



Rewarding Learning

General Certificate of Secondary Education
2024

Engineering and Manufacturing

Unit 2
assessing

Production

MV18

[GEM21]

TUESDAY 7 MAY, MORNING

Time

3 hours, plus your additional time allowance.

Instructions to Candidates

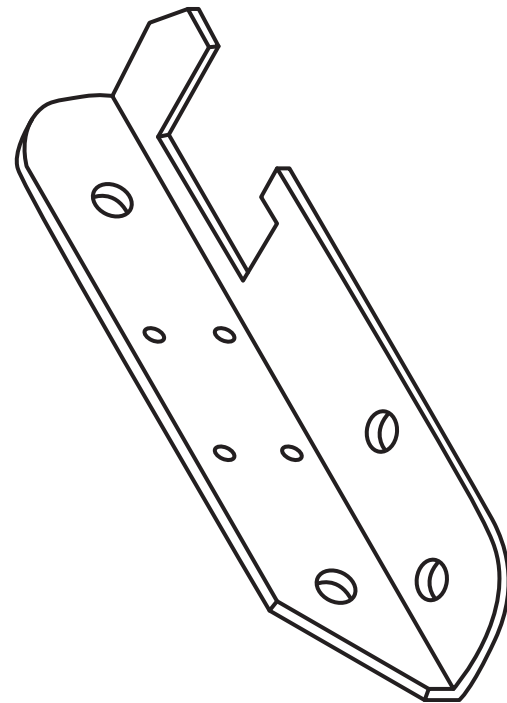
