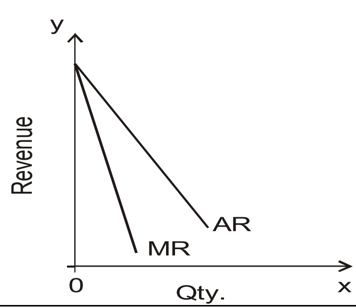
12 MONOPOLY MARKET

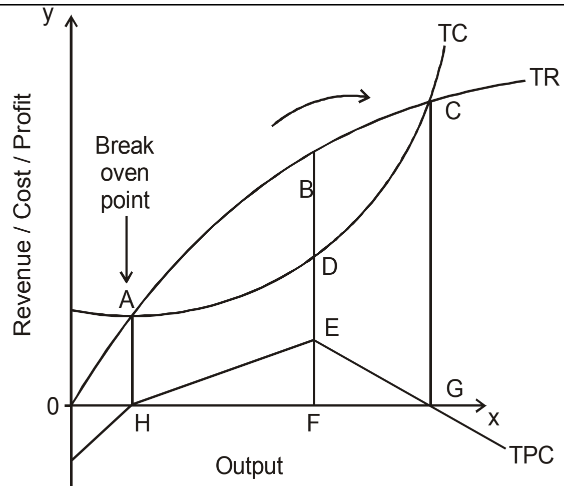
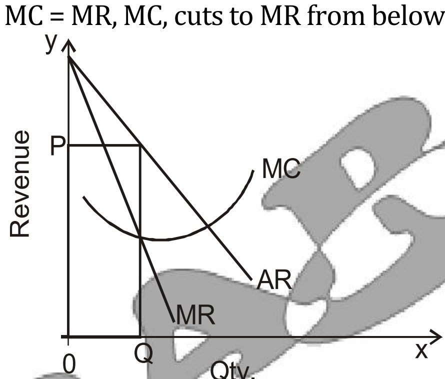
Monopoly Market	
Definition	As per Koutsoyiannis, Monopoly is a market situation in which there is a single seller, there are no close substitutes for commodity it produces, and there are barriers to entry.
Meaning	Mono means one and poly means seller. Thus the term monopoly refers to that market situation where there is a single firm selling the commodity. There are no close substitutes of the commodity. Entry by a new firm in the monopoly market (an industry) is very difficult or impossible. As a result, a monopoly is more or less free to charge any price by regulating the supply of the commodity. For e.g. railway and electricity are the monopoly of the Govt. of India. The monopoly firm itself is an industry.
Features	**1. Single seller:** There is only one producer or firm of a commodity in the market. So the distinction between industry and firm disappears. The firm itself is the industry and has full control on supply of the commodity. **2. No close substitutes of the commodity:** The product sold by the monopolist has no close substitutes. **3. Difficult entry of a new firm:** It is very difficult for a new firm to enter the monopoly market. A monopolist is a price maker and not a price taker. **4. Full Control Over Prices:** Since he alone produces the commodity in the market, a monopolist has full control over its price. A monopolist thus is a price maker. **5. Possibility of price Discrimination:** Many a time a monopolist charges different prices from different consumers. It is called price discrimination.
Types of Monopoly	**Simple Monopoly:** where the monopolist charges uniform price from all buyers for example, Indian Railways charging same fare from all AC 3Tier passengers and **Discriminating Monopoly:** where the monopolist charges different prices from different buyers of the same good or service for example, Dynamic fare charged by Indian Railways in specific trains. We shall look into equilibrium of a simple monopolist.

Relationship between AR and MR	
Different AR and MR	AR and MR is different because price is different at the early level of output or sale. 

