

## VCE VET: Furnishing GA 2: Written examination

### GENERAL COMMENTS

In 2002, over 100 students sat the written examination and the overall standard was pleasing. The examination tested underpinning knowledge gained across the 5 modules studied. These modules will be the basis for the examination in 2003.

Areas that continue to present problems include:

- using the provided grid to adequately draw in respective lines to represent the parts of the cutting plan
- difficulty given students' limited ability to respond accurately to the completion of the cutting list.

### SPECIFIC INFORMATION

#### Section A – Multiple-choice questions

This table indicates the approximate percentage of students choosing each distractor. The correct answer is the shaded alternative.

Question	A	B	C	D	Question	A	B	C	D
1	49	32	4	15	11	37	21	12	30
2	32	31	29	8	12	58	27	4	11
3	23	58	8	11	13	13	17	22	48
4	7	16	4	73	14	46	14	12	28
5	87	5	4	4	15	11	33	8	48
6	11	19	10	60	16	12	13	71	4
7	7	33	19	41	17	28	55	6	11
8	6	59	32	3	18	23	13	61	3
9	7	13	79	1	19	65	16	4	15
10	22	6	65	7	20	11	28	33	28

#### Section B – Short-answer questions

Question	Marks	%	Response
Question 1	0/5	2	Students were asked to name the joint used in the illustration given and describe two advantages and two disadvantages. A mark was awarded for a correct joint type and 1 mark for each advantage and disadvantage. The sketch depicted a 'machined lapped dovetail' joint but marks were awarded to those who left out the word 'Machined'. Advantages accepted were along the lines of 'reflect quality in a piece of furniture' and 'a strong joint that would last the life of the product'. Disadvantages were generally described as 'costing more to produce in labour and materials' and 'the use of specialist machinery'.
	1/5	5	
	2/5	20	
	3/5	29	
	4/5	26	
	5/5	18	
	(Average mark 3.22)		
Question 2	0/2	22	Answers to this question included: routed and/or moulded edges, cocked beading applied, apply patterned expensive veneers, inlay bandings, beadings, mouldings, laminates and beveled or moulded edges. One mark was awarded for each response.
	1/2	45	
	2/2	33	
	(Average mark 1.11)		
Question 3	0/6	2	Three different cabinet doors were specified and students were asked to select a suitable material and hinge type for each door. Two marks were awarded for each. Students did not answer this particularly well with many duplicating the materials and hinge types for each situation. An example for <u>kitchen cupboard doors</u> could have included, melamine faced HMR particleboard fitted using concealed hinges. <u>Display cabinet doors</u> could include a concealed pivot hinge, piano hinge or brass butt hinge. The <u>traditional bedside cabinet door</u> could be constructed using a pine frame with plywood panel and insertion moulding and fitted using a butt hinge.
	1/6	1	
	2/6	6	
	3/6	9	
	4/6	30	
	5/6	34	
	6/6	18	
(Average mark 4.39)			
Question 4	0/4	4	Four marks were awarded for providing two advantages and two disadvantages of modular furniture from a production or customer's point of view. Advantages included cheaper to manufacture than other forms of construction, easy to assemble, transported easily in flat pack containers
	1/4	11	
	2/4	32	
	3/4	35	
	4/4	18	

	(Average mark 2.5)		Disadvantages included not as strong as solid well made furniture, requirements for expensive machinery to produce, some customers may find assembly difficult.
<b>Question 5</b>	0/6 46 1/6 5 2/6 9 3/6 8 4/6 12 5/6 6 6/6 14 (Average mark 2.08)		Students were asked to complete sectional elevation drawings and label three different ways of fixing solid timber edging to particleboard. A mark was awarded for each completed sketch and one mark for a correctly labeled sketch. Solutions accepted were, tongued and grooved (glued and clamped), loose tongued (glued and clamped), butt joint (glued and clamped), butt joint (glued with block and pins removable after joint has dried).
<b>Question 6</b>	0/4 2 1/4 10 2/4 38 3/4 37 4/4 13 (Average mark 2.49)		Six materials were listed; students were to select two and give two advantages of their use in modular furniture. One mark was awarded for each advantage given. <u>Particle board</u> : seen as low cost, good substitute for veneers, laminates and foils, availability of standard sizes and thickness' and available in moisture resistant form. <u>Metal fittings</u> : strength and availability and range of product, ie. hardware. <u>Plastics</u> : use as mouldings for edge treatments and general use in hardware. <u>Plywood</u> : dimensionally stable, strong in relation to thickness. <u>Glass</u> : ideal as a design feature whether used as transparent or opaque, easy to clean. <u>Laminates</u> : range of colours, patterns and wood grain finishes, hard wearing, easy to maintain.
<b>Question 7</b>	0/5 0 1/5 0 2/5 0 3/5 7 4/5 40 5/5 53 (Average mark 4.45)		This question was answered particularly well by most students. Five marks were awarded for matching the correct name to each given part on a sketch provided.
<b>Question 8</b>	0/4 0 1/4 1 2/4 12 3/4 27 4/4 60 (Average mark 3.44)		Students were awarded 1 mark for selecting a corresponding photograph and matching the relevant hardware item. This question was well answered by most students. <ul style="list-style-type: none"> <li>• adjustable shelf support (E)</li> <li>• dowel and cam (B)</li> <li>• metal drawer runner (D)</li> <li>• concealed hinge (A)</li> </ul>
<b>Question 9</b>	0/3 13 1/3 18 2/3 35 3/3 34 (Average mark 1.89)		Students were asked to provide three examples of edge treatments to medium density fibreboard for use on a unit door. Examples that were accepted included, sanded edging, laminate edging, iron-on-veneer or paper tape, routed and/or moulded edge profile, melamine coated edging.