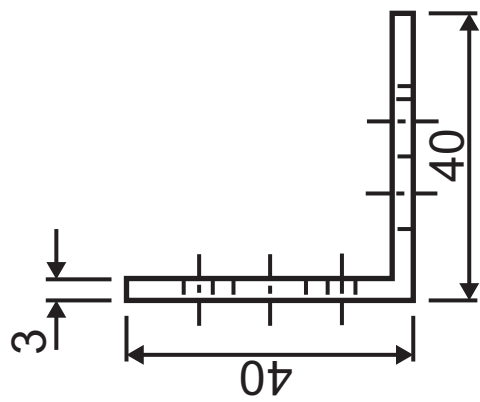
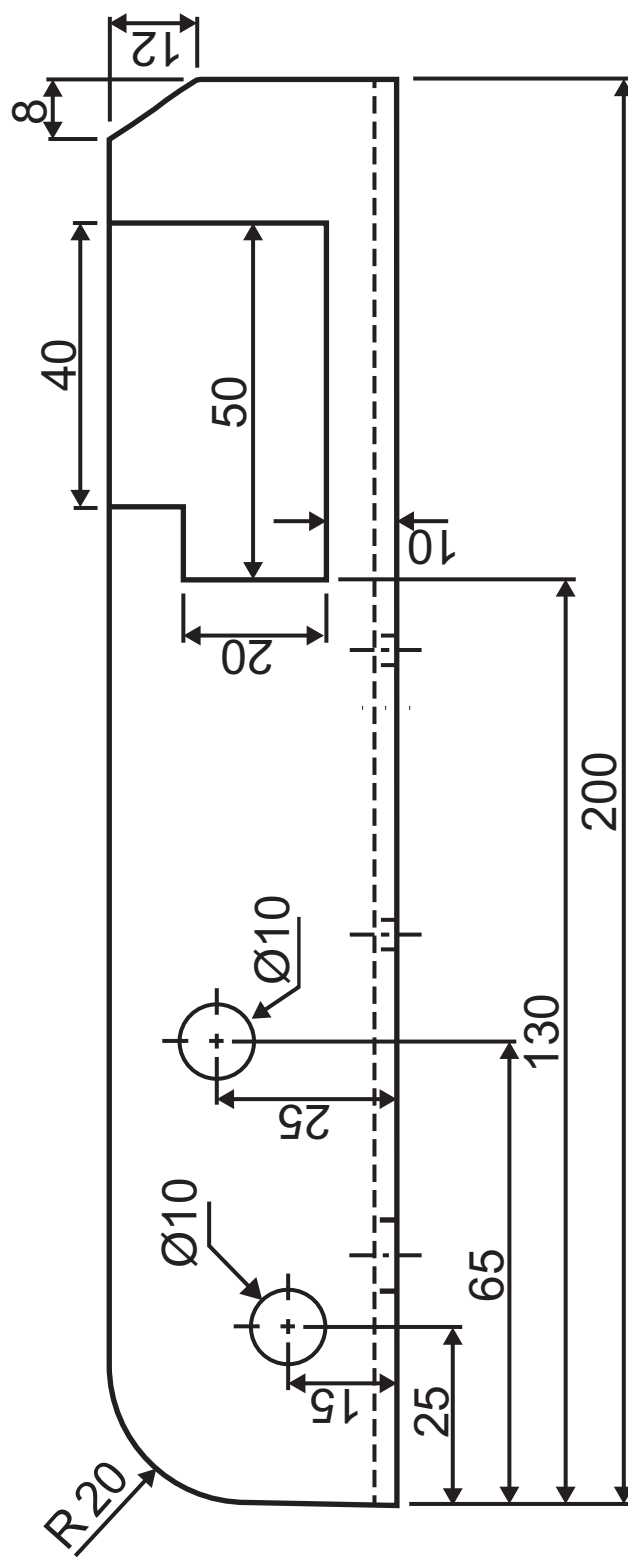
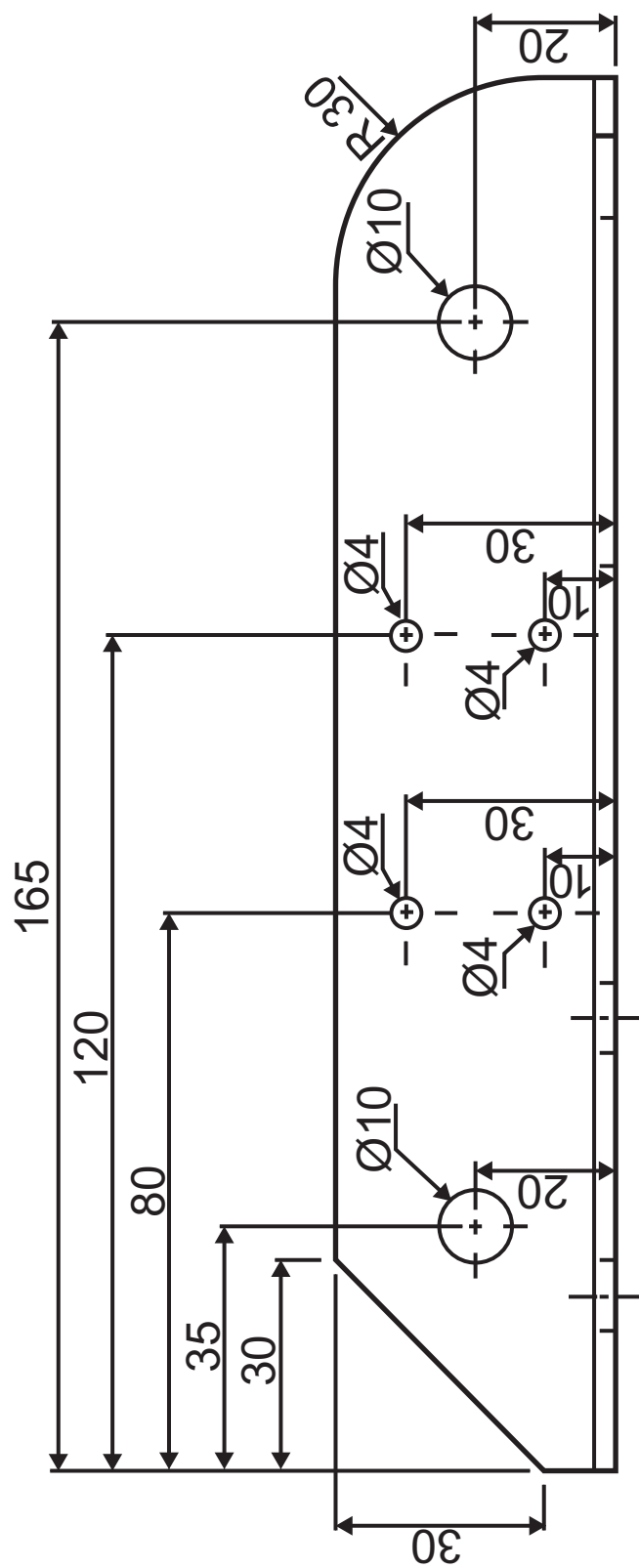
Candidates are expected to complete **all** parts of the manufacturing task from the drawings supplied using the equipment and the materials provided by the centre.

