Exercise questions 4  \hspace{1cm} \textbf{Economics 102}

\textbf{Principles of Microeconomics}

Answer all questions.
II. Multiple choice questions. Choose the \textit{best} answer.

1) In the long-run equilibrium, a firm in monopolistic competition produces at an output level where
   A) \( P > ATC \) but \( MR = MC \).
   B) \( P > ATC \) and \( MR > MC \).
   C) \( P = ATC \) and \( MR = MC \).
   D) \( P = ATC \) but \( MR > MC \).

2) Which one of the following statements is \textit{true} for BOTH perfect competition and monopolistic competition?
   A) Each type of firm faces a downward sloping demand curve.
   B) Each type of firm produces a homogenous product.
   C) In the long run, firms in both industries earn zero economic profit.
   D) Each type of firm competes on product quality and price.

3) When new firms enter a monopolistically competitive industry, each existing firm’s
   A) demand curve shifts rightward (up).
   B) demand curve shifts leftward (down).
   C) marginal cost curve shifts rightward.
   D) marginal cost curve shifts leftward.

\begin{center}
\begin{tabular}{|c|c|c|c|}
\hline
\textbf{Quantity (units per day)} & \textbf{Price and costs (dollars per unit)} \\
\hline
0 & 60 & \phantom{60} & \phantom{60} \\
4 & 48 & \phantom{48} & \phantom{48} \\
8 & 48 & \phantom{48} & \phantom{48} \\
12 & 48 & \phantom{48} & \phantom{48} \\
16 & 48 & \phantom{48} & \phantom{48} \\
20 & 48 & \phantom{48} & \phantom{48} \\
24 & 48 & \phantom{48} & \phantom{48} \\
\hline
\end{tabular}
\end{center}

\textbf{MC} \hspace{1cm} \textbf{ATC} \hspace{1cm} \textbf{MC} \hspace{1cm} \textbf{ATC}

\textbf{MR} \hspace{1cm} \textbf{D}

\textbf{Quantity (units per day)}

Use the above graph for questions (4) and (5).

4) The above figure depicts a firm in monopolistic competition. At the profit maximizing level of output,
   A) the firm is making economic profit.
   B) the firm incurs an economic loss.
   C) the firm is making zero economic profit.
   D) this firm would choose to shut down in the short run.
5) The above figure depicts a firm in monopolistic competition. As a profit maximizer, the firm is currently making ___
A) positive profits.
B) normal profits.
C) below normal profits.
D) above normal profits.

6) Which of the following market structures has the highest barriers to entry?
A) Monopoly
B) Oligopoly
C) Monopolistic competition
D) Perfect competition

7) Which of the following statements is true about a natural monopoly?
A) Demand for the product is price inelastic at any price.
B) Diseconomies of scale result in losses if more than one firm operates.
C) Marginal cost is less than average cost for the relevant range of output.
D) The maximum economic profit the firm can earn is zero.

8) For a single-price monopolist (a monopoly),
A) \( MR = P \).
B) \( MR < P \).
C) \( MR \) first increases and then decreases with the quantity sold.
D) \( MR \) first decreases and then increases with the quantity sold.

9) The figure above shows the demand and cost curves for a single-price monopolist. The firm’s economic profit equals
A) $0
B) $300
C) $100
D) $50
10) Which of the following statements applies to a single-price monopolist?
A) In order to maximize profits, the monopolist should only produce an output that lies in the elastic range of its demand.
B) In order to maximize profits, the monopolist should only produce an output that lies in the inelastic range of its demand.
C) In order to maximize profits, the monopolist should produce where its demand is unit elastic.
D) In order to maximize profits, the monopolist should only produce an output in the inelastic range of its supply.

11) A monopolist engages in price discrimination because
A) it is philanthropic.
B) its primary goal is to maximize total revenue.
C) price discrimination will allow it to earn greater economic profit than charging the same price to all customers.
D) it is less expensive than charging the same price to all customers.

12) One major difference between monopolistic competition and perfect competition is
A) economic profit.
B) product variety.
C) excess capacity.
D) efficiency.