#### Question 10

Marks	0	1	2	3	4	5	6	7	8	9	10	11	12	Average
%	15	14	11	16	13	11	8	5	5	2	1	0	0	3.37

The 'cutting list' question was answered poorly by many students. The orthogonal drawing provided along with the specifications was not interpreted well. The cutting list asked for 12 sizes to be generated to match what was already provided.

The correct answers are shown in the table below:

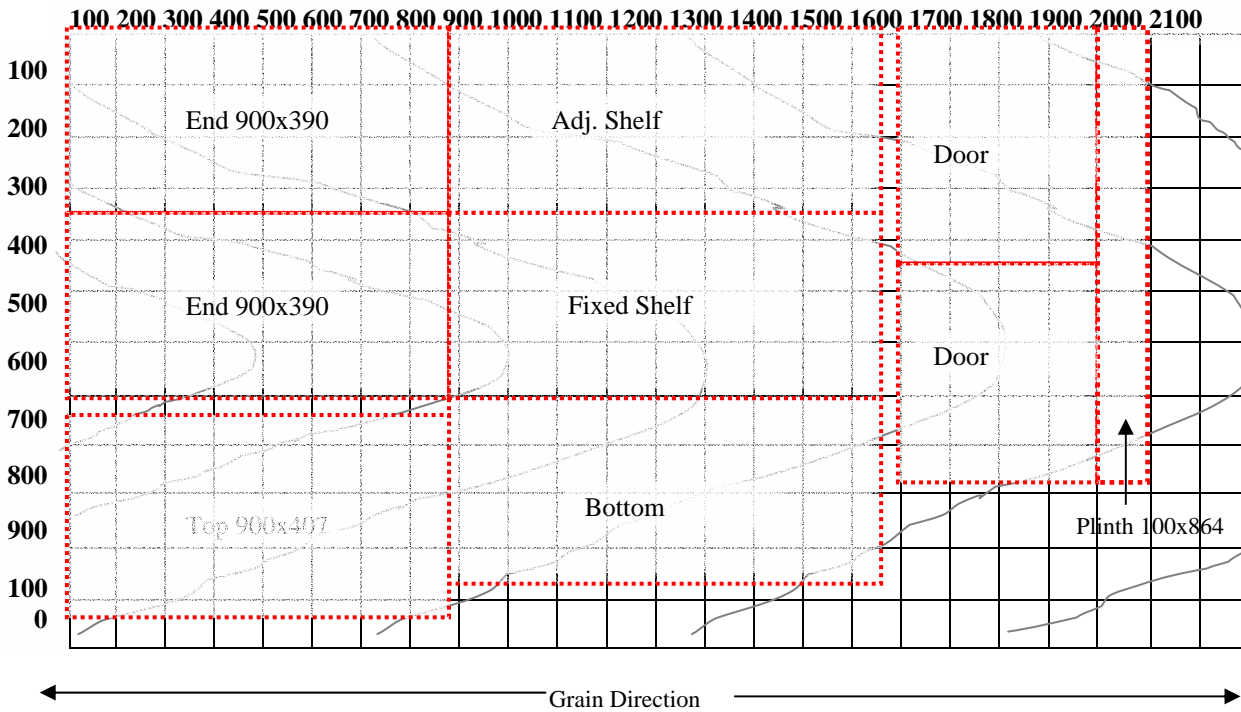
The cutting list is as follows:

