**SECTION B - Specialist Technical Principles**

**Finishing treatments and techniques**

Specialist finishing techniques include:

| Tanalising | Spot (UV) varnishing | Stain protection |
| --- | --- | --- |
| Self-adhesive decals | PCB lacquering (conformal coating) | Plastic dip coating |

14.1: Choose **one** specialist treatment or technique from the list above.

Name of chosen specialist treatment or technique

Give **one** reason why the treatment or technique is used. [1 mark]

14.2: In the box below, use notes and sketches to explain how your chosen   
treatment or technique from **14.1** is performed using an appropriate   
material(s) of your choice. [4 marks]



15: Give **two** reasons why tolerances are used in designing and manufacturing products.

Give **one** example in each of your answers.

1. [2 marks]

2. [2 marks]

16.1: Choose one product, material or component in **figure 4** and describe **two** features that make it suitable for computer aided manufacturing (CAM).

|  |  |  |
| --- | --- | --- |
| Laser cut clothes | Laser cut metal signage | 3D printed polymer parts |
|  |  |  |
| CNC routed furniture | Laser cut card stationary | CNC routed PCB |

**Figure 4**

Name of chosen product, material or component

Feature 1 [2 marks]

Feature 2 [2 marks]

16.2: Choose **one** specific computer aided manufacturing process that you are familiar with. This may have been one used on your chosen product/component/material in **16.1**.

Name of chosen specialist CAM process

In the box below, use notes and sketches to explain a CAM process   
in detail. [4 marks]