Candidates are advised to spend the first 10 minutes reading the drawings.


Candidates must apply Health and Safety procedures at all times.

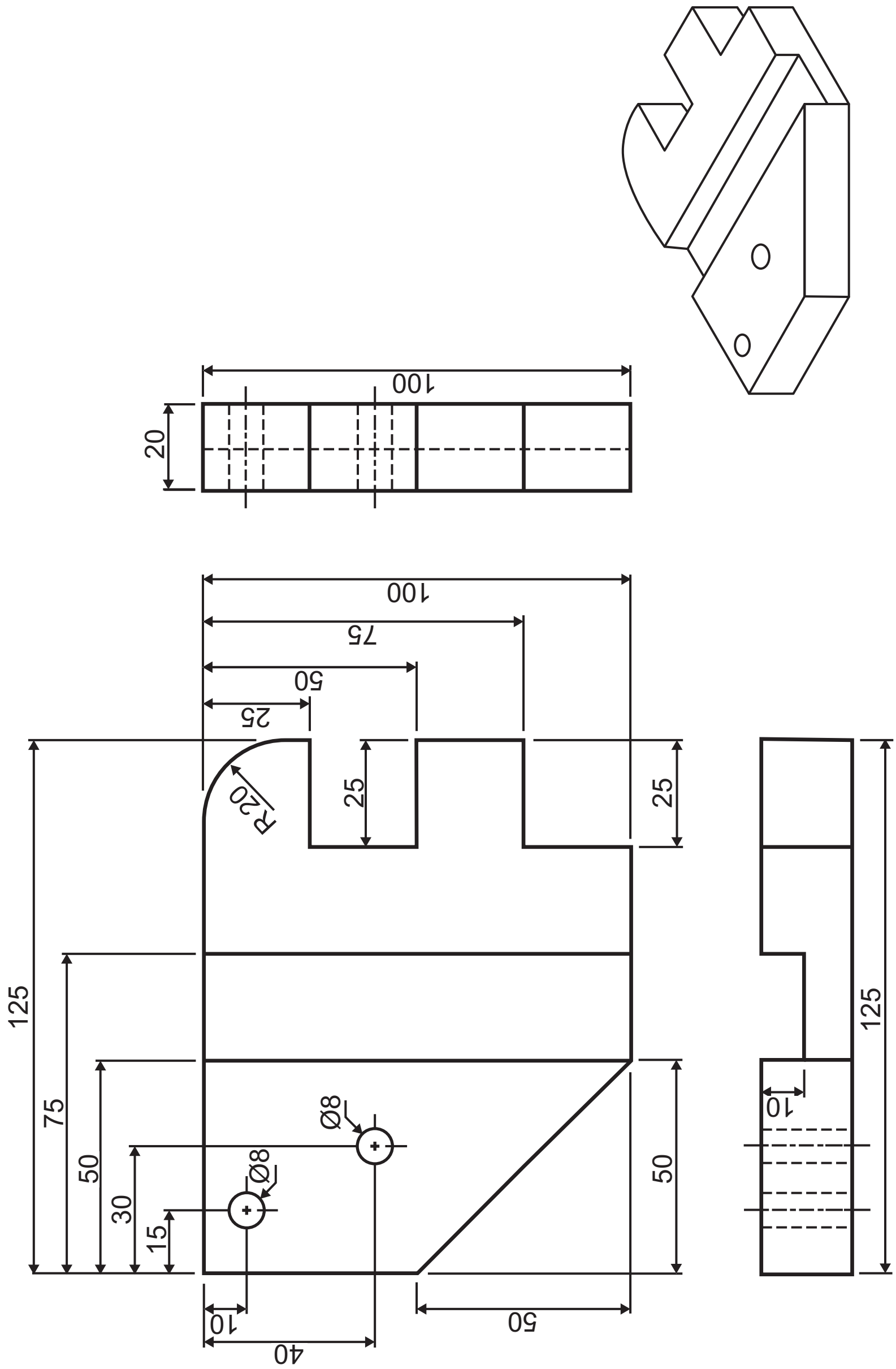
Information for Candidates

The total mark for this practical examination is **100**.

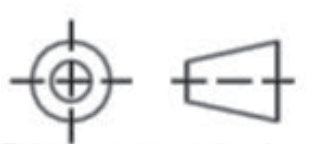


Notes
 All parts cleaned
 Draw filed finish
 No sharp edges

CCEA	Dimensions in mm Do not scale	Unit 2	Part 1	
GCSE Engineering and Manufacturing	Tolerance +/- 0.5mm	Material 40 mm x 40 mm x 3 mm mild steel angle section		Third angle projection



Notes
 Finished with glass paper

CCEA	Dimensions in mm Do not scale	Unit 2	Part 2	 Third angle projection
GCSE Engineering and Manufacturing	Tolerance +/- 0.5 mm	Material 20 mm thick wood		



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DATE OF ISSUE: JANUARY 2024

**CONFIDENTIAL INSTRUCTIONS
TO TEACHERS**

MANUFACTURING PROCESSES

Manufacturing Processes

The practical examination set for Summer **2024** will require candidates to employ manufacturing processes in both **metal** and **wood**.

The practical examination set for Summer **2024** will require candidates to engage in the following processes:

- Working to given tolerances
- Marking out
- Cutting
- Cross filing and draw filing
- Centre punching
- Drilling
- Using wood chisels
- Finishing



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CONFIDENTIAL INSTRUCTIONS TO TEACHERS

EQUIPMENT AND MATERIALS LIST

Centres must ensure that the materials are ordered well in advance of the practical examination.

