BOARD OF STUDIES
NEW SOUTH WALES

2011 HSC Automotive Marking Guidelines

Section I

Multiple-choice Answer Key

Question	Answer
1	D
2	D
3	B
4	B
5	A
6	B
7	C
8	A
9	C
10	C
11	B
12	D or B
13	C
14	C
15	B

Section II

Question 16 (a)

Criteria	Marks
• Identifies ALL components correctly	3
• Identifies at least THREE components correctly	2
• Identifies at least TWO components correctly	1

Question 16 (b)

Criteria	Marks
• Names the correct operating cycles using precise industry terminology • Demonstrates a comprehensive understanding of the cycles and the role within the engine's operation • Provides examples of components using correct terminology	4–5
• Names the correct operating cycles • Demonstrates a basic understanding of the operating cycles • Identifies some components utilising correct terms	2–3
• Names some of the cycles correctly • Demonstrates an elementary understanding of the operating cycles	1

Question 17 (a)

Criteria	Marks
• Correctly identifies the saw blade teeth direction	1

Question 17 (b)

Criteria	Marks
• Provides a thorough explanation of the suitable repair procedure using precise industry specific terminology • Demonstrates a detailed understanding of thread repair • Correctly identifies tools and equipment used	3
• Provides a suitable explanation of a repair procedure using some industry specific terminology • Demonstrates an understanding of thread repair • Identifies some examples of tools and equipment used	2
• Provides a limited explanation of repair procedure • Communicates using non-industry specific terms	1

Question 17 (c) (i)

Criteria	Marks
• Correctly names the device shown	1

Question 17 (c) (ii)

Criteria	Marks
• Identifies THREE correct dimensions	3
• Identifies TWO correct dimensions	2
• Identifies ONE correct dimensions	1

Question 17 (c) (iii)

Criteria	Marks
• The correct reading is indicated plus or minus 0.04 tolerance accepted	1

Question 18 (a)

Criteria	Marks
• Identifies the hazardous gas • Clearly identifies suitable precautions to be followed	2
• Either identifies the hazardous gas OR identifies suitable precautions to be followed	1

Question 18 (b)

Criteria	Marks
• Identifies correct polarity • Indicates correct sequence	2
• Identifies correct polarity • Incorrect sequence is included	1

Question 18 (c)

Criteria	Marks
• Uses precise industry specific terminology • Provides a concise description of suitable steps • Identifies suitable tools and repair techniques	3
• Uses industry specific terminology • Identifies suitable steps for the repair • Identifies some appropriate tools used for the repair	2
• Uses non-industry specific terms • Demonstrates a superficial understanding of the repair techniques	1

Question 19 (a)

Criteria	Marks
• Demonstrates a sound understanding of the design of a bunded area • Uses industry specific terminology	2
• Demonstrates a basic understanding of the design of a bunded area	1

Question 19 (b)

Criteria	Marks
• Demonstrates a thorough understanding of the suitable methods of storage within a bunded area • Uses precise industry specific terminology	3
• Demonstrates a basic understanding of the suitable methods of storage within a bunded area • Uses some industry specific terms	2
• Demonstrates a limited understanding of storage methods within a bunded area • Uses inappropriate or non-industry specific terms	1

Question 20 (a)

Criteria	Marks
• Correctly identifies the source of information	1

Question 20 (b)

Criteria	Marks
• Provides a suitable procedure to deal with the damaged tool	1

Question 20 (c)

Criteria	Marks
• Provides a comprehensive explanation of the correct lifting procedure • Uses precise industry specific terminology • Demonstrates clear awareness of the potential safety concerns when using a hoist	3–4
• Provides some basic steps for safely raising the vehicle • Uses limited industry specific terms	1–2

Section III

Question 21

Criteria	Marks
• Demonstrates in-depth knowledge and understanding of the trouble-shooting processes required for sound diagnosis • Provides precise industry specific examples and associated terminology • Develops a well-reasoned cohesive response relating cause and effect	13–15
• Demonstrates detailed knowledge and understanding of the trouble-shooting processes required for sound diagnosis • Provides specific industry terminology and uses suitable industry related examples • Develops a well-reasoned response relating cause and effect	10–12
• Demonstrates a general understanding of the trouble-shooting processes required for sound diagnosis • Provides sound examples using industry terminology • Provides a descriptive response	7–9
• Demonstrates an understanding of some diagnosis trouble-shooting processes • May provide limited examples using basic industry terminology • Develops a general response	4–6
• Demonstrates limited understanding of trouble-shooting processes • Communicates using non-industry specific terms	1–3