13) With price discrimination, a monopolist will ____
A) charge a lower price to less elastic consumers.
B) charge a lower price to more elastic consumers.
C) charge one price for all consumers.
D) have normal economic profits.

14) In monopolistically competitive markets, products are ____ and entry is ____.
A) identical; free  B) differentiated; free  C) identical; hard  D) differentiated; hard

15) Within a monopolistically competitive industry,
A) each firm faces a downward sloping demand curve.
B) firms can charge a higher price for a higher quality product.
C) firms are not able to collude because there are too many of them.
D) All of the above answers are correct.

16) A monopoly might be more beneficial than a perfectly competitive industry if it ____.
A) employs fewer workers
B) has a bigger incentive to innovate
C) never price discriminates
D) produces where \( MR = MC \).

17) A single-price monopoly causes a deadweight loss because it ____.
A) restricts its output
B) increases the amount produced beyond the efficient quantity
C) maximizes marginal revenue rather than minimizes marginal cost
D) increases marginal cost
18) Nations can increase consumption of all goods if they
A) maximize exports and minimize imports.
B) minimize exports and maximize imports.
C) direct their scarce resources to those goods in which they have a comparative advantage and
trade with other nations.
D) price their goods below the world price.

19) When a monopoly perfectly price discriminates,
there is ____.
A) no producer surplus
B) an increase in supply
C) no consumer surplus
D) a large consumer surplus

20) Compared to a single-price monopoly, the output of a perfectly competitive industry with the same
costs
A) is more than the monopoly’s output.
B) is the same as the monopoly’s output.
C) is less than the monopoly’s output.
D) could be more than, less than, or equal to the monopoly’s output.

21) Advertising costs affect a firm in a monopolistic competition by increasing the firm’s
A) total fixed cost.
B) marginal cost.
C) total variable cost.
D) average variable cost.

22) A firm should hire more workers as long as
A) marginal revenue exceeds the wage rate.
B) marginal revenue is less than the wage rate.
C) marginal revenue product exceeds the wage rate.
D) marginal product exceeds the wage rate.

<table>
<thead>
<tr>
<th>Labor (workers)</th>
<th>Output (haircuts per day)</th>
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<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>24</td>
</tr>
<tr>
<td>2</td>
<td>36</td>
</tr>
<tr>
<td>3</td>
<td>44</td>
</tr>
<tr>
<td>4</td>
<td>48</td>
</tr>
<tr>
<td>5</td>
<td>50</td>
</tr>
</tbody>
</table>

23) The above table has output information for Joe’s Barber Shop. Joe charges $6 per haircut. The firm’s
marginal revenue product of labor for the third worker is equal to ___
A) $264.
B) $48.
C) $8.
D) $6.
24) Young Johnny inherited the only local cable company in town after his father passed away. The company is completely unregulated by the government and is therefore free to operate as it wishes. Assuming that Johnny understands the true power of his new monopoly, he is probably most excited about which of the following statements?

(i) The customers will be forced into purchasing cable at whatever price he wants to set.
(ii) He will be able to achieve any profit level that he desires.
(iii) He will be able to control the price of cable.

a. (i) and (ii)
b. (ii) and (iii)
c. (iii) only
d. all of the above

25) A firm’s demand for labor curve
A) is the same as its marginal revenue product of labor curve.
B) shows how much labor the firm hires at different wage rates.
C) shifts rightward when the price of the firm’s output increases.
D) ALL of the above answers are correct.

26) A competitive firm will hire workers up to the point at which the value of the marginal product equals the
A) wage.
B) price.
C) total revenue.
D) total cost.

27) A perfectly competitive firm’s long run supply curve is made up of its marginal cost curve at all points above its minimum
A) average total cost curve.
B) average fixed cost curve.
C) price.
D) average variable cost curve.

28) A small number of firms such as Boeing dominate aircraft production. In this market, new firms have difficulties entering because_____.
A) firms collude with each other by forming a cartel.
B) firms monopolize the market by setting price.
C) the large initial capital investment required.
D) firms are interdependent.