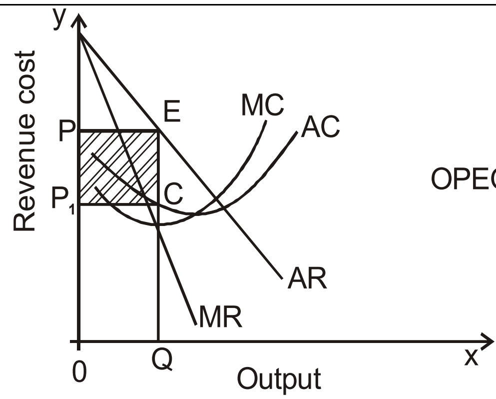
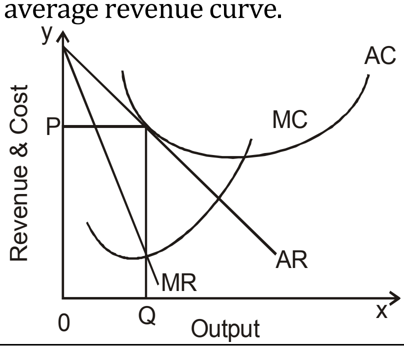
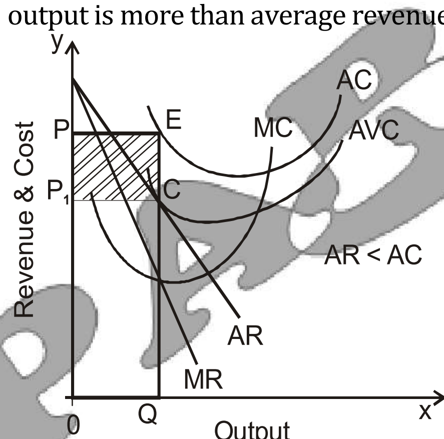
Relationship	**1.** AR and MR are both negatively by sloped (downward sloping) curves. **2.** The slope of the MR curve is twice that of the AR curve. MR curve lies half-way between the AR curve and the Y axis. i.e. it cuts the horizontal line between Y axis and AR into two equal parts. **3.** AR cannot be zero, but MR can be zero or even negative.

How do Monopolies arise?	
How it arise	The fundamental cause of monopoly is barriers to entry; in effect other firms cannot enter the market. A few reasons for occurrence and continuation of monopoly are mentioned below.
1. Strategic Control	Strategic control over a scarce resources, inputs or technology by a single firm limiting the access of other firms to these resources.
2. Unique Product	Through developing or acquiring control over a unique product that is difficult or costly for other companies to copy.
3. Govt. Policies	Governments granting exclusive rights to produce and sell a good or a service.
4. Patents and copyrights	Patents and copyrights given by the government to protect intellectual property rights and to encourage innovation.
5. Business combinations	Business combinations or cartels (illegal in most countries) where former competitors cooperate on pricing or market share.
6. Large start-up costs	Extremely large start-up costs even to enter the market in a modest way and requirement of extraordinarily costly and sophisticated technical know-how discourage firms from entering the market.
7. Natural Monopoly	Natural monopoly arises when there are very large economies of scale. A single firm can produce the industry's whole output at a lower unit cost than two or more firms could. It is often wasteful (for consumers and the economy) to have more than one such supplier in a region because of the high costs of duplicating the infrastructure. For e.g. telephone service, natural gas supply and electrical power distribution.
8. Goodwill	Enormous goodwill enjoyed by a firm for a considerably long period create difficult barriers to entry.
9. Stringent legal and regulatory requirements	Stringent legal and regulatory requirements effectively discourage entry of new firms without being specifically prohibited.
10. Firm's Strategy	Firms use various anti-competitive practices often referred to as predatory tactics, such as limit pricing or predatory pricing intended to do away with existing or potential competition.

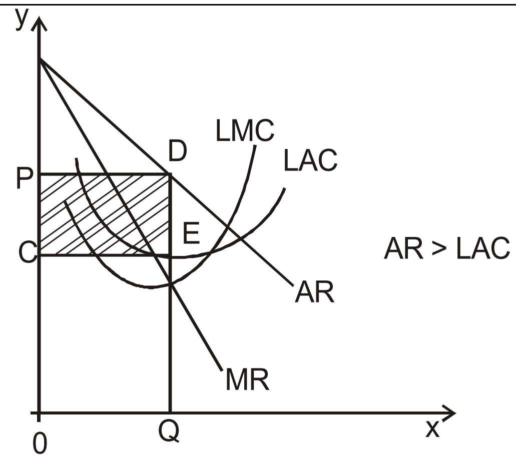
Firm and Approaches	
Meaning of Firm	A firm is a unit who produces the goods and services to earn maximum profit.
Meaning of firm's Equilibrium	A firm is in equilibrium when it is satisfied with its existing amount of output. A firm will be in equilibrium when a firm is not interested to increase or decrease its output.

