2005 Assessment Report

VICTORIAN CURRICULUM AND ASSESSMENT AUTHORITY

2005 VCE VET Furnishing GA 2: Written examination

GENERAL COMMENTS

In 2005, 87 students sat for the VCE VET Furnishing written examination. The questions on the examination were designed to test students' underpinning knowledge of the five modules they had studied in Units 3 and 4. This was the last exam based on the ABC module system. In 2006, questions will be drawn from the relevant competencies in the new training package.

Areas of strength

- basic components
- completing a cutting list
- quality control and quality systems

Areas of weakness

- modular construction
- use of quadrants
- decorative treatments
- cutting plans

SPECIFIC INFORMATION

Section A – Multiple-choice questions

The table below indicates the percentage of students who chose each option. The correct answer is indicated by shading.

Question	% A	% B	% C	% D	% No Answer
1	8	63	15	14	0
2	5	5	80	10	0
3	26	20	52	2	0
4	7	85	7	1	0
5	6	64	8	22	0
6	2	29	17	51	1
7	9	17	66	8	0
8	18	6	36	40	0
9	2	11	1	85	0
10	13	10	32	45	0
11	36	13	48	3	0
12	62	21	3	14	0
13	9	31	41	18	0
14	6	11	66	17	0
15	30	40	14	16	0
16	29	37	28	7	0
17	3	7	31	59	0
18	10	36	30	24	0
19	14	20	17	49	0
20	8	2	21	69	0

Section B – Short-answer questions

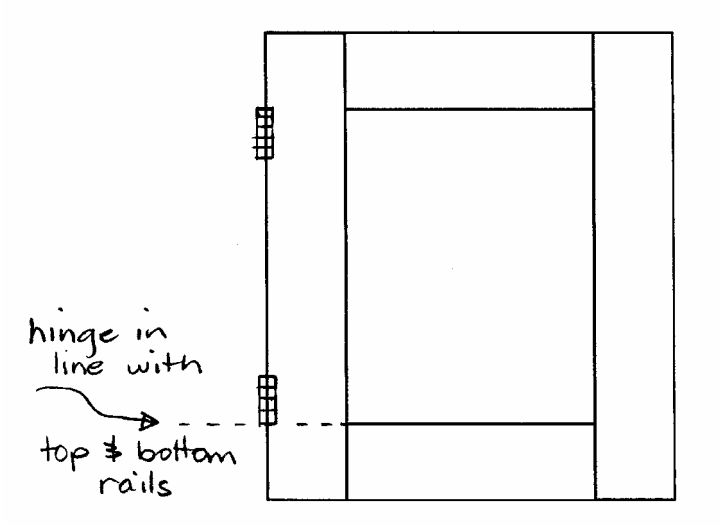
Question 1a.

Marks	0	1	Average
%	35	65	**0.7**

brass hinge or butt hinge

Question 1b.

Marks	0	1	Average
%	58	42	**0.4**



Question 1c.

Marks	0	1	2	Average
%	12	40	48	**1.4**

Acceptable answers included:

- dowelled joint
- through mortise and tenon.

Question 2a.

Marks	0	1	Average
%	7	93	**0.9**

Acceptable answers included:

- melamine faced particle board
- melamine faced medium density fibreboard (MDF)
- solid timber of particular species.

Either of the first two options could also be HMR (highly moisture resistant).

Question 2b.

Marks	0	1	Average
%	41	59	**0.6**

- concealed hinge
- semi-concealed hinge

A butt hinge was not considered to be correct.

Question 3

Marks	0	1	2	Average
%	65	25	10	**0.5**

Any two of:

- power points may need to be reinstalled by a licensed electrician
- plumbing may need to be altered by a licensed plumber to suit the new installation
- walls may not be plumb; bowed walls might exist or the room might be out of square
- floors may not be level
- fixing difficulties may arise due to materials used in the building process.

Many students misinterpreted this question and answered in terms of the aesthetic issues of installing modern kitchens in old houses, rather than physical or technical difficulties with installing modular units in older houses.

Question 4

Marks	0	1	2	3	4	5	6	Average
%	32	16	35	9	7	1	1	**1.5**

Name of drawer runner	Description of drawer runner
full extension runner	This type allows for full extension of the drawer so the back of draw is visible/accessible.
telescopic extension runner	This type of drawer slide has multiple extension parts that slide within one another. Normally used for heavier drawer types.
side mounted runner	These are mounted in a groove run in the drawer side to save space. The grove also reduces the amount of the slide showing, so is more aesthetically pleasing.

One mark was awarded for the name of each drawer runner and one mark for each description.

