

## **2014 HSC Industrial Technology Timber Products and Furniture Technologies Marking Guidelines**

### **Section I**

#### **Multiple-choice Answer Key**

<b>Question</b>	<b>Answer</b>
1	D
2	D
3	A
4	A
5	A
6	D
7	C
8	A
9	A
10	C

## Section II

### Question 11

Criteria	Marks
• States ONE advantage of using recycled timber	1

*Sample answer:*

Minimises environmental impact.

*Answers could include:*

- Minimises waste by reclaiming timber
- Positive environmental effect including conservation of old growth timbers
- Recycled timber has a desirable ‘aged’ appearance
- Reduces landfill
- Cost effective

### Question 12

Criteria	Marks
• Provides main features of making the table top	3
• Provides some features of making the table top	2
• Provides a feature of how to make the table top from the timber beam	1

*Sample answer:*

- Prepare the timber to the finished sizes by cutting to length and planing the face edges square. Mark on the location joints.
- Prepare the joint by using a biscuit joint to create slots in the edges to be joined.
- Assemble the pieces. Insert the biscuit with some glue, then align and join the timber pieces. Clamp together until glue is set.

*Answers could include:*

- Dowels
- Tongue and groove
- Domino joint

**Question 13**

Criteria	Marks
• Identifies a suitable joint and provides a quality sketch	3
• Identifies a suitable joint and provides a basic sketch OR • Provides a quality sketch of a suitable joint	2
• Identifies a suitable joint OR provides a suitable joint sketch	1

**Sample answer:**

Name of joint.....

**Answers could include:**

- Bridle
- Domino
- Dovetail
- Feathered mitre
- Mortise and tenon

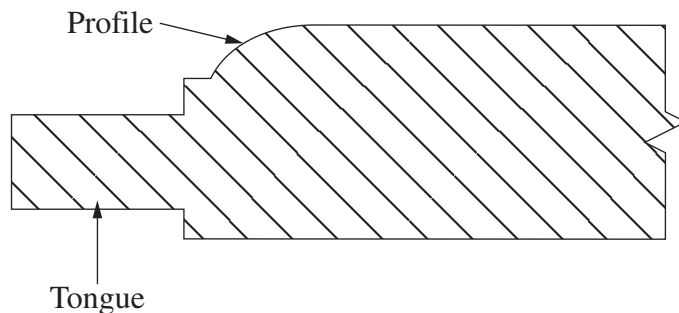
**Question 14**

Criteria	Marks
<ul style="list-style-type: none"> <li>• Provides main steps involved in creating the raised panel profile</li> </ul> OR <ul style="list-style-type: none"> <li>• Provides a sketch which illustrates creating a profile of a raised panel</li> </ul>	3
<ul style="list-style-type: none"> <li>• Provides some steps in creating the raised panel profile</li> </ul> OR <ul style="list-style-type: none"> <li>• Provides some steps in creating a raised panel insert</li> </ul> OR <ul style="list-style-type: none"> <li>• Provides a relevant sketch which illustrates creating a profile of a raised panel</li> </ul>	2
<ul style="list-style-type: none"> <li>• Provides a basic feature of making a profile</li> </ul> OR <ul style="list-style-type: none"> <li>• Provides a basic step in creating a raised panel insert</li> </ul> OR <ul style="list-style-type: none"> <li>• Provides a basic sketch</li> </ul>	1

**Sample answer:**

The panel is cut to size so as to fit within the frame. The profile needs to include a tongue so that it fits into the groove of the rail and stile frame.

A suitable router bit is selected to match the desired profile. The bit is fixed to a table mounted router (not hand held). The panel's edges are machined to form the profile and tongue as depicted in the diagram.

**Answers could include:**

The raised profile could also be formed by applying moulding/beading to a flat panel.

**Question 15**

<b>Criteria</b>	<b>Marks</b>
<ul style="list-style-type: none"> <li>Provides characteristics and features of the process involved in applying and finishing the veneer</li> </ul>	5
<ul style="list-style-type: none"> <li>Provides features involved in applying and finishing the veneer</li> </ul> OR <ul style="list-style-type: none"> <li>Describes either the steps in applying the veneer OR the steps in finishing the veneer</li> </ul>	3–4
<ul style="list-style-type: none"> <li>Identifies basic steps of applying OR finishing the veneer OR outlines either step</li> </ul>	1–2

***Sample answer:***

Select a suitable veneer and match grain ensuring the grain runs in a suitable directional. Apply contact adhesive to both the board and the underside of the veneer and wait until it is tack dry.