Conditions	• Maximum profit: π = (TR - TC) • MC = MR • MC cuts to MR from below.
Total revenue and total cost approach	 Maximum profit: A firm is in eqb. when it is earning maximum profit. A firm's total profit can be estimated by the difference between total revenues & total cost. In the diagram a firm produced of unit difference is maximum 'BD' and a firm earn maximum profit EF. So a firm is in eqb. that position.
Marginal Revenue and Marginal Cost approach	Point E is equilibrium point because both condition are fulfilled MC = MR, MC, cuts to MR from below: 

Short-run equilibrium of a Firm	
Short-run equilibrium of a firm	Monopoly firm in short run equilibrium may face of the three situations • Super normal profit • Normal profit • Minimum loss.
Super normal profit AR>AC	If the price (AR) fixed by monopolist in equilibrium is more than the average cost (AC) than he will earn excess profits.

	 $OPEQ-OP_1CQ = PP_1EC$
Normal profit AR=AC	In the short period it is possible that monopolist may earn normal profit. This happens only when the average cost curve of the monopolist is tangent to its average revenue curve. 
Minimum loss AR<AC	A monopolist firm in eqb. may incur minimum loss when the average cost of eqb. output is more than average revenue. 

Long run equilibrium	
Meaning AR>LAC	• In the long run, a monopolist earns super normal profit. The monopolist will be in equilibrium at a point where his long run marginal cost is equal to marginal revenue (LMC = MR). • Thus in the long run the monopolist will fix the price in such a way as to earn super normal profit. Super normal profit refers to a situation. • where AR > LAC.

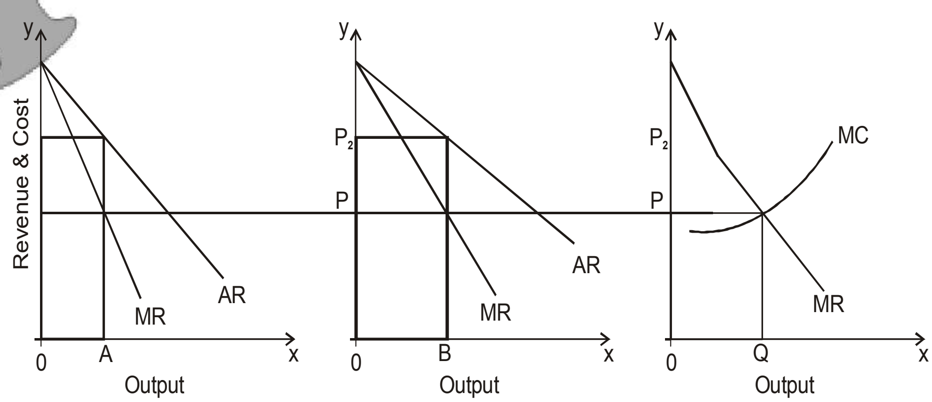


OPDQ - OCEQ = PCDE = S.N.P.

Economic effects of Monopoly	
(i)	Monopoly is often criticized because it reduces aggregate economic welfare through loss of productive and allocate efficiency.
(ii)	Monopolists charge substantially higher prices and produce lower levels of output than would exist if the product were produced by competitive firms.
(iii)	Monopolists earn super normal profits in the long run which are unjustifiable.
(iv)	Monopoly prices exceed marginal costs and therefore reduces consumer surplus. There is a transfer of income from the consumers. Not only that consumers pay higher prices, but they would also not be able to substitute the good or service with a more reasonably priced alternative.
(v)	Monopoly restricts consumer sovereignty and consumers' opportunities to choose what they desire.
(vi)	Monopolists may use unjust means for creating barriers to entry to sustain their monopoly power. They often spend huge amount of money to maintain their monopoly position. This leads increases average total cost of producing a product.
(vii)	A monopolist having substantial financial resources is in a powerful position to influence the political process in order to obtain favorable legislation.
(viii)	Very often, monopolists do not have the necessary incentive to introduce efficient innovations that improve product quality and reduce production costs.
(ix)	Monopolies are able to use their monopoly power to pay lower prices to their suppliers.
(x)	The economy is also likely to suffer from 'X' inefficiency, which is the loss of management efficiency associated with markets where competition is limited or absent

