Perfect Competition MC Questions

GCE A-LEVEL ECONOMICS
A commodity is traded under conditions of perfect competition. Which one of the following is a likely impact of exit from the industry by a large number of loss-making producers?

A  Firms remaining in the market will cut their prices
B  Firms remaining in the market will keep their prices unchanged
C  Firms will operate where their average revenue is greater than their marginal revenue
D  Firms remaining in the market will make normal profits in the long run
E  Demand for the commodity will expand as prices fall

Answer □

Explanation ____________________________________________________________

_____________________________________________________________________

_____________________________________________________________________
Question Number | Answer | Mark
--- | --- | ---
8 | D

Characteristic of perfect competition, e.g. no barriers to entry/exit, AR=MR, many firms all selling exactly the same product (1);

Explanation: firms leave because the price is below AVC or AC or shut down point (1); barriers to entry/exit are low making it easy to leave (1); which makes the industry price rise (1) normal profits is the level at which firms will stop leaving (1);

Diagram can earn up to the maximum 3 marks:
- horizontal AR-MR (as characteristic of perfect competition - do not award this in addition to any perfect competition definition/characteristic in text) (1),
- firms leaving (1)
- loss area (1);
- long run perfect competitive firm equilibrium diagram i.e. AC at tangent to horizontal AR (1)

This diagram shows horizontal AR-MR and the loss area on the right hand side, and the supply shift to the left on the left hand side shows firms leaving:

Example of knock out mark: not A because perfectly competitive firms are price takers so cannot cut prices.
<table>
<thead>
<tr>
<th>Output per day</th>
<th>Total revenue (£)</th>
<th>Average revenue/Marginal revenue (£)</th>
<th>Total cost (£)</th>
<th>Average cost (£)</th>
<th>Marginal cost (£)</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>-</td>
<td>12</td>
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<tr>
<td>6</td>
<td>60</td>
<td>10</td>
<td>81</td>
<td>13.5</td>
<td>31</td>
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The firm is attempting to maximise profit. From this information it can be concluded that the firm is operating under conditions of

A monopolistic competition in the short run and will operate at 4 units
B monopolistic competition in the long run and will operate at 5 units
C perfect competition making a supernormal profit at an output of 1 unit
D perfect competition making a supernormal profit at an output of 3 units
E perfect competition making normal profit at an output of 5 units

Answer
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<tr>
<th>Question Number</th>
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<tr>
<td>3</td>
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<td>(1)</td>
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</table>

**Definition of normal profit (1) e.g. AR=AC or TR=TC or making just enough profit to keep factors in their current use.**

Award 1 mark for correct calculation of the columns and filled in up to at least 5 units, for TC (1) AR or MR (1) MC (1) or total profit if added (1).

Observation that MC=MR is profit maximisation (1)

The firm is a price taker, or faces perfectly elastic/horizontal demand (1)

The firm makes normal profits where AR=AC in the long run (1)

Defining characteristic of perfect competition, if not included above, e.g. very many firms in the industry, perfect knowledge, no barrier to entry or exit, homogeneous product (1)

Diagram showing price taking firm, or perfect competition firm with industry diagram determining the price (1)

Total revenue is increasing at a constant gradient indicating firm is a price taker (1)

Knock out marks: e.g. it is not A because this is a price taker with horizontal demand curve whereas monopolistic competitor would have downward sloping demand curve due to differentiation (1)

D is wrong because £3 loss is made at 3 units
2 Sally’s farm grows and sells potatoes and she aims to maximise profit. She believes that the market price of potatoes will not be affected by changes in her farm’s output. She will

A sell as much as she can produce in the long run
B become a monopolist, because she can supply the whole market
C produce at the level of output where marginal cost equals price in the short run
D produce at the level of output where average cost equals price in the short run
E produce at the level of output where average fixed costs equals marginal revenue

Answer

Explanation
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<tr>
<td>2</td>
<td>C</td>
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**Definition/identification mark**: Identification of perfect competition (1).  
**Explanation** that profit maximisation is $MC=MR$ (1).  
**Characteristics of perfect competition** (1): $AR=MR$ or perfectly elastic demand, price taker, low barriers to entry, homogenous product, lots of firms in the industry.  
**Application** e.g. that it is difficult to distinguish potatoes according which farm they were produced on (1)  
**Diagram**: showing horizontal $AR=MR$ (1) **with** output occurs where $MC=MR$ (1)  
**Example of elimination mark**: Knock out of A that she cannot sell as much as she can produce because costs will rise  
**Knock out of B**: not a monopoly because there are many firms in the industry
A profit-maximising firm will produce at the productively and allocatively efficient level of output in which of the following market conditions?

A. Perfect competition in the long run
B. Monopoly
C. Perfect competition in the short run
D. Monopolistic competition in the long run
E. Oligopoly.

Answer

Explanation
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| 8               | A. Definition of profit maximisation $MC=MR$
|                 | B. Explanation of productive efficiency (lowest point on average cost curve) (1 mark) NB definitions are not sufficient for this mark. There must be some explanation
|                 | C. Explanation of allocative efficiency ($P=MC$) (1 mark)
|                 | D. Explanation of firms entering/leaving industry in long run, with no barriers to entry or exit (up to 3 marks)
|                 | E. Diagram illustrating long run equilibrium of a perfectly competitive firm (1 mark for horizontal AR, 1 mark for tangential AC) |

Long-run equilibrium of industry and firm under perfect competition

![Diagram illustrating long run equilibrium of industry and firm under perfect competition]
4 Super normal profits being made by a perfectly competitive firm in the short run would disappear in the long run because of

A freedom of entry into this market
B firms engaging in large scale advertising
C differentiated goods
D allocative inefficiencies
E high sunk costs.

Answer

Explanation
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| 4               | **A**
|                 | Definition of normal profit or supernormal profit verbally or as formulae normal profit $AC = AR$ or supernormal $AC < AR$ (1 mark) Understanding of the existence of perfect knowledge which means that these profits attract new firms (1 mark) into the industry benefitting from no or low barriers to entry such as sunk costs (1 mark) and therefore profits are competed away (1 mark) Diagram to illustrate entry of new firms in long run up to (2 marks) If diagram has no industry and just shows long run perfectly competitive firm (1 mark) |

![Diagram showing the long run behavior of firms and industries with marginal cost (MC), long-run average total cost (LRATC), price (P), and quantity (Q).](image)