

Revision List Product Design Unit 1 Written Exam.

- Question 1.
Product Analysis.
Know the meaning of Anthropometric and Ergonomics.
(Make sure you know your ACCESSFMM, you will need a calculator for this question.)
<http://accessfm.com/tool-1-0/> (pages 2-14)
- Question 2.
Symbols/Packaging Logos/Environmental Issues/Product Life Cycle.
(6 Rs,) (Pages 24-27 and 66-69)
- Question 3.
Designers. James Dyson and Philippe Starck.
You must know about both, you may be asked to compare the designers.
- Question 4.
Design Processes
You must know the 7 stages that designers go through when creating a product, you must also know which order the stages come in and why they are important and what happens at each stage. 1st Stage is a Brief last is Evaluation. (pages 2-14) You will need drawing equipment and colouring pencils for this question. Make sure you tick off EVERY specification point. (Remember 3 marks would mean 3 different annotations.)
- Question 5.
Commercial Manufacturing Practices.
Plastic Processes Vacuum Forming Machine, Injection Moulding machine, Blow Moulding Machine Mass, batch and one off production. Quality control and Quality assurance. Revise fixings, screws, nails, pot-rivets, lock down fittings.(pages 70-84)
- Question 6.
Knowledge of Materials & Components.
Different types of wood, metal, plastics and smart materials (e.g Polymorph) with and their properties and uses. Finishing techniques, stains, varnish, glass paper, polishing. Joining different materials. E.g metal to wood.(pages 30-60)
- Question 7.
Tools, equipment and making.
Tools and their uses. Symbols and signs you may find in the work shop. Hegner Saw, Band Saw, Strip Heater, Hot wire cutter. Health and Safety measures in the work shop.(pages 70-84)
- Question 8.
ICT, CAD/CAM.
Advantages and Disadvantages of using CAD/CAM in manufacturing. Software and programs you may use in school. How do CAM machines work? (pages 78-84) Laser cutter, rapid prototyper. Isometric drawing skills to scale. (pages 16-18)

