**Introduction information sheet**

# Resource 2 Slide 6 answers

**How does the use of made-to-stock (MTS) compare to other production strategies like made-to-order (MTO)?**

Made-to-stock (MTS) products are manufactured based on forecasted demand and stored in inventory. Advantages include short lead times, immediate availability and economies of scale. Disadvantages include risk of overstocking, obsolescence and inaccurate forecasting.

Made-to-order (MTO) products are manufactured only after a customer order is received. This leads to advantages such as reduced inventory costs, customisation and minimal waste. Disadvantages are longer lead times, potential for delays and higher production costs.

The key differences between MTS and MTO are that MST focuses on efficiency and availability, with a risk of overstocking. Whereas MTO focuses on customisation and minimising waste, with longer lead times. The choice of production strategy depends on factors such as product characteristics, customer expectations and market dynamics.

# Resource 2 Slide 7 answers

**How does the just-In-time (JIT) inventory management approach impact the relationship between a manufacturer and its suppliers in today’s globalised industries?**

1. Increased interdependence and collaboration

* JIT requires a high degree of coordination and trust as manufacturers become heavily reliant on suppliers to deliver materials exactly when needed.
* This can result in closer, more collaborative relationships, often involving:
  + shared information and forecasting data;
  + joint problem-solving and process improvement;
  + long-term contracts and strategic partnerships.

2. Emphasis on reliability and consistency

* JIT systems are highly sensitive to disruptions. Therefore, manufacturers prioritise suppliers with:
  + consistent delivery performance;
  + high product quality;
  + ability to adapt to fluctuating demand.

3. Enhanced communication and information sharing

* Effective JIT requires good communication and real-time information sharing between manufacturers and suppliers.
* This often involves:
  + electronic data interchange (EDI);
  + online portals and tracking systems;
  + regular communication and feedback.

4. Increased pressure and risk

* JIT places significant pressure on suppliers to meet tight deadlines and maintain high quality.
* This can increase their risk exposure, as any disruption in their own supply chain can have a ripple effect. Globalised supply chains exacerbate these risks, as they are more vulnerable to geopolitical instability, natural disasters and transportation delays.

# Resource 2 Slide 8 answers

**How does the made-to-order (MTO) approach optimise resource allocation and minimise waste in industries with highly variable demand?**

The made-to-order (MTO) approach works well in industries with highly variable demand by optimising resource allocation and minimising waste through several key mechanisms:

1. Demand-driven production

* MTO removes the need to forecast demand and produce goods in anticipation of sales. Production begins only after a customer order is received. This ensures that resources are allocated precisely to meet actual customer demand, preventing overproduction and stockouts.

2. Reduced inventory costs

* MTO significantly minimises or removes the need for finished goods inventory. This reduces costs associated with handling, storage and obsolescence. This frees up capital that would otherwise be tied up in inventory.

3. Efficient resource utilisation

* Resources (labour, materials, equipment) are used only when an order is placed. This prevents idle resources and ensures that they are deployed efficiently. It also allows for better scheduling and planning of production activities.

4. Minimization of waste. MTO reduces waste in several ways:

* Overproduction: Producing only what is ordered eliminates the waste of excess inventory.
* Defects: Because items are often built to a specific customer specification, there is often more care taken in the production process, lowering defects.
* Waiting: Resources are used only when needed, minimising idle time and waiting.
* Transport: Reduced inventory means less movement of goods, reducing transport costs and emissions.

MTO provides a highly responsive and efficient production model that is well-suited to industries with fluctuating demand and a need for customised products.