Dumping & Determine the price's output under Dumping	
Meaning	When a monopolist charge high price in Domestic market and low price in foreign market is called Dumping. In this case a monopolist has to face two types of markets. Domestic market over which has monopoly and foreign market where he is to compete with other sellers. There are few reasons as to do so: – (i) To take advantage of law of increasing returns. (ii) To compete out rivals in the foreign market. (iii) To create demand for his product in foreign markets. (iv) To get rid of the surplus stock of the product. (v) To take advantage of the difference in the elasticity of demand.

Price discrimination & Determine the price & output of a monopolist under situation of the Price discrimination	
Definition	**According to Dooley:** Discriminatory monopoly means charging different rates from different customers for the same good or service.
Meaning	When a monopolist charge different prices to different customers is called price discrimination. This type of monopolist is called discriminating monopolist.
Kinds of Discriminating Monopoly	**1. Personal Price Discrimination:** When a monopolist charges different prices from different customers for the same product. Then it is called personal price discrimination. For exp. a teacher charging different fees to different students as accordance to poor & rich. **2. Geographical Price Discrimination:** When a monopolist charges different prices in different areas for the same product, then it is an example of geographical price discrimination. **3. Price Discrimination according to use:** When a monopolist charges different prices for different uses of a product, then it is called price discrimination according to use. e.g. rate of electricity charge per unit for domestic use is less than that for commercial use. **4. Time Price Discrimination.** A monopolist charge different prices on different time
Objectives	(i) To earn maximum profit (ii) To dispose off surplus stock (iii) To enjoy economies of scale (iv) To capture foreign markets and (v) To secure equity through pricing.
Extra Shots on Objectives & Decrees of price discrimination	**1.** Price discrimination may take place for reasons such as differences in the nature and types of persons who buy the products, differences in the nature of locality where the products are sold and differences in the income level, age, size of the purchase, time of purchase. **2.** Price discrimination may be related to the consumer surplus enjoyed by the consumers. Prof. Pigou classified three degrees of price discrimination. **3.** Under the first degree price discrimination, the monopolist separates the market into each individual consumer and charges them the price they are willing and able to pay and thereby extract the entire consumer surplus. Doctors, lawyers, consultants etc., charging different fees prices decided under 'bid and offer' system, auctions, and through negotiations are examples of first degree price discrimination. **4.** Under the second degree price discrimination, different prices are charged for different quantities of sold. The monopolist will take away only a part of the consumers' surplus. The two possibilities are: a) Different consumers pay different price if they buy different quantity. Larger quantities are available at lower unit price. For example, a family pack of soaps or biscuits tends to cost less per kg than smaller packs. b) Each consumer pays different price for consecutive purchases. For example, suppliers of services such as telephone, electricity, water, etc., sometimes charge higher prices when consumption exceeds a particular limit. **5.** Under the third degree price discrimination, price varies by attributes such as location or by customer segment. Here the monopolist will divide the consumers into separate sub-markets and charge different prices in different sub-markets. Examples: Dumping, charging different prices for domestic and

