

**2005 HSC Notes from  
the Marking Centre  
VET Construction**

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# Contents

Section I ..... 4  
Section II ..... 5  
Section III ..... 6

# 2005 HSC NOTES FROM THE MARKING CENTRE

## VET CONSTRUCTION

### Introduction

This document has been produced for the teachers and candidates of the Stage 6 course in Construction. It provides comments with regard to responses to the 2005 Higher School Certificate examination, indicating the quality of candidate responses and highlighting the relative strengths and weaknesses of the candidature in each section and each question.

This document should be read along with the relevant syllabus, the 2005 Higher School Certificate examination, the marking guidelines and other support documents which have been developed by the Board of Studies to assist in the teaching and learning of Construction.

The VET Construction Curriculum Framework is designed to enable candidates to acquire a range of technical, personal and organisational skills valued both within and beyond the workplace. Candidates also acquire underpinning skills and knowledge related to function areas within the construction industry.

Note: the 2005 HSC examination was the last examination based on the 1999 Construction syllabus. The 2006 HSC examination will be based on the September 2004 Construction syllabus that was implemented from 2005.

### Specific Comments

Approximately 1292 candidates attempted the 2005 Construction HSC examination.

Teachers and candidates should be aware that examiners may ask questions that address the syllabus outcomes in a manner that requires candidates to respond by integrating their knowledge, understanding and skills developed through studying the course.

### Section I

| Question | Correct Response |
|----------|------------------|
| 1        | B                |
| 2        | C                |
| 3        | A                |
| 4        | C                |
| 5        | C                |
| 6        | D                |
| 7        | D                |
| 8        | A                |

| Question | Correct Response |
|----------|------------------|
| 9        | C                |
| 10       | B                |
| 11       | B                |
| 12       | C                |
| 13       | D                |
| 14       | D                |
| 15       | C                |
|          |                  |

## Section II

### Question 16

This question was well answered by candidates who demonstrated an understanding of the essential functions and machinery checks. Candidates considered the vacuum head, hoses and barrel in their response, with most understanding the importance of the need for the machine to function correctly, and its association with handling hazardous materials.

### Question 17

- (a) In part (i), some candidates were confused by the number of doors and the number of door openings. The majority of candidates were able to identify the items on the plan. Part (ii) was generally well answered, with candidates demonstrating their ability to read the plan and complete a calculation. Candidates with incorrect answers were not able to locate the information on the plan or misunderstood the concept of levels.  
In part (iii), candidates were able to show a relationship between accurate plans and preparing a materials order. A small number of candidates related this order to cost and only some provided an example from the floor plan.
- (b) Candidates answered this question well, being able to define the correct personnel and relate the purpose of the drawing. The role of the architect was the least well known.

### Question 18

- (a) Most candidates were able to specify PPE correctly and understood its purpose. Many candidates were unable to justify their selection and did not adequately respond to this question.
- (b) This part of the question was well answered by the majority of candidates. Most were able to list and describe procedures that should be considered on the first day of using the compressor on site.  
Poorer responses considered only the daily maintenance or routine checks that needed to be carried out each day and did not consider those of a ‘new’ compressor.

### Question 19

The majority of candidates answered this question poorly. In general, they were unable to identify tools with the correct industry terminology, although many were able to address one tool correctly.

### Question 20

This question proved a challenge to candidates in responding to all three levelling devices. Most candidates demonstrated a sound understanding of the spirit level, with many not recognising that a hydrostatic level was in fact a water level. Many candidates that responded to the hydrostatic level cited how it works, rather than indicating potential issues with its accuracy and checking techniques. The dumpy levelling device was poorly answered with very few candidates recognising the equipment.

### **Question 21**

The majority of candidates answered this question well, with the two areas given in the question providing a background to direct a suitable response. Candidates in general have a good understanding of the OHS aspect of the construction industry.

### **Question 22**

Most candidates defined the role of the Environmental Protection Authority (EPA) well, with most providing general/non-specific examples to support their definition. Candidates were aware that, in some way, the EPA was involved in protecting the environment, with few giving an example that linked to Construction. Many candidates were still citing issues relating to a ‘chemical mindset’, perhaps prompted by the previous question.

### **Question 23**

Most candidates demonstrated some understanding of wall frames, piers and concrete/brick-related foundations. A small number of candidates interpreted the drawing as a house plan, and cited the bearer or joist as a water closet.

