

Chapter 36: Worksheet mark scheme (24 marks, HL 24 + 11)

- 1 List **three** costs of holding stocks. (3)
 - storage costs
 - stock-handling costs
 - loss of and damage to stocks
 - obsolescence
 - opportunity costs of capital and/or alternative use of space
- 2 List **three** disadvantages of not holding enough stocks. (3)
 - lost sales
 - production stops if supplies run out
 - special orders could be difficult/expensive to produce
 - raw material orders may be small, hence loss of potential purchasing economies
- 3 List **three** advantages of holding stocks. (3)
 - sudden increased demand can be met
 - economies of scale from bulk discounts on orders
 - finished goods can be displayed to potential customers – may result in new orders
 - finished goods can be stockpiled to meet fluctuating seasonal demand
- 4 Draw a fully labelled stock control graph for an imaginary product X. (9)

Award 1 mark for a correct graph shape with vertical line on arrival of order and 1 mark for a sloping line as stocks are used.

Award a further mark for correctly labelling each of the following:

Re-order level

Buffer stock

Lead time

Maximum stock level

Title for graph

x axis: time

y axis: units

- 5 What does 'JIT' refer to? (2)

This means just in time. It is a stock control method that originated in Japan and aims to avoid holding stocks by planning for supplies to arrive just as they are needed for production, and producing completed goods only to order and for immediate delivery.

Award 2 marks for an accurate definition and 1 mark for a general definition.

- 6 List **four** factors that are needed for JIT to be successful. (4)
- close relationships and communication between suppliers and customers
 - flexible production staff able to switch between production of different products
 - machinery able to produce large batches, then switch products
 - accurate demand forecasts
 - accurate computerised demand forecasting (can be expensive)
 - excellent employer–employee relationships
 - quality must be right first time: no stocks to fall back on
 - cost of halting production if supplies do not arrive must not be greater than the cost of holding stocks
 - low inflation does not mean that stock holding is a way of beating inflation
- 7 **(HL)** Give the equation for calculation of capacity utilisation. (2)
- $$\text{Capacity utilisation} = \frac{\text{current output level}}{\text{maximum output level}} \times 100\%$$
- 8 **(HL)** Why does the fixed cost part of an item's cost go down as the capacity utilisation goes up? (2)
- For product costing purposes, the fixed costs must be divided between the items produced. The more items produced, the lower the fixed cost component of the total cost.
- 9 **(HL)** List **three** reasons for the recent trend towards outsourcing business functions. (3)
- reduction of costs
 - increased flexibility to respond to fluctuations in demand
 - outsourcing of peripheral activities leaves management free to focus on core concerns
 - to free up resources for use in core focus areas
- 10 **(HL)** List **four** potential drawbacks to outsourcing. (4)
- loss of jobs in the business
 - quality may be difficult to control or of a lower standard
 - customers may resist
 - ethical concerns
 - IT data may be less secure
 - outsourced supplier may put up costs once in-house facilities are closed down
 - may be very expensive to reopen closed facilities if outsourcing does not work out well