Item	No of pieces	Length	Width	Thickness
1	2	900	390	18
2	1	900	407	18
3	1	(862-864)	376	18
4	1	864	386	18
5	1	864	386	18
6	2	400	450	18
7	1	936	18	18
8	2	425	18	18
9	1	100	864	18

**Question 11**

Marks	0	1	2	3	4	5	6	7	8	9	Average
%	27	4	6	7	15	8	11	8	8	6	3.75

Students were asked to set out an economical cutting plan of the Victorian Ash veneered particle board used in the cutting list for the general storage unit (see below). This question was generally not answered well; students had particular problems with the use of scale, size, grain direction in relation to doors and plinth.



Question	Marks	%	Response
<b>Question 12</b>	<b>a-b</b>		<p><b>a</b> Students were asked to give an acceptable range in the clearance between the doors and the carcass. This generally was between 1 mm and 2 mm.</p> <p><b>b</b> Students were required to give length and width measurements for the size of a door. The accepted measurement range was 421-423 mm for the height of the door and 449-451 mm for the width of the door. As no grain direction was set, students who had the length and width reversed were awarded part marks.</p>
	0/4	17	
	1/4	13	
	2/4	20	
	3/4	31	
	4/4	19	
	(Average mark 2.21)		
<b>Question 13</b>	<b>a-b</b>		<p><b>a</b> This question required students to mark in the positions on the stile where the butt hinges would be fitted. The rule here is generally in line with the top and bottom rail. Many students were clearly not aware of this.</p> <p><b>b</b> This question required a recommendation of a suitable catch to secure the door. Acceptable options included double ball catch or a magnetic catch.</p>
	0/3	13	
	1/3	34	
	2/3	26	
	3/3	27	
		(Average mark 1.66)	

<b>Section C – Case study</b>			
<b>Question 1</b>	<b>a–b</b>		<b>a</b>
	0/6	15	Students were asked to sketch a traditional bedside cabinet with a drawer and framed door, using the example from the insert as a guide. Generally, most students reacted well to the challenge.
1/6	14		
	2/6	19	<b>b</b> Students were required to label pointers to identify features that matched the customers sideboard. In many instances students were unable to identify details such as applied mouldings, veneered drawer fronts, turned legs, split turnings, ply panels, and moulded top edges.
	3/6	32	
	4/6	15	
	5/6	5	
	6/6	0	
	(Average mark 2.35)		
<b>Question 2</b>	0/2	23	Students were asked to describe an important advantage of using cramping blocks when assembling end frames or doors for a traditional bedside cabinet. A good response would have been, ‘so that the cramps do not mark or bruise the timber’ and ‘to enable better control of the cramping process so that the stiles and rails are straight and on the same plane’. Two marks were awarded for two distinct advantages.
	1/2	8	
	2/2	69	
	(Average mark 1.46)		
<b>Question 3</b>	0/2	23	Students were to describe one problem likely to occur if a door is fitted to the traditional bedside cabinet when the door has been assembled in twist or wind. Appropriate responses included ‘when the door is fitted, it will not close flush at all four points with the carcass front’, and ‘a catch will not be able to hold the door closed adequately’.
	1/2	40	
	2/2	37	
	(Average mark 1.13)		
<b>Question 4</b>	<b>i</b>		This question was in two parts each awarded 5 marks which, when broken down awarded 1 mark for the name of the joint to be used, one mark for the sketch, 1 mark for where the joint would be used in the traditional bedside table and 2 marks for a reason why the joint would be suited to this situation. <ul style="list-style-type: none"><li>• framing joints included dowel joint and mortise and tenon joint (either stopped or through)</li><li>• joints selected could have been used to construct either the door frames and/or the end sections of the cabinet.</li></ul> These joints were suitable because of the strength and durability of the joint and traditional use of these joints.
	0/5	25	
	1/5	6	
	2/5	13	
	3/5	21	
	4/5	21	
	5/5	14	
	(Average mark 2.47)		
	<b>ii</b>		
	0/5	35	
	1/5	9	
	2/5	16	
	3/5	22	
	4/5	10	
5/5	8		
(Average mark 1.86)			
<b>Question 5</b>	0/3	19	A mark was awarded for each suitable answer for the three requirements, e.g. satisfy customers demands for the design; correct size, proportions and features; minimum gaps on drawer and door to industry standard; and checking quality before the customer takes delivery.
	1/3	42	
	2/3	31	
	3/3	8	
	(Average mark 1.28)		