Question 5

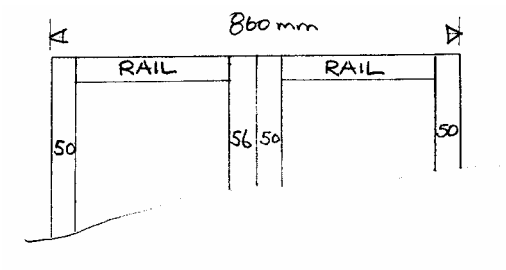
Marks	0	1	2	3	4	5	6	Average
%	10	15	21	23	17	10	5	**2.7**

Material	Advantages (one of the following)	Disadvantages (one of the following)
melamine-coated particle board	• ideal material for making cabinet carcass • not expensive in relation to other materials • comes in many colours	• melamine can be easily chipped along edges • care needs to be exercised in handling • needs special fixings
veneered MDF	• can replace solid timber • edges can be machined successfully • more stable than solid timber	• MDF is much heavier material • veneered board is more expensive • could reduce hinge life • dents easily on edges • can be an OH&S issue due to dust
plywood	• a strong manufactured board • a variety of thicknesses are available for purpose; i.e. 3 ply for backs and drawer bottoms • multi-ply for constructions	• can distort on face of board • can chip on edge due to the way it is manufactured

One mark was awarded for each advantage and disadvantage.

Question 6

Marks	0	1	2	Average
%	83	3	14	**0.3**



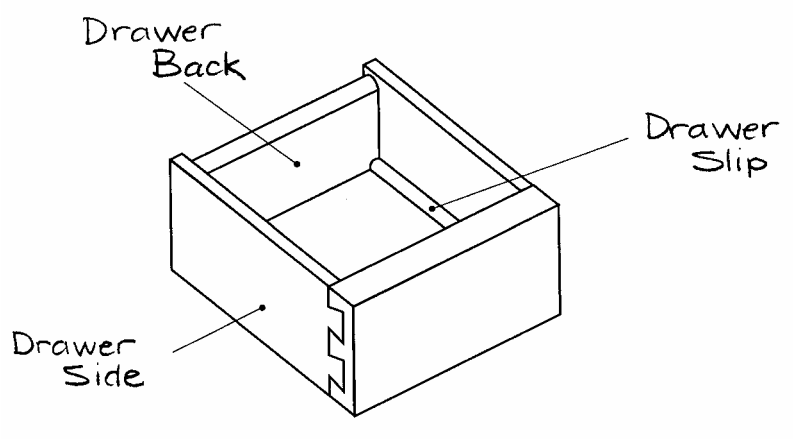
860 – 206 = 654
654 ÷ 2 = 327
Length of rails 327 mm

All information required to answer this question was provided in the question. Students did not need to allow for gaps (as this is part of the fitting process), but students who did were still awarded the marks.

The poor performance on this question was surprising as the question involved application of the types of skills students applied effectively in completing the cutting list (see Section B Question 12).

Question 7a.

Marks	0	1	2	3	Average
%	3	5	33	59	**2.5**



Question 7b.

Marks	0	1	Average
%	61	39	**0.4**

hand or machine lapped dovetail joint

Question 8

Marks	0	1	2	3	4	Average
%	54	11	9	10	17	**1.3**

The quadrant marks indicate:

- the front, back, left side and right side outer bottom edges of the drawer parts
- when numbered, all drawer parts in a set of drawers; for example, five drawer chest
- which edge is to be fitted to the carcass
- to the wood machinist, where grooves are to be run or the position to be applied in the dovetailing machine.

Question 9

Marks	0	1	2	Average
%	37	37	26	**0.9**

The drawer slip:

- adds strength to the drawer side and increases the wearing capacity of the drawer
- adds aesthetic appeal to the inside of the drawer.

Question 10

Marks	0	1	2	3	Average
%	4	13	35	47	**2.3**

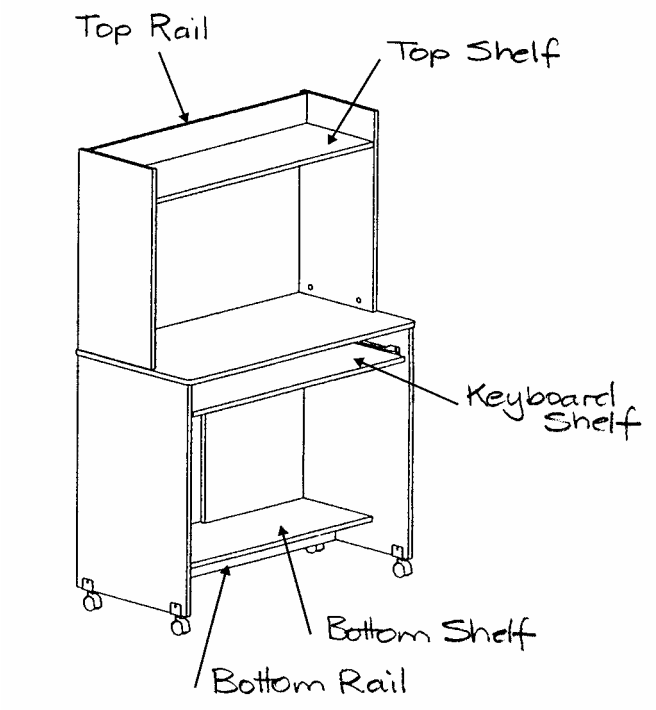
Component	Use
cam and dowel	Used to join components (knock down) (for example, rails, shelves and bottoms) to ends or panels to create a modular carcass.
angle bracket	Used to fix backs, bases, tops to carcass and/or general purpose use.