Bring the veneer together with the board and apply firm pressure. Use a scraper to remove any bubbles and apply pressure. Once the adhesive is set, sand in the direction of the grain with progressively finer sand paper. Dust down, select a suitable finish and apply a minimum of three coats. Allow to dry and sand between coats.

***Answers could include:***

- Vacuum press veneer

## Section III

### Question 16 (a)

Criteria	Marks
• Detailed understanding of the characteristics and features of how government legislation has impacted work practices	6
• Sound understanding of the characteristics and features of how government legislation has impacted work practices	4–5
• Basic understanding of features of government legislation and link to work practices	2–3
• Provides some relevant information	1

#### *Sample answer:*

Government legislation, such as the Equal Employment Opportunity Act, has had significant impacts on work practices. For example, when advertising, interviewing, and appointing someone to a position in an organisation care and diligence is required to ensure everybody has an opportunity to apply, get interviewed and appointed, regardless of gender, disability, race, beliefs etc. This may mean equal access now requires ramps, elevators, disabled toilets in all workplaces.

### Question 16 (b)

Criteria	Marks
• Provides a judgement based on detailed criteria of the effect of new and emerging technologies on work practices	9
• Provides a judgement based on criteria of the effect of new and emerging techniques on work practices	7–8
• Provides an understanding of the value and effect of new and emerging technologies on work practices	5–6
• Main features of the value or effect of new and emerging technologies on work practices	3–4
• Provides some relevant information	1–2

#### *Answers could include:*

The internet has now allowed people to do some of their work from home as they can access the company's software and data from home.

This is very positive for three main reasons:

1. Travel time is reduced. This means the worker can spend more time with his/her family which has positive effects for the happiness of the worker.
2. Fewer people travelling on roads to and from work means less traffic. Less traffic means faster travelling and less frustration before getting to work.
3. More work can be done as working alone at home means no distractions from other workers.

# Industrial Technology

## Timber Products and Furniture Technologies

### 2014 HSC Examination Mapping Grid

**Section I**

Question	Marks	Content	Syllabus outcomes
1	1	Materials	H1.2
2	1	Materials	H1.2
3	1	Materials	H1.2, H5.1
4	1	Processes, tools and machinery	H1.2
5	1	Processes, tools and machinery	H1.2
6	1	Materials	H4.3
7	1	Materials	H4.3
8	1	Processes, tools and machinery	H3.2
9	1	Materials	H4.3, H6.1
10	1	Personnel	H3.2

**Section II**

Question	Marks	Content	Syllabus outcomes
11	1	Materials	H4.3, H6.1
12	3	Processes, tools and machinery	H1.2
13	3	Processes, tools and machinery	H3.1
14	3	Processes, tools and machinery	H1.2
15	5	Processes, tools and machinery	H1.2

**Section III**

Question	Marks	Content	Syllabus outcomes
16 (a)	6	Personnel issues	H1.1, H2.1
16 (b)	9	Technological considerations	H1.1, H2.1, H7.2

**Section I**

Question	Marks	Content	Syllabus outcomes
1	1	Materials	H1.2
2	1	Materials	H1.2
3	1	Materials	H1.2, H5.1
4	1	Processes, tools and machinery	H1.2
5	1	Processes, tools and machinery	H1.2
6	1	Materials	H4.3
7	1	Materials	H4.3
8	1	Processes, tools and machinery	H3.2

<b>Question</b>	<b>Marks</b>	<b>Content</b>	<b>Syllabus outcomes</b>
9	1	Materials	H4.3, H6.1
10	1	Personnel	H3.2

**Section II**

<b>Question</b>	<b>Marks</b>	<b>Content</b>	<b>Syllabus outcomes</b>
11	1	Materials	H4.3, H6.1
12	3	Processes, tools and machinery	H1.2
13	3	Processes, tools and machinery	H3.1
14	3	Processes, tools and machinery	H1.2
15	5	Processes, tools and machinery	H1.2

**Section III**

<b>Question</b>	<b>Marks</b>	<b>Content</b>	<b>Syllabus outcomes</b>
16 (a)	6	Personnel issues	H1.1, H2.1
16 (b)	9	Technological considerations	H1.1, H2.1, H7.2