Confidentiality

To maintain the integrity of the assessment, **no** information pertaining to this examination should be publicly released until after the examination is completed.

Information about the equipment and materials required for the Unit 2 assessment **must not** be communicated to candidates taking the examination prior to the examination.

Equipment and Materials

It is the responsibility of the centre to ensure candidates have access to all of the equipment and materials required to complete the practical examination.

To complete the practical examination successfully each candidate will need access to the following equipment and materials.

Equipment:

- Access to a multimedia workshop capable of accommodating the required number of candidates
- Appropriate Health and Safety equipment for each candidate
- Coping saw
- Tenon saw or dovetail saw
- Try square
- Marking gauge
- Wood chisels
- Mallet
- Hacksaw
- Junior hacksaw
- Pillar drill
- Drill bits suitable for metal: 4 mm and 10 mm and for wood: 8 mm
- Scriber
- Engineers square
- Marking blue
- Centre punch
- Hammer
- Steel rule
- Spring divider
- Odd-leg caliper
- Files suitable for cross and draw filing
- Abrasives suitable for finishing wood and metal

Material required for each candidate:

- 1 piece of 40 mm × 40 mm × 3 mm mild steel angle section 210 mm long and
- 1 piece of 20 mm (+/- 1 mm) natural wood* 125 mm × 100 mm

* The natural wood selected by the centre should be suitable for completion of a bench joinery piece to a high degree of accuracy and finish.

