

Design & Technology
AQA A-Level

**Production, planning
and control (PPC)
networking**

Materials required for questions

- Pencil
- Rubber
- Calculator

Instructions

- Use black ink or ball-point pen
- Try answer all questions
- Use the space provided to answer questions
- Calculators can be used if necessary
- For the multiple choice questions, circle your answer

Advice

- Marks for each question are in brackets
- Read each question fully
- Try to answer every question
- Don't spend too much time on one question

Good luck!

Q1. What is the primary role of PPC systems in manufacturing?

- A** Coordinating materials, machines, and schedules for efficient production
- B** Designing marketing campaigns
- C** Managing employee payroll

Q2. How does PPC ensure the availability of materials?

- A** Relying solely on supplier guarantees
- B** By halting production during shortages
- C** Using inventory tracking and Just-in-Time (JIT) ordering

Q3. Scheduling machines and people via PPC helps to:

- A** Optimize production timelines and reduce idle time
- B** Maximize downtime for maintenance
- C** Eliminate the need for workforce training

Q4. PPC systems coordinate suppliers by:

- A** Prioritizing customer complaints
- B** Reducing communication with suppliers
- C** Automating order placements based on production needs

Answers

Q1. A

Q2. C

Q3. A

Q4. C

Q5.

- An MPS provides clear and accurate information relating to the volume of a specific product that will be produced within a specific time frame.
- An MPS is created using information from various different departments within a business, coordinating resources.
- The shared nature of the document ensures that an accurate picture is always maintained and information is always up to date.
- The MPS will provide information about the volume of workforce needed for a specific manufacturing task and then provide information about the availability of the workforce.
- The MPS software will contain information relating to the volume of components needed to perform a manufacturing task.
- The physical machinery capabilities and output is monitored in order to plan production times and distribution of the finished product.
- It will contain detail of the stock, suppliers and delivery schedules for the relevant component.
- MPS software will manage stock and ensure that orders are made to suppliers based on the required planned output of the manufacture.