



BOARD OF STUDIES
NEW SOUTH WALES

2011 HSC Industrial Technology Metal and Engineering Technologies Marking Guidelines

Section I

Multiple-choice Answer Key

Question	Answer
1	B
2	D
3	A
4	C
5	D
6	B
7	A
8	B
9	C
10	A

Section II

Question 11

Criteria	Marks
• Indicates how the bolt could be produced with reference to head and thread	2
• Indicates how the head OR thread of the bolt could be produced	1

Question 12

Criteria	Marks
• Provides characteristics and features of all processes required to make the turned handle	3
• Sketches in general terms some processes required to make the turned handle	2
• Lists TWO or more steps in the process of making the turned handle	1

Question 13

Criteria	Marks
• Sketches a labelled jig that could be used to hold all components in place for welding	3
• Sketches a suitable jig that could be used to hold all components in place for welding	2
• Sketches a method that could be used to hold some components in place for welding	1

Question 14 (a)

Criteria	Marks
• With the aid of a labelled sketch clearly indicates a suitable adjustable method of extending and securing the arm davit	3
• With the aid of a sketch indicates a suitable method of extending or securing the arm of the davit	2
• Sketches or indicates method of securing or extending the arm	1

Question 14 (b)

Criteria	Marks
<ul style="list-style-type: none"> Determines the value of the materials and surface finishes that could be used to manufacture the davit for the marine environment 	4
<ul style="list-style-type: none"> Provides characteristics and features of materials and finishes that could be used to manufacture the davit for the marine environment 	3
<ul style="list-style-type: none"> Sketches in general terms materials and surface finishes that could be used to manufacture the davit 	2
<ul style="list-style-type: none"> Lists TWO materials OR <ul style="list-style-type: none"> TWO surface finishes OR <ul style="list-style-type: none"> A material and a surface finish that could be used to manufacture the davit 	1

Section III
Question 15 (a)

Criteria	Marks
<ul style="list-style-type: none"> Provides characteristics and features of personnel issues the company needs to consider when staffing the new facility 	5
<ul style="list-style-type: none"> Sketches in general terms personnel issues the company needs to consider when staffing the new facility 	3–4
<ul style="list-style-type: none"> Identifies personnel issues the company needs to consider when staffing the new facility 	1–2

Question 15 (b)

Criteria	Marks
<ul style="list-style-type: none"> Makes the relationships between the factors, other than personnel issues, that affect the viability of a company and the establishment of a facility in a new location evident 	9–10
<ul style="list-style-type: none"> Identifies factors, other than personnel issues, that affect the viability of a company and provides points for how they relate to the establishment of a facility in a new location 	7–8
<ul style="list-style-type: none"> Provides characteristics and features of factors, other than personnel issues, that would affect the viability of the company when establishing a facility in a new location 	5–6
<ul style="list-style-type: none"> Sketches in general terms the factors, other than personnel issues, that affect the viability of a company when establishing a facility in a new location 	3–4
<ul style="list-style-type: none"> Indicates features of factors, other than personnel issues, that affect the viability of a company when establishing a facility in a new location 	1–2

Industrial Technology

Metal and Engineering Technologies

2011 HSC Examination Mapping Grid

Section I

Question	Marks	Content	Syllabus outcomes
1	1	Materials	H1.2
2	1	Materials	H1.2
3	1	Processes tools and machinery	H2.1, H3.1
4	1	Processes tools and machinery	H2.1
5	1	Materials	H1.2
6	1	Materials	H3.2
7	1	Processes tools and machinery	H2.1
8	1	Processes tools and machinery	H2.1
9	1	Processes tools and machinery	H3.2
10	1	Materials	H3.2

Section II

Question	Marks	Content	Syllabus outcomes
11	2	Processes tools and machinery	H1.2
12	3	Processes tools and machinery	H3.1, H4.1
13	3	Processes tools and machinery	H2.1
14 (a)	3	Processes tools and machinery	H3.1
14 (b)	4	Materials	H6.2

Section III

Question	Marks	Content	Syllabus outcomes
15 (a)	5	Occupational health and safety	H1.1, H1.2
15 (b)	10	Occupational health and safety	H1.1, H1.2, H6.2, H7.1