

## Answers and marking guidance

Award one mark per correct, developed point unless stated. Other valid answers should be credited.

### 2 Describe two advantages of producing the drawings from the 3D model.

- The views always match each other because they come from one model
- Drawings update automatically when the model is changed
- Accurate dimensions can be taken straight from the model
- Quicker than drawing each view separately

### 3 Quick check

- a) Centre axis
- b) Align
- c) STEP
- d) Top-down

### 4 Key terms

- 1 – A
- 2 – B
- 3 – C
- 4 – E
- 5 – F
- 6 – D

### 5 Explain two benefits of modelling in this way.

- Hole sizes and positions are projected from the head, so they always match
- The cartridge is created in the correct position without needing constraints
- Changes to one component update the related components automatically

### 6 State a suitable file format and explain why it is used.

- STEP (or IGES)
- A neutral format that can be opened in almost any CAD software

### 7 Describe how the tonearm would be fully assembled.

- Centre axis the axle, the hole through the main arm and the base
- Mate one inner face of the axle to an outside flat face of the base
- Orientate the main arm at 20°
- Offset the centre of the arm 13 from the inner edge of the base (or mate to the centre work plane)