	commercial uses, lower prices in railways for senior citizens, etc.
Conditions	**(i)** **Existence of Monopoly:** Price discrimination is possible when monopoly situation is in their market. **(ii)** **Difference in the Elasticity of demand:** Price discrimination is possible when elasticity of demand will be different markets. The monopolist will fix higher price per unit in the market where demand is inelastic and lower price per unit in the market, where demand is elastic. **(iii)** **Legal sanction:** In some cases, price discrimination is legally sanctioned. **(iv)** **Product differentiation:** A monopolist by changing the packing, name, label etc. of the good can charge different prices although the good is of the same quality. **(v)** **Separate market:** Another condition necessary for discriminating monopoly is that there must be two or more markets which can be separated and can be kept separate. It can be possible only if a unit of the commodity could not be transferred from low price market to high priced Market, nor could the buyer move from expensive market to cheap market. **(vi)** **Behaviour of the consumers**
Price and output determination of a monopoly under price discrimination	The aim of the monopolist in resorting to price discrimination is to increase total revenue and profit. Analysis of price determination under price discrimination can be made with reference to two or more market conditions. Now we study a situation of price discrimination in which a monopolist by selling a product at two different prices and receives same part of consumer's pocket as surplus. Each discrimination monopolist, in order to maximize his profit will produce up to that level where his marginal revenue is equal to marginal cost. This conditions of MR = MC will be applied by him in each market. So long as marginal revenue is more than marginal cost he will continue with his production. We assume that the monopolist will sell his product in two different markets having different elasticity of demand curve.
A- Market **Price = OP** **Output = OA**	Discriminating monopolist is to decide about: – **1.** The total output to produce. **2.** How much of the output to be sold in different markets and at what price, so as to get maximum profit.
B- Market **Price = OP_1** **Output = OB**	**3.** In order to get maximum profit, he must fulfill the following two conditions. Must get some marginal revenue in both market MR1 = MR2. Equality between MR and MC **$MR_1 = MR_2 = MC$**
Total market output **OA+OB=OQ**	

Degree of Price Discrimination	• **Discrimination of first Degree:** In first degree price discrimination the monopolist charge different prices for every unit of commodity or different prices charges to different person. • **Second degree of price discrimination:** In Second degree price discrimination the monopolist charges different prices for a specific quantity or block of output. • **Third degree of price discrimination:** In third degree price discrimination the price charged by monopolist is different in different market of same commodity
Effects of Price Discrimination	• **Beneficial effects:** **(i)** Full utilisation of resources **(ii)** Public utility services **(iii)** Beneficial to the poor • **Harmful effect:** **(i)** Less production **(ii)** No proper use of factors of production

MULTIPLE CHOICE QUESTIONS

Q.1. Monopoly may arise in a product market because [SM-21]

(a) A significantly important resource for the production of the commodity is owned by a single firm.
(b) The government has given the firm patent right to produce the commodity.
(c) The cost of production and economies of scale makes production by single producer more efficient.
(d) All the above.

Q.2. In which form of the market structure is the degree of control over the price of its product by a firm very large? [SM-28]

(a) Monopoly (b) Imperfect Competition (c) Oligopoly (d) Perfect competition

Q.3. A Monopolist is a [SM-71]

(a) price-maker (b) price-taker (c) price-adjuster (d) None of the above.

Q.4. Under monopoly, the degree of control over price is: [SM-73]

(a) none (b) some (c) very considerable (d) None of the above.

Q.5. There is a single seller of a commodity which has no close substitutes can be termed as

(a) Oligopoly (b) Monopoly (c) Perfect competition (d) Duopoly.

Q.6. The market which has single seller, no-substitutes for the product and freedom to entry of new firms is completely blocked is the case of

(a) Perfect competition (b) Oligopoly (c) Duopoly (d) Monopoly.

Q.7. In which of the following types of market structure are advertise expenses the least?
(a) Monopoly (b) Duopoly (c) Monopolistic competition (d) Oligopoly.

Q.8. In India, in which of the following industries does monopoly exist?
(a) Courier service (b) Internet service providing industry
(c) Rail transportation (d) Small car industry.

Q.9. Under monopoly form of market, TR is maximum when
(a) MR is zero (b) MR is maximum (c) MR > 0 (d) MR < 0

Q.10. Which of the following is not a characteristic of a monopoly?
(a) No close substitutes (b) Price discrimination
(c) Free entry and exit (d) Price maker.