Section IV

Question 22 (a)

Criteria	Marks
• Develops a detailed comparison of the advantages and disadvantages between both systems • Correctly uses precise industry specific terminology	4–5
• Demonstrates understanding of the advantages and disadvantages between both systems • Communicates using industry terminology	2–3
• Demonstrates an elementary understanding of both systems • Communicates using non-industry specific terms	1

Question 22 (b)

Criteria	Marks
• Clearly demonstrates an understanding of the benefits to environmental sustainability • Demonstrates a thorough understanding of the operation of hybrid vehicles • Provides precise industry specific examples using correct terminology • Develops a logical and concise response	8–10
• Demonstrates an understanding of the benefits to environmental sustainability • Demonstrates some understanding of the operation of hybrid vehicles • Provides examples using suitable industry terminology • Develops a descriptive response	5–7
• Demonstrates a basic understanding of the benefits to environmental sustainability • Demonstrates limited understanding of the operation of hybrid vehicles • Uses basic industry terminology	2–4
• Demonstrates a limited understanding of the benefits to environmental sustainability • Demonstrates a superficial understanding of hybrid vehicles • Uses non-industry specific terminology	1

Automotive

2011 HSC Examination Mapping Grid

Section I

Question	Marks	Unit of competency/Element of competency
1	1	AURC270103A – Apply safe working practices
2	1	AURC272003A – Apply environmental regulations and best practice in a workplace or business
3	1	AURC270789A – Communicate effectively in the workplace Automotive systems and components
4	1	Automotive industry induction
5	1	AURT270278A – Use and maintain workplace tools and equipment
6	1	AURE218708A – Carry out repairs to single electrical circuits
7	1	AURC272003A – Apply environmental regulations and best practice in a workplace or business
8	1	AURC270103A – Apply safe working practices
9	1	AURT270278A – Use and maintain workplace tools and equipment
10	1	AURC252103A – Apply basic automotive troubleshooting processes
11	1	AURC270789A – Communicate effectively in the workplace AURC252103A – Apply basic automotive troubleshooting processes
12	1	AURE218708A – Carry out repairs to single electrical circuits
13	1	Automotive systems and components P.94
14	1	Automotive systems and components AURT270278A – Use and maintain workplace tools and equipment P.94
15	1	AURC252103A – Apply basic automotive troubleshooting processes AURE218670A – Service, maintain or replace batteries

Section II

Question	Marks	Unit of competency/Element of competency
16 (a)	3	Automotive systems and components
16 (b)	5	Automotive systems and components
17 (a)	1	AURT270278A – Use and maintain workplace tools and equipment
17 (b)	3	AURT270278A – Use and maintain workplace tools and equipment P.90 Linked to P.94
17 (c) (i)	1	AURT270278A – Use and maintain workplace tools and equipment
17 (c) (ii)	3	AURT270278A – Use and maintain workplace tools and equipment
17 (c) (iii)	1	AURT270278A – Use and maintain workplace tools and equipment
18 (a)	2	AURE218670A – Service, maintain or replace batteries
18 (b)	2	AURT270278A – Use and maintain workplace tools and equipment
18 (c)	3	AURE218708A – Carry out repairs to single electrical circuits
19 (a)	2	AURC272003A – Apply environmental regulations and best practice in a workplace or business
19 (b)	3	AURC272003A – Apply environmental regulations and best practice in a workplace or business
20 (a)	1	AURC270103A – Apply safe working practices
20 (b)	1	AURC270103A – Apply safe working practices
20 (c)	4	AURC270103A – Apply safe working practices

Section III

Question	Marks	Unit of competency/Element of competency
21	15	Automotive industry induction AURC270789A – Communicate effectively in the workplace AURC252103A – Apply basic automotive troubleshooting processes

Section IV

Question	Marks	Unit of competency/Element of competency
22 (a)	5	Automotive systems and components
22 (b)	10	Automotive systems and components AURC272003A – Apply environmental regulations and best practice in a workplace or business