## **Section III**

### **Question 24**

Approximately 80% of the candidates attempted this question. The majority of candidates were able to identify and discuss the three issues of working with the hazardous material, site storage and disposal of the hazardous material and removal from the site. Most candidates had a working knowledge of hazardous materials and were able to indicate an appreciation of OHS principles required for working with asbestos.

Better responses included differences between a commercial construction site and a domestic construction site and provided examples using appropriate industry terminology to present their understanding in context. Weaker responses did not include an expansion of the cited example/s.

The majority of candidates were unable to communicate their understanding of Safe Work Method Statements and Risk Assessment Analysis Reports. This limited their ability to achieve the highest mark range for this question.

### **Question 25**

Approximately 89% of candidates attempted this question. The question was generally well answered by the majority of candidates. Candidates were able to use the dot points provided in the question to develop their responses. The verb ‘outline’ was successfully interpreted; however the verb ‘discuss’ was not well understood by many. Some candidates were able to support their outlines with significant advantages but overlooked the costs involved in establishing an efficient and safe workplace, eg the costs of training, providing PPE and establishing systems and increased flow-on costs to clients.

Candidates related their outlines to both domestic and commercial sites with the latter proving the most popular. They were able to demonstrate a sound understanding of induction and clean up /

maintenance areas but had difficulty outlining the correct set-up and use of the mixer. Many candidates had difficulty differentiating between a petrol-driven mixer and an electric (240V) type.

### **Question 26**

Approximately 30% of candidates attempted this question. Candidates were able to sequence their responses as laid out in the question. The majority of candidates were able to provide elaboration and depth in their responses, using the stimulus material to display their knowledge and solve problems.

Candidates were required to show that they could read a floor plan, calculate area and then apply this to calculate a volume. The majority of candidates were able to make some attempt in the calculation section of the question, with a high proportion calculating correctly.

The phrase ‘critically evaluate’ is still not fully understood by candidates in general. While many made brief yet relevant responses to the possible implications of a council rejecting the plans, few candidates presented a balanced response.

# Construction

## 2005 HSC Examination Mapping Grid

| Question           | Marks | Unit of competency / Element of competency |
|--------------------|-------|--|
| <b>Section I</b>   |       |  |
| 1                  | 1     | BCC1005A, BCG1004A, BCG1005A               |
| 2                  | 1     | BCG1000A, BCG1008A                         |
| 3                  | 1     | BCG1001A                                   |
| 4                  | 1     | BCG1003A, BCG2000A                         |
| 5                  | 1     | BCC1006A, BCG1001A, BCG1006A               |
| 6                  | 1     | BCC1005A, BCG1005A                         |
| 7                  | 1     | BCC1006A, BCG1006A                         |
| 8                  | 1     | BCG1000A                                   |
| 9                  | 1     | BCC1006A, BCG1001A, BCG1006A               |
| 10                 | 1     | BCG1004A                                   |
| 11                 | 1     | BCG1003A, BCG1004A, BCG2000A               |
| 12                 | 1     | BCG1002A                                   |
| 13                 | 1     | BCG1002A                                   |
| 14                 | 1     | BCG1004A                                   |
| 15                 | 1     | BCG1004A, BCG1000A                         |
| <b>Section II</b>  |       |  |
| 16                 | 3     | BCG1006A                                   |
| 17 (a) (i)         | 1     | BCC2000A, BCG1003A                         |
| 17 (a) (ii)        | 1     | BCC2000A, BCG1003A                         |
| 17 (a) (iii)       | 2     | BCC2000A, BCG1003A                         |
| 17 (b)             | 3     | BCG1003A                                   |
| 18 (a)             | 2     | BCG1001A, BCG1005A, BCG1006A               |
| 18 (b)             | 5     | BCG1001A, BCG1006A                         |
| 19                 | 2     | BCC1005A, BCC1006A, BCG1005A, BCG1006A     |
| 20                 | 5     | BCG1008A                                   |
| 21                 | 5     | BCG1011A, BCG1000A, BCG1001A               |
| 22                 | 3     | BCG1001A                                   |
| 23                 | 3     | BCG1003A                                   |
| <b>Section III</b> |       |  |
| 24                 | 15    | BCG1001A, BCG1011A                         |
| 25                 | 15    | BCG1006A, BCG1002A                         |
| 26                 | 15    | BCG1004A, BCG1003A                         |