Q.11. A single seller of a particular product in a particular town or city means.
(a) Monopsony (b) Perfect competition (c) Monopoly (d) Monopolistic completion

Q.12. A queue of a large number of farmers before a Single cold storage in the area is a case of
(a) Monopoly (b) Oligopoly (c) Monopsony (d) Monopolistic competition.

Q.13. When AR is falling, MR. will be
(a) Equal to AR (b) Less than AR (c) More than AR (d) Either more or equal to AR.

Q.14. Using total revenue and total cost curves, the level of output that gives maximum profits will be one where
(a) TR and TC curves intersect
(b) Where the gap between TR and TC is Maximum and TR curve lies below TC curve
(c) Where the gap between TR and TC is maximum and TR curve lies above TC curve
(d) Where TR = TC curve.

Q.15. Monopolist's demand curve slopes downward because
(a) The industry's demand curve is the monopolist demand curve.
(b) He can influence price
(c) He can influence output.
(d) All of the above.

Q.16. Given the cost conditions, which statement is correct -
(a) Monopoly output and price will be higher than under pure competition
(b) Monopoly output will be lower and price higher than under pure competition
(c) Monopoly output will be higher and prices lower than under pure competition
(d) Monopoly output and price will be lower than under-pure competition.

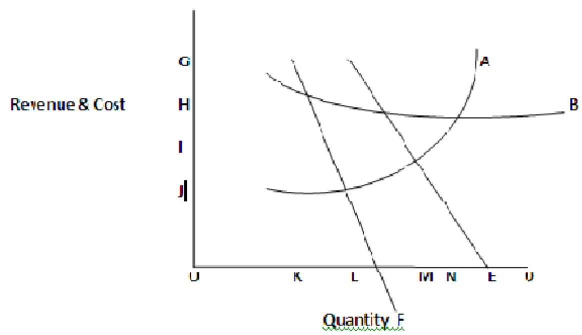
Q.17. Monopoly power refers to the firm's ability to
(a) Earn economic profit (b) Restrict entry into the industry
(c) Set prices above marginal cost (d) Possess economies of scale.

Q.18. Monopolist can fix price of goods whose elasticity is ______(J,11)
(a) Less than 1 (b) more than 1 (c) Elastic (d) Inelastic.

Q.19. Under monopoly , which of the following is correct :(J,13)
(a) AR and MR both are downward sloping
(b) MR lies halfway between AR and Y-axis
(c) MR can be zero or even negative
(d) All of the above.

Q.20. Monopolist can control only _____ (J,15
(a) Price (b) Demand (c) Utility (d) Both (a) & (b)

Question 21 to 23 are based on the Figure :(D,15)



Q.21. Figure represents a :(D,15)
(a) Perfectly competitive firm (b) Perfectly competitive industry
(c) Monopolist (d) None of the above

Q.22. In figure, the firm's marginal revenue curve is curve :(D,15)
(a) E (b) A (c) F (d) B

Q.23. In figure, curve E is the firm's is :(D,15)
(a) Marginal cost curve (b) Average revenue curve
(c) Demand curve (d) Marginal revenue curve

Q.24. Comparing a Monopoly and Competitive firm the Monopolist will:(J,16)
(a) Produce less at a lower price (b) Produce more at a lower price
(c) Produce less at a higher price (d) Produce zero at a lower price.

Q.25. If a firm under monopoly wants to sell more, its average revenue curve will be a ___ line.(J,16)
(a) horizontal (b) vertical (c) downward sloping (d) upward sloping.

Q.26. Which is not characteristic of monopoly ?(D,16)
(a) The firm is price taker (b) There is a single firm
(c) The firm produces a unique product (d) The existence of some advertising.

Q.27. Suppose a firm is producing a level of output such that MR > MC. What should be firm do to maximize its profits?
(a) The firm should do nothing (b) The firm should hire less labour
(c) The firm should increase price (d) The firm should increase output.

Q.28. If AR curve is a falling straight line, MR curve will lie below it in such a way that any line drawn from a point from y-axis parallel to x-axis to meet the AR curve is intersected by the MR curve
(a) Mid-way (b) More than half-way (c) Less than half-way (d) Anywhere.

