

## Sector 6 Mechanical Automotive

The written examination paper is split into two sections.  
Section A is worth 50 marks and Section B is worth 60 marks.

**In Section A** you will need to answer a range of general questions.

To prepare for Section A, you should study and understand the design and manufacture of a range of mass produced products belonging to and used in the *Mechanical Automotive* sector.

You should be able to:

- Name and identify products from this sector including appropriate uses and applications
- Identify a range of components used in the manufacture of engineering products and their uses
- Identify the stages in manufacturing products from this sector
- Name and understand the functions of modern materials used in products in this sector
- Identify, apply and evaluate new technologies including CAD/CAM, ICT, systems and control technology and CIM
- Know and understand the benefits new technology can have on a company relating to communications, control of production, automation, distributors and consumers
- Know how old technology has been replaced by new technology

For **Section B** you should carry out research into the stages in manufacturing **mass produced cycle carriers**.

You should be able to:

- Identify the parts/components used in cycle carriers and explain their functions
- Name and explain the functions of modern materials and their impact on product characteristics and the environment
- Explain and identify appropriate processes including extrusion and polymer coating when manufacturing the product
- Name and describe the stages in manufacture
- Explain the impact of quality and computer control when used in production and packaging & dispatch.
- Explain how ICT is used and impacts on the stages of manufacturing the cycle carrier
- Explain how new technologies impact on materials supply and control, the workforce and the working environment.

You should also familiarise yourself with the What you need to learn section of the GCSE specification – Unit 3: Application of Technology.