## 2005 HSC Construction Marking Guidelines

### Section II

#### Question 16

*Competencies assessed: BCG1006A*

#### MARKING GUIDELINES

| Criteria  | Marks |
|---|-------|
| • Indicates an understanding of specific machinery checks, including hazardous wastes, with reasons | 3     |
| • Indicates an understanding of specific machinery checks, with reasons                             | 2     |
| • Indicates a basic knowledge of machinery checks   | 1     |

#### Question 17 (a) (i)

*Competencies assessed: BCC2000A, BCG1003A*

#### MARKING GUIDELINES

| Criteria            | Marks |
|---------------------|-------|
| • Answers correctly | 1     |

#### Question 17 (a) (ii)

*Competencies assessed: BCC2000A, BCG1003A*

#### MARKING GUIDELINES

| Criteria                                     | Marks |
|--|-------|
| • Answers correctly in metres or millimetres | 1     |

**Question 17 (a) (iii)***Competencies assessed: BCC2000A, BCG1003A***MARKING GUIDELINES**

| <b>Criteria</b>  | <b>Marks</b> |
|--|--------------|
| • Demonstrates the importance of a floor plan with example | 2            |
| • Demonstrates a basic understanding                       | 1            |

**Question 17 (b)***Competencies assessed: BCG1003A***MARKING GUIDELINES**

| <b>Criteria</b>  | <b>Marks</b> |
|--|--------------|
| • Identifies relevant personnel and provides typical uses of drawing types | 3            |
| • Identifies some of the correct personnel and uses                        | 2            |
| • Shows limited understanding of personnel and drawing uses                | 1            |

**Question 18 (a)***Competencies assessed: BCG1006A, BCG1001A, BCG1005A***MARKING GUIDELINES**

| <b>Criteria</b>   | <b>Marks</b> |
|---|--------------|
| • Includes several examples of PPE and justifies their need | 2            |
| • Shows some justification of the need for PPE              | 1            |

**Question 18 (b)***Competencies assessed: BCG1006A, BCG1001A***MARKING GUIDELINES**

| <b>Criteria</b>  | <b>Marks</b> |
|--|--------------|
| • Shows a sound knowledge of necessary procedures  | 4–5          |
| • Describes several procedures thoroughly  |              |
| • Indicates some understanding using at least two areas  | 2–3          |
| • Gives a limited understanding of what should be carried out, giving at least one area of consideration | 1            |

**Question 19**

*Competencies assessed: BCC1005A, BCC1006A, BCG1005A, BCG1006A*

**MARKING GUIDELINES**

| <b>Criteria</b>                  | <b>Marks</b> |
|----------------------------------|--------------|
| • Identifies all tools correctly | 2            |
| • Identifies two tools correctly | 1            |

**Question 20**

*Competencies assessed: BCG1008A*

**MARKING GUIDELINES**

| <b>Criteria</b>   | <b>Marks</b> |
|---|--------------|
| • Demonstrates sound understanding of all levelling devices         | 4–5          |
| • Demonstrates some understanding of at least two levelling devices | 2–3          |
| • Demonstrates limited understanding of one levelling device        | 1            |

**Question 21**

*Competencies assessed: BCG1011A, BCG1000A, BCG1001A*

**MARKING GUIDELINES**

| <b>Criteria</b>   | <b>Marks</b> |
|---|--------------|
| • Demonstrates extensive knowledge of safety procedures for chemical storage on site including both routine and emergency details | 4–5          |
| • Demonstrates some knowledge of safety procedures for chemical storage on site for routine and/or emergency details              | 2–3          |
| • Demonstrates limited knowledge of safety procedures for chemical storage on site  | 1            |

**Question 22**

*Competencies assessed: BCG1001A*

**MARKING GUIDELINES**

| <b>Criteria</b>   | <b>Marks</b> |
|---|--------------|
| • Demonstrates extensive knowledge of the role of the Environmental Protection Authority, giving an example | 2–3          |
| • Demonstrates limited knowledge  | 1            |

**Question 23***Competencies assessed: BCG1003A***MARKING GUIDELINES**

| <b>Criteria</b>  | <b>Marks</b> |
|--|--------------|
| • Identifies all three components and their purpose    | 3            |
| • Identifies at least two components and their purpose | 2            |
| • Identifies more than one component                   | 1            |