29) An example of oligopoly is best described by the___.
A) clothing market
B) automobile market.
C) coffee market.
D) number of gas stations in Las Vegas
30). In which of the following markets that a firm is likely to produce more pollution?
   A) Perfect competition  
   B) Monopoly  
   C) Oligopoly  
   D) Monopolistically competitive market.

31) The rise of a natural monopoly can be explained by____.
   A) economies of scope 
   B) economies of scale 
   C) copy rights 
   D) patents 
   E) competition

The following Table gives you the average productivity of workers in producing shoes and clothes in each country. Use the information for (32).

|        | AP  
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<tbody>
<tr>
<td></td>
<td>PCs</td>
<td>Clothes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korea</td>
<td>6</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>2</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

32) Which of the following statements is true?
   A) both Korea and Mexico have a comparative advantage in producing PCs. 
   B) both Korea and Mexico have a absolute advantage in producing PCs. 
   C) Mexico has a comparative advantage in producing PCs 
   D) Korea has a comparative advantage in producing PCs

33) On average, the US workers receive a higher wage. This is because____.
   A) US workers are relatively productive 
   B) the US is a rich country. 
   C) the US workers receive minimum wages 
   D) the Price level is the US is higher.

34) Monopolists are able to practice price discrimination in part because
   A) consumers price elasticities of demand are not identical 
   B) price elasticities of supply are different. 
   C) firms have constant marginal cost. 
   D) firms have constant average cost.
35) When price rises from $P_2$ to $P_3$, the firm finds that
   A) marginal revenue exceeds marginal cost at a production level of $Q_2$.
   B) if it produces at output level $Q_3$ it will earn zero profit.
   C) expanding output to $Q_4$ would leave the firm with losses.
   D) all of the above

36) Which of the following is likely to be a monopolist (a monopoly firm)?
   A) A firm who creates a drug for curing a disease.
   B) A firm such as Dell who produces personal computers.
   C) A firm such as GM is one of the largest producers of automobiles.
   D) The local movie theaters.

37) When an external cost of production is present, the unregulated, competitive market price does
   not reflect the ____ and is too ____ for efficiency.
   A) marginal social cost; high
   B) marginal private cost; high
   C) marginal social benefit; low
   D) marginal social cost; low

38) Which of the following is true?
   A) A large country will gain from free trade while the smaller ones do not.
   B) Free trade will lower domestic price of traded good (such as clothes / shoes).
   C) Free trade will hurt small countries.
   D) Free trade will reduce the efficiency of domestic workers.

39) Which of the following is a characteristic of monopoly in the long run?
   A) Economic profits are driven to zero so that the firm earns only a normal profit.
   B) Economic profits can exist.
   C) Price equals marginal cost.
   D) Price equals marginal revenue.
40) In the above figure, a single-price monopolist charges a price of ____, but the equilibrium competitive price is ____.
A) $10; $20
B) $20; $30
C) $30; $20
D) $30; $10

41) In the above figure, if the single-price monopolist charges a price that maximizes its profits, consumer surplus is
A) area $iae$
B) area $bac$
C) area $cde$
D) area $jhee$

42) An example of an activity that creates a negative production externality is
A) logging, which pollutes rivers.
B) locating beehives next to an orange orchard.
C) smoking, which harms the health of a bystander.
D) flu vaccination.

43) 10) Which of the following is the best example a public good?
A) A parking space.
B) A car.
C) A stop sign.
D) A toll road.
44) Which area(s) in the above figure indicates producer surplus under perfect price discrimination?
A) $A + B + C + D + E + F + G + H + I + J + K + L$
B) $A + B + C + D + E + F + G + H + I + J + K$
C) $A + B + C + D + E + F + G + H$
D) $C + D + E + F + G + H$

45) A country has a comparative advantage in the production of a good if
A) it can produce more of the good than another country.
B) it can produce more of the good most efficiently.
C) it can produce the good at the lowest opportunity cost.
D) it can tradeoff producing the good for another.

Key:
Ccbbc
Acbca
Cbbbd
Bacca
Acbcd
Aacba
Bdaab
Aabbc
bacac