Q.29. In long run equilibrium the pure monopolist can make pure profits because of
(a) Blocked entry (b) The high price he charges
(c) The low LAC costs (d) Advertising

Q.30. If the price is statutorily fixed and equal to AC, monopoly profits will be
(a) Increased (b) Decreased
(c) Eliminated (no loss, no profit) (d) At same level

Q.31. Monopoly price is the function of
(a) Marginal cost of production (b) Price elasticity of demand
(c) Either (a) or (b) (d) Both (a) and (b).

Q.32. A monopolist is able to maximize his profits when:(F,07)
(a) His output is maximum (b) He charges a high price
(c) His average cost is maximum (d) His marginal cost is equal to marginal revenue

Q.33. Monopolist can determine:(F,08),(D,12)
(a) Price (b) Output (c) Either price or output (d) None

Q.34. The MR curve cuts the horizontal line between Y axis and demand curve into:(F,08)
(a) Two unequal parts (b) Two equal parts
(c) May be equal or unequal parts (d) None of these

Q.35. For a monopolist, the necessary condition for equilibrium is :(J,08)
(a) P = MC (b) P = MR = AR (c) MR = MC (d) None

Q.36. In the long-run monopolist can (J,09)
(a) Incur losses (b) Must earn super normal profits
(c) Wants to shut - down (d) Earns only normal profits

Q.37. The demand curve of the firm and industry will be same in which form of market(J,09)
(a) Monopolistic competition (b) Perfect competition
(c) Monopoly (d) Oligopoly

Q.38. In the long run a monopolist always earns (D,13)
(a) Normal profit (b) Abnormal profit (c) Zero profit (d) Loss

Q.39. Discriminating monopoly implies that the monopolist charges different prices for his
(a) from different groups of consumers (b) for different uses
(c) at different places (d) any of the above.

Q.40. Price discrimination will be profitable only if the elasticity of demand in different sub-markets is: [SM-32]
(a) Uniform (b) different (c) jess (d) zero

Q.41. What e >1 then MR is [SM-66]
(a) Zero (b) negative (c) Positive (d) one

Q.42. When e = 1 then MR is [SM-67]
(a) positive (b) zero (c) one (d) negative

Q.43. When e < 1 then Mr. is [SM-68]
(a) negative (b) zero (c) positive (d) one

Q.44. When the monopolist divides the consumers into separate sub markets and charges different prices in different sub-markets it is known as [SM-83]
(a) first degree of price discrimination (b) second degree of price discrimination
(c) third degree of price discrimination (d) None of the above.

Q.45. Under ____ the monopolist will fix a price which will take away the entire consumers' surplus. [SM-84]
(a) second degree of price discrimination (b) first degree of price discrimination
(c) third degree of price discrimination (d) None of the above.

Q.46. The firm and the industry are one and the same in ______________ [SM-86]
(a) Perfect competition (b) Monopolistic competition
(c) Duopoly (d) Monopoly

Q.47. The demand curve of a monopoly firm will be ___________ [SM-87]
(a) Upward sloping (b) Downward sloping (c) Horizontal (d) Vertical

Q.48. A circumstances in which it might pay a monopolist to cut the price of his product is where
(a) MC is falling (b) MR is greater than MC
(c) His advertising costs are increasing (d) Average costs seem about to fall

Q.49. Price discrimination under monopoly depends on :
(a) Elasticity of supply of commodity. (b) Taxes and other overhead expenses.
(c) The size of market where he sells. (d) Elasticity of demand for the commodity.

Q.50. A discriminating monopolist will charge a higher price in the market in which the demand for its product is _______.(J,16)
(a) highly elastic (b) relatively elastic (c) relatively inelastic (d) perfectly elastic.

Q.51. Price discrimination is profitable only when :(D,16)
(a) Different markets are kept separate
(b) Distance between the consumer and the market is more
(c) Elasticity of demand in different markets is different
(d) The consumers are segregated on the basis of their purposes of use of the commodity.

Q.52. Which of the following statements is incorrect?[SM-45]
(a) Even monopolist can earn losses
(b) Firms in a perfectly competitive market are price takers.
(c) It is always beneficial for a firm in the perfectly competitive market to discriminate prices.
(d) Economic laws are less exact than the laws of natural sciences.

