, prepare the demand schedule and find out the marginal revenue of the fourth unit of quantity produced:

- a) INR 1
- b) INR 3
- c) INR 6
- d) INR 24

Answer: (B)

Question 20: A colluding oligopoly will face market demand and produce until the point at which:

- a) P = MR = MC
- b) P > MR = MC
- c) P < MR = MC
- d) P < MR > MC

Answer: (B)

Question 21: In a strategic interaction between two firms (A & B) in the market, both firms have two strategies to exercise: *Increase Price* & *Not to increase price*. Given the following payoffs under different strategy combinations:

- If both would increase price: (3000,3000)
- If both would not increase price: (5000, 5000)
- If A increase price and B don't: (10000, 15000)
- If A do not increase price and B increase: (15000, 10000)

What would be the Nash Equilibrium of the game?

- a) (Raise Price, Don't Raise Price)
- b) (Don't Raise Price, Raise Price)
- c) (Don't Raise Price, Don't Raise Price)
- d) Both A and B are correct

Answer: (D)

Question 22: A monopolistically competitive firm, is producing 80 units of output per day and selling each unit for \$32. At that production level ATC is \$40 and AFC is \$10, and both MR and MC are \$16. In the short run, this firm should

- a) continue to produce 80 units
- b) increase output to the point where price equals marginal cost
- c) decrease output to the point where price equals average total cost
- d) shutdown and produce zero output and pay fixed costs.

Question 23: If firms in a monopolistically competitive industry are earning economic profits, then in the long run

- a) these firms can continue earning economic profits because entry into the industry is blocked
- b) new firms producing close substitutes will enter the industry and this entry will continue until economic profits are eliminated
- c) new firms producing the exact same product will enter the industry and this entry will continue until economic profits are eliminated
- d) the government will most likely regulate firms in this industry to reduce these economic profits

Answer: (B)

Question 24: In a strategic interaction between two firms (A & B) in the market, both firms have two strategies to exercise: *Advertise* & *Not to Advertise*. Given the following payoffs under different strategy combinations:

- If both advertise, then the profits are: (75,75)
- If both would not advertise, then the profits are: (100, 100)
- If A advertise and B don't: (200, 50)
- If A do not advertise and B does: (50, 200)

Firm A's dominant strategy is

- a) to advertise
- b) to not advertise
- c) dependent on what Firm B does
- d) indeterminate from this information, as no information is provided on Firm A's risk preference

Question 25: In a strategic interaction between two firms (A & B) in the market, both firms have two strategies to exercise: *Advertise* & *Not to Advertise*. Given the following payoffs under different strategy combinations:

- If both advertise, then the profits are: (75,75)
- If both would not advertise, then the profits are: (100, 100)
- If A advertise and B don't: (200, 50)
- If A do not advertise and B does: (50, 200)

The result of this game is known as a _____ and the result can be improved by _____.

- a) prisoners' dilemma, repeated play
- b) collusive outcome, single interaction
- c) repeated strategy, government intervention
- d) None of these

Answer: (A)

Question 26: For a firm under perfect competition, total cost function is given as follows:

$$TC = 5 + 10Q - 0.9Q^2 + 0.04Q^3$$

If the price is INR 4 per unit, how much quantity will the firm produce to maximize its profits?

- a) 10
- b) 5
- c) 0
- d) None of these

Answer: (C)

Question 27: Monopolies can _____ in the long run while monopolistically competitive firms ____ due to barriers to entry in monopoly but not in monopolistic competition.

- a) break-even; cannot
- b) earn positive economic profits; cannot
- c) only break-even; can only earn positive economic profits
- d) can never shut down; can

Question 28: When firms enter a monopolistically competitive industry, the demand curves of the remaining firms in the industry

- a) do not change
- b) shift to the left
- c) shift upward
- d) shift to the right

Answer: (B)

Question 29: If a perfectly competitive industry becomes a monopoly and the costs do not change, which of the following allocation of costs and benefits applies? (1 Mark)

- A) The producer and society benefit, but consumers are harmed
- B) The producer and society are harmed, but consumers benefit
- C) The producer is harmed, but consumers and society benefit
- D) The producer benefits, but consumers and society are harmed

Answer: D

Question 30: Calculate the net investment from the following information:

- Investment in Property and Equipment (In the year 2015 in INR): 32,337
- Inventories (in the year 2015 in INR): 2902
- Depreciation (in the year 2015 in INR): 17606
- Investment in Property and Equipment (In the year 2014 in INR): 27804
- Inventories (in the year 2014 in INR): 2660
- Depreciation (in the year 2014 in INR): 14793
- A) 1962
- B) 1720
- C) 17633
- D) 14731

Answer: A