confirmat	A knock down type of screw designed for use in modular furniture. Different head types are available and in different finishes to suit the application or design. A confirmat can also be used in conjunction with a cover cap.
cover caps	Used to cap or conceal screw heads so a neat appearance is obtained. Available in a range of colours to suit the laminate or melamine surface being used.
connecting screw	A two-part connector (male and female) used to join two carcasses together, usually via the line of 5 mm holes as for system 32 (modular construction).
bench top connector	Used mostly in sets of two to three at a time to join tops together at right angles or to obtain a tight mitre joint. A series of holes with an open slot is used to mount these under the tops to be joined. They are not used to fix a top to a carcass.
knockdown connector	Used similarly to how a cam and dowel would be used. It is a cheaper form of modular construction hardware and is generally made of a plastic material.
extension runner	Used to mount draws or shelves to modular carcasses. There are a number of different types of extension runners available.

One mark was awarded for each description of where a component would be used.

Question 11

Marks	0	1	2	3	4	5	Average
%	0	0	0	2	20	78	**4.8**



One mark awarded for each part labelled correctly.

Question 12

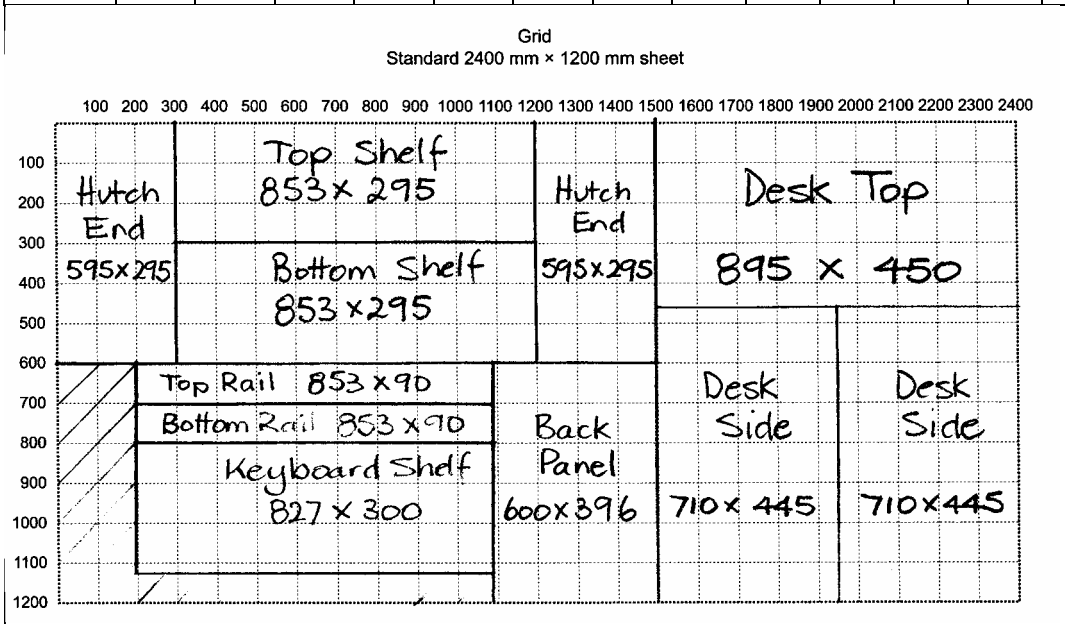
Marks	0	1	2	3	4	5	6	7	8	Average
%	3	0	0	1	8	14	5	52	16	**6.3**

Index	Item	No. pieces	Length	Width	Thickness	Material	Remarks
Top section							
1	top rail	1	**853**	90	16	grey double-sided particle board	faces edge tape
2	top shelf	1	853	295	16	grey double-sided particle board	faces edge tape
3	hutch ends	2	**595**	295	16	grey double-sided particle board	faces end and edge tape
Bottom section							
4	desk top	1	**895**	450	16	grey double-sided particle board	faces end and edge tape
d	desk sides	**2**	710	445	**16**	grey double-sided particle board	faces end and edge tape
6	keyboard shelf	1	827	300	16	grey double-sided particle board	on runners (allow 26 mm)
7	bottom self	**1**	853	295	**16**	grey double-sided particle board	edge tape to front
8	bottom rail	1	**853**	90	16	grey double-sided particle board	screwed to shelf
9	back panel	1	600	396	16	grey double-sided particle board	edge tape along top

One marked was awarded for each box completed with the correct answer. Figure 1 in the insert needed to be used to obtain the relevant information.

