



*Scéimeanna Marcála*

*Scrúduithe Ardteistiméireachta, 2001*

*Innealtóireacht*

*Ardleibhéal*

*Marking Scheme*

*Leaving Certificate Examination, 2001*

*Engineering*

*Higher Level*

**DEPARTMENT OF EDUCATION AND SCIENCE