Q.53. Natural Monopoly arises when [SM-97]
(a) There is enormous goodwill enjoyed by a firm.
(b) There are stringent legal and regulatory requirement.
(c) There are very large Economies of Scale.
(d) There are Business Combinations and Cartels.

Q.54. Price Discrimination cannot persist under the following market form: [SM-98]
(a) Perfect Competition (b) Monopoly (c) Monopolistic (d) Oligopoly

Q.55. Price varies by attributes such as location or by Customer Segment is _________ degree of Price Discrimination. [SM-101]
(a) First (b) Second (c) Third (d) Fourth

Answer

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
d	a	a	c	b	d	a	c	a	c	c	a	b	c	d	b	b	d	d	a
21	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**
c	c	b	c	c	a	d	a	a	c	d	d	c	b	c	b	c	b	d	b
41	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**					
c	b	a	c	b	d	b	b	d	c	c	c	c	a	c					

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10	A	B	C	D	50	A	B	C	D	90	A	B	C	D	125	A	B	C	D
11	A	B	C	D	51	A	B	C	D	91	A	B	C	D	126	A	B	C	D
12	A	B	C	D	52	A	B	C	D	92	A	B	C	D	127	A	B	C	D
13	A	B	C	D	53	A	B	C	D	93	A	B	C	D	128	A	B	C	D
14	A	B	C	D	54	A	B	C	D	94	A	B	C	D	129	A	B	C	D
15	A	B	C	D	55	A	B	C	D	95	A	B	C	D	130	A	B	C	D
16	A	B	C	D	56	A	B	C	D	96	A	B	C	D	131	A	B	C	D
17	A	B	C	D	57	A	B	C	D	97	A	B	C	D	132	A	B	C	D
18	A	B	C	D	58	A	B	C	D	98	A	B	C	D	133	A	B	C	D
19	A	B	C	D	59	A	B	C	D	99	A	B	C	D	134	A	B	C	D
20	A	B	C	D	60	A	B	C	D	100	A	B	C	D	135	A	B	C	D
21	A	B	C	D	61	A	B	C	D	101	A	B	C	D	136	A	B	C	D
22	A	B	C	D	62	A	B	C	D	102	A	B	C	D	137	A	B	C	D
23	A	B	C	D	63	A	B	C	D	103	A	B	C	D	138	A	B	C	D
24	A	B	C	D	64	A	B	C	D	104	A	B	C	D	139	A	B	C	D
25	A	B	C	D	65	A	B	C	D	105	A	B	C	D	140	A	B	C	D
26	A	B	C	D	66	A	B	C	D	106	A	B	C	D	141	A	B	C	D
27	A	B	C	D	67	A	B	C	D	107	A	B	C	D	142	A	B	C	D
28	A	B	C	D	68	A	B	C	D	108	A	B	C	D	143	A	B	C	D
29	A	B	C	D	69	A	B	C	D	109	A	B	C	D	144	A	B	C	D
30	A	B	C	D	70	A	B	C	D	110	A	B	C	D	145	A	B	C	D
31	A	B	C	D	71	A	B	C	D	111	A	B	C	D	146	A	B	C	D
32	A	B	C	D	72	A	B	C	D	112	A	B	C	D	147	A	B	C	D
33	A	B	C	D	73	A	B	C	D	113	A	B	C	D	148	A	B	C	D
34	A	B	C	D	74	A	B	C	D	114	A	B	C	D	149	A	B	C	D
35	A	B	C	D	75	A	B	C	D	115	A	B	C	D	150	A	B	C	D
36	A	B	C	D	76	A	B	C	D										
37	A	B	C	D	77	A	B	C	D										
38	A	B	C	D	78	A	B	C	D										
39	A	B	C	D	79	A	B	C	D										
40	A	B	C	D	80	A	B	C	D										

Max. Marks	Min. Marks	Right Ans.	Wrong Ans.	Blank Que.	Neg. Marks	Obt. Marks	Sub. Wise P/F