## Section III

### Question 24

Competencies assessed: BCG1001A, BCG1011A

#### MARKING GUIDELINES

| Criteria  | Marks |
|---|-------|
| <ul style="list-style-type: none"><li>• Demonstrates extensive knowledge and understanding of hazardous waste</li><li>• Correctly uses precise industry terminology in a well-organised response</li><li>• Uses appropriate and varied examples to support the answer</li></ul> | 13–15 |
| <ul style="list-style-type: none"><li>• Demonstrates a sound knowledge and understanding of hazardous waste</li><li>• Uses industry terminology in correct context</li><li>• Uses a range of appropriate examples</li></ul>   | 10–12 |
| <ul style="list-style-type: none"><li>• Demonstrates a working knowledge of working with hazardous waste</li><li>• Uses basic industry terminology correctly</li><li>• Provides a supporting example</li></ul>  | 7–9   |
| <ul style="list-style-type: none"><li>• Demonstrates a basic knowledge of hazardous waste</li><li>• Uses some appropriate terminology</li><li>• Provides examples appropriate to the building industry</li></ul>  | 4–6   |
| <ul style="list-style-type: none"><li>• Displays a limited understanding of hazardous waste</li><li>• Uses limited industry terminology</li><li>• Indicates a reference to the building industry</li></ul>  | 1–3   |

**Question 25***Competencies assessed: BCG1006A, BCG1002A***MARKING GUIDELINES**

| <b>Criteria</b>  | <b>Marks</b> |
|--|--------------|
| <ul style="list-style-type: none"><li>• Demonstrates extensive knowledge of planning and organising work, and its importance to the workplace</li><li>• Understands the advantages and costs involved in maintaining an efficient and safe workplace</li><li>• Correctly uses precise terminology in a well-organised response</li><li>• Considers all tasks, indicating the main features of each</li></ul> | 13–15        |
| <ul style="list-style-type: none"><li>• Demonstrates a clear knowledge and understanding of planning and organising work, and the effect it has on the workplace</li><li>• Understands and discusses the positive aspects of efficient and safe workplaces</li><li>• Uses appropriate terminology in context</li><li>• Addresses all tasks to varying degrees</li></ul>                                      | 10–12        |
| <ul style="list-style-type: none"><li>• Demonstrates a general understanding of planning and organising work</li><li>• Is able to apply principles of safe and efficient work practices to some tasks</li><li>• Uses basic industry terminology</li><li>• Addresses some of the tasks required</li></ul>   | 7–9          |
| <ul style="list-style-type: none"><li>• Demonstrates a basic understanding of planning and organising work</li><li>• Indicates that efficiency and safe work practices are important</li><li>• Uses some industry terminology</li><li>• Addresses some of the tasks required</li></ul>   | 4–6          |
| <ul style="list-style-type: none"><li>• Displays a limited understanding of planning and organising work</li><li>• Indicates some knowledge of working efficiently and safely</li><li>• Uses limited terminology</li></ul>   | 1–3          |

**Question 26**

*Competencies assessed: BCG1004A, BCG1003A*

**MARKING GUIDELINES**

| Criteria   | Marks |
|--|-------|
| <ul style="list-style-type: none"> <li>• Demonstrates extensive knowledge and understanding of plans and accurately calculates volume of concrete required</li> <li>• Displays extensive knowledge and clearly communicates the implications for accurate calculations</li> <li>• Demonstrates a thorough understanding of site implications and can organise information which clearly indicates and solves issues and problems</li> <li>• Provides a well-reasoned and cohesive response to issues and problems</li> </ul> | 13–15 |
| <ul style="list-style-type: none"> <li>• Demonstrates a sound knowledge and understanding of plans and calculates volumes</li> <li>• Displays clear knowledge and communicates the implications of accurate calculations</li> <li>• Demonstrates a relevant understanding of site implications and can organise information which shows issues and problems concerned</li> <li>• Provides information which is relevant to issues and problems</li> </ul>  | 10–12 |
| <ul style="list-style-type: none"> <li>• Demonstrates a general understanding of calculation methods and the importance of accuracy</li> <li>• Demonstrates some understanding of site implications and their relevance to issues and problems</li> <li>• Provides some relevant information on issues and problems</li> </ul>   | 7–9   |
| <ul style="list-style-type: none"> <li>• Demonstrates basic understanding of calculations</li> <li>• Demonstrates basic understanding of implications of council decision</li> </ul>   | 4–6   |
| <ul style="list-style-type: none"> <li>• Demonstrates limited understanding of calculations</li> <li>• Demonstrates limited understanding of site implications</li> </ul>  | 1–3   |