



**Coimisiún na Scrúduithe Stáit
State Examinations Commission**

Leaving Certificate Applied, 2007

**Vocational Specialism – Engineering
(240 marks)**

Written Examination

Marking Scheme

1. Answer **all** questions from Section 1.
2. Answer **any three** questions from Section 2.

Section 1 (90 Marks)

Answer all three questions

Section 1 Question 1. Give brief answers to **any fifteen** of the following: **45 marks**

- (a) Purpose: **3 Marks**
- (b) Precaution: **3 Marks**
- (c) Reason: **3 Marks**
- (d) Tool: **2 Marks**
Use: **1 Mark**
- (e) Reason: **3 Marks**
- (f) Tool: **2 Marks**
Use: **1 Mark**
- (g) Name A/B/C: **1 Mark each**
- (h) Copper + Zinc: **3 Marks**
- (i) Precaution: **3 Marks**
- (j) Material: **3 Marks**
- (k) Material: **2 Marks**
Reason: **1 Marks**
- (l) Use: **3 Marks**
- (m) First part: **2 Marks**
Other part: **1 Mark**
- (n) Name: **2 Marks**
Use: **1 Mark**
- (o) Material: **2 Marks**
Reason: **1 Mark**
- (p) Name: **2 Marks**
Use: **1 Mark**
- (q) Reason: **3 Marks**
- (r) Name: **2 Marks**
Use: **1 Mark**
- (s) Name: **2 Marks**
Use: **1 Mark**
- (t) Reason: **3 Marks**

Section 1 Question 2.

25 marks

- (a) A front elevation @ **9 Marks**
- (b) A plan @ **3 Marks**
- (c) Insert **three** other dimensions @ **1 Mark each**
Proportion/quality **10 Marks**

Section 1 Question 3.

20 marks

- (a) Safety item 1: **2 Marks** Use 1: **1 Mark**
Safety item 2 : **2 Marks** Use 2: **1 Mark**
- (b) Precaution 1: **1 Mark**
Precaution 2: **1 Mark**
- (c) Danger 1: **2 Marks** Precaution 1: **1 Mark**
Danger 2: **2 Marks** Precaution 2: **1 Mark**
- (d) Precaution: **2 Marks**
- (e) Symbol A: **2 Marks**
Symbol B: **2 Marks**

Section 2 (150 Marks)
Answer **any three** questions

Section 2 Question 4.

50 marks

(a) Idea: 20 Marks

Final solution: **20 Marks**

- (b) (i) Material: 2 Marks**
(ii) Reason: 2 Marks
(iii) Stage 1: 2 Marks
 Stage 2: 2 Marks
 Stage 3: 2 Marks

Section 2 Question 5.

50 marks

- (a) Description 1: 10 Marks**
Description 2: 10 Marks
Description 3 : 10 Marks

(b) Explanation: 4 Marks

(c) Advantage: 4 Marks

- (d) Component 1: 2 Marks Function 1: 2 Marks**
Component 2: 2 Marks Function 2: 2 Marks
Component 3: 2 Marks Function 3: 2 Marks

Section 2 Question 6.

50 marks

- (a) Stage 1: **6 Marks**
Stage 2: **6 Marks**
Stage 3: **6 Marks**
Stage 4: **6 Marks**

- (b) Stage 1: **5 Marks**
Stage 2: **5 Marks**
Stage 3: **5 Marks**
Stage 4: **5 Marks**

- (c) Precaution 1: **3 Marks**
Precaution 2: **3 Marks**

Section 2 Question 7.

Systems Module
(Any two topics comprise a full module)

50 marks

Answer **any two** from the five topics: @ 25 Marks each

Section 2 Q7 (a) Computer Aided Design (CAD)

25 marks

- (a) Command 1: **4 Marks**
Command 2: **4 Marks**
Command 3: **4 Marks**
Command 4: **4 Marks**

- (b) Procedure: **9 Marks**

Section 2 Q7 (b) Electricity

25 marks

- (a) Explanation: **9 Marks**
- (b) Name 1: **2 Marks** Use 1: **2 Marks**
Name 2: **2 Marks** Use 2: **2 Marks**
Name 3: **2 Marks** Use 3: **2 Marks**
Name 4: **2 Marks** Use 4: **2 Marks**

Section 2 Q7 (c) Electronics

25 marks

- (a) Name 1: **2 Marks** Use 1: **2 Marks**
Name 2: **2 Marks** Use 2: **2 Marks**
Name 3: **2 Marks** Use 3: **2 Marks**
- (b) Purpose: **4 Marks**
- (c) Explanation: **9 Marks**

Section 2 Q7 (d) Mechanisms

25 marks

- (a) Explanation: **10 Marks**
- (b) Mechanism A : **3 Marks** Use A: **2 Marks**
Mechanism B: **3 Marks** Use B: **2 Marks**
Mechanism C: **3 Marks** Use C: **2 Marks**

Section 2 Q7 (e) Pneumatics

25 marks

- (a) Name 1: **2 Marks** Use 1: **2 Marks**
Name 2: **2 Marks** Use 2: **2 Marks**
Name 3: **2 Marks** Use 3: **2 Marks**
Name 4: **2 Marks** Use 4: **2 Marks**
- (b) Name 1: **2 Marks** Use 1: **1 Marks**
Name 2: **2 Marks** Use 2: **1 Marks**
- (c) Precaution: **3 Marks**