

### 2014 HIGHER SCHOOL CERTIFICATE EXAMINATION

# Industrial Technology Timber Products and Furniture Technologies

#### **General Instructions**

- Reading time 5 minutes
- Working time  $1\frac{1}{2}$  hours
- Write using black or blue pen Black pen is preferred
- Draw diagrams using pencil
- Board-approved calculators may be used
- Write your Centre Number and Student Number at the top of page 5

#### Total marks - 40

Section I ) Pages 2–4

#### 10 marks

- Attempt Questions 1–10
- Allow about 20 minutes for this section

Section II Pages 5–7

#### 15 marks

- Attempt Questions 11–15
- Allow about 35 minutes for this section

**Section III** Page 9

#### 15 marks

- Attempt Question 16
- Allow about 35 minutes for this section

#### **Section I**

#### 10 marks Attempt Questions 1–10 Allow about 20 minutes for this section

Use the multiple-choice answer sheet for Questions 1–10.

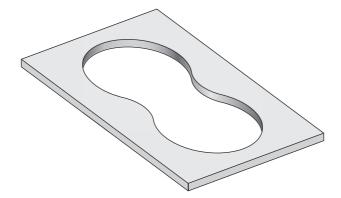
1 A Pozidrive screw head is shown.



The main advantage of a Pozidrive screw is that

- (A) it is designed to fit a slotted bit.
- (B) it is available in countersunk and raised heads.
- (C) it is tamper resistant once the screw has been driven in.
- (D) there is less chance of stripping the head when driving the screw in.
- 2 What is the gauge of a screw based on?
  - (A) Pitch
  - (B) Length
  - (C) Head diameter
  - (D) Diameter of the shank
- **3** What is meant by the term DAR?
  - (A) Dressed all round
  - (B) Dressed and roughcut
  - (C) Drawn all round
  - (D) Drawn and roughcut

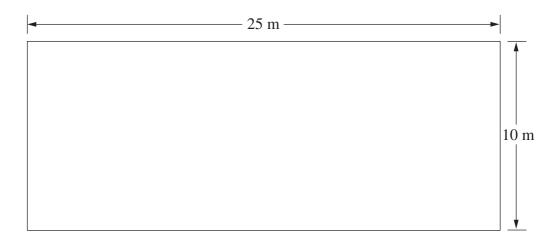
4



Which is the best handsaw to use to cut the inside shape of the timber piece shown?

- (A) Coping
- (B) Panel
- (C) Tenon
- (D) Scroll
- 5 Which method of lathe turning would be most suited to turning a large bowl?
  - (A) Face plate turning
  - (B) Cup chuck turning
  - (C) Spindle turning
  - (D) Parallel turning
- **6** When is timber considered to have been seasoned?
  - (A) When it has completely dried
  - (B) When it feels dry to the touch
  - (C) When no moisture is left in the cell walls
  - (D) When it has reached its equilibrium moisture content
- 7 Which timber conversion results in the fewest seasoning defects?
  - (A) Live sawn
  - (B) Back sawn
  - (C) Quarter sawn
  - (D) Tangential sawn

8 The dimensions of a timber products and furniture workshop are shown. 15 m<sup>2</sup> of its floor area is dedicated to storage.



What percentage of the total floor area is dedicated to storage?

- (A) 6%
- (B) 12%
- (C) 60%
- (D) 67%
- 9 In which of the following are both factors reasons for using veneered manufactured boards as an alternative to solid timber?
  - (A) Aesthetics, cost effectiveness
  - (B) Aesthetics, moisture protection
  - (C) Machinability, moisture protection
  - (D) Strength, never distorts
- A large timber products and furniture company pays for its workers' professional association fees. The fee is \$457 for a full-time tradesman and \$250 for a part-time tradesman. An apprentice fee is 48% of a part-time tradesman's fee.

How much does it cost the company if there are 137 full-time tradesmen, 22 part-time tradesmen and 27 apprentices?

- (A) \$65 849
- (B) \$68 109
- (C) \$71 349
- (D) \$74 589

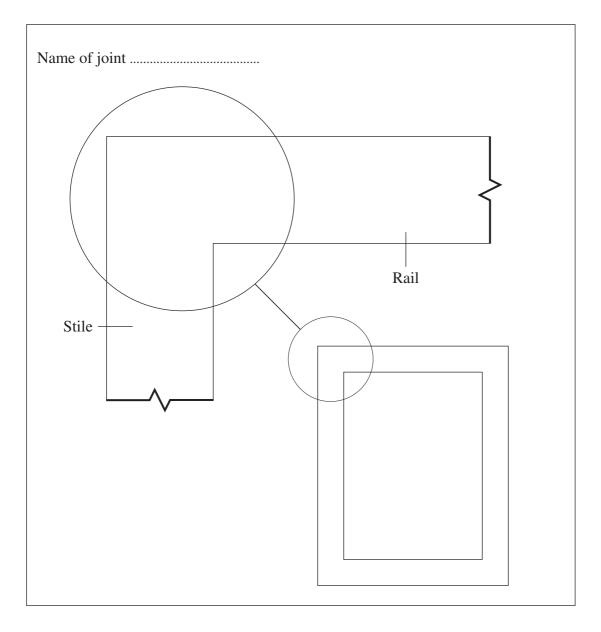
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Technologies									
Section II						Stu	ıdent	Nur	mber
15 marks Attempt Questions 11–15 Allow about 35 minutes for this section									
Answer the questions in the spaces provided. The length of response.	ese space	es pro	ovide	e gui	danc	e foi	the	expe	cted
Question 11 (1 mark)									
Identify an advantage of using recycled timber to	make a	table	<b>).</b>						1
Question 12 (3 marks)  Outline the steps in making the table top shown frowith the dimensions $150 \text{ mm} \times 25 \text{ mm} \times 1200 \text{ mm}$		recyo	eled	timb	er be	ams	each	ı	3
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#### Question 13 (3 marks)

The doors of a cupboard are made from solid timber.

Name and sketch a suitable joint to join the rail and stile as shown.



3

Question 14 (3 marks)	
Outline the steps in creating a profile of a raised panel insert for a door. You may include a diagram.	3

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Describe the process involved in applying and finishing veneer on the face and edges of a manufactured board.

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#### **Section III**

15 marks Attempt Question 16 Allow about 35 minutes for this section

Answer the question in a writing booklet. Extra writing booklets are available.

#### **Question 16** (15 marks)

(a) Describe the impact of government legislation on work practices. 6

(b) Evaluate the effect of new and emerging technologies on work practices in industry.

#### End of paper

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