Question 13

Marks	0	1	2	3	4	5	6	7	8	9	10	11	12	13	Average
%	25	0	3	4	4	7	7	11	13	11	3	0	1	12	**5.7**



One mark was awarded for each part drawn to scale. A further two marks were awarded for the planning aspect.

Common errors included:

- failure to follow the grid in terms of the size of components
- not labelling the plan with sizes/item numbers/items
- not completing the plan due to initial incorrect setting out of components (commencing the answer without planning properly).

General techniques that students could apply to improve cutting plan layout include grouping like components and minimising the number of intersections.

Question 14

Marks	0	1	2	Average
%	43	30	27	**0.9**

Any two of:

- heated pre-glued timber
- veneer applied by iron or edge bander
- tongued/loose-tongued solid edge strip applied to edge.

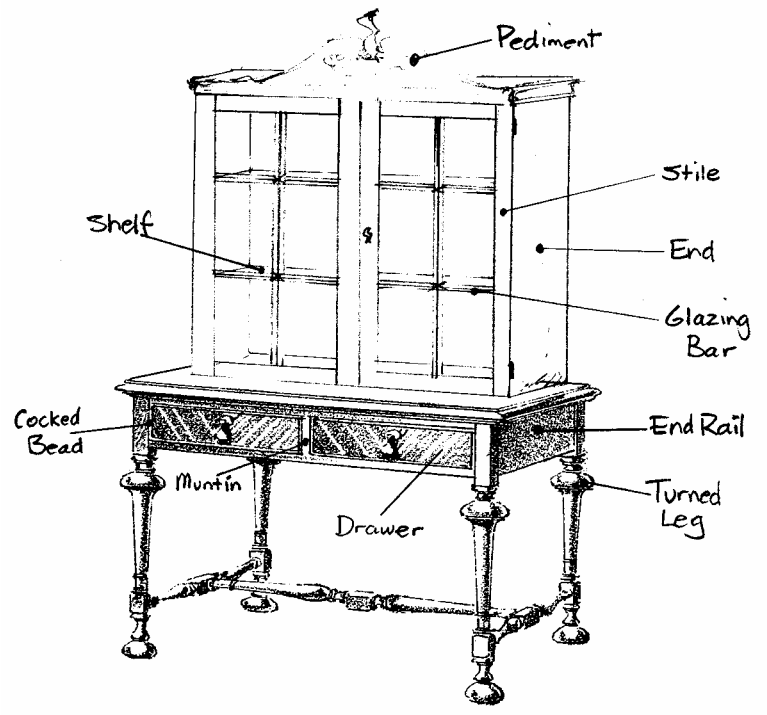
Section C – Case study

Question 1a.

Marks	0	1	2	3	4	Average
%	20	10	11	13	46	**2.6**

Question 1b.

Marks	0	1	2	3	4	Average
%	30	6	10	18	36	**2.3**



One mark was awarded for each part that was labelled correctly on the diagram drawn for part a.

Question 2

Marks	0	1	2	3	4	Average
%	22	14	24	20	20	**2.0**

Check for:

- 'twist' or 'wind', because if the door is twisted it will not close in the carcass properly. This creates an unsightly look and is not possible to correct
- squareness (diagonally square), because if it is not square the door may end up with too much gap between stiles and rails and the surrounding carcass.

One mark was awarded for each check and one mark for each explanation.

Question 3a.

Marks	0	1	2	3	Average
%	8	13	48	31	**2.0**

Question 3b.

Marks	0	1	2	3	Average
%	27	26	31	15	**1.4**

Hardware list	(✓) if required	Number needed
brass shelf supports	✓	8
cut cupboard locks	✓	1
semi-concealed hinge		
single ball catch		
double ball catch		
flush bolt	✓	2
furniture bolt		
brass butt hinge	✓	4
barrel bolt		
chrome-plated piano hinge		
concealed hinge		
touch latch		
straight cupboard lock	✓	1

One mark was awarded for each tick in a correct box. One mark was awarded for each relevant, correct number.

Question 3c.

Marks	0	1	2	3	4	Average
%	24	6	29	15	25	**2.1**

Hardware items to be used in the construction of the customer's two-door cabinet	Where the item of hardware is to be used	Why the hardware is suitable for the job
brass shelf support	used as a set of four to hold adjustable shelf in place	• traditional • brass finish to match other hardware
cut cupboard lock	on the closing stile of the right hand side door	• traditional • neat appearance at the back (for example, if there is a mirror fitted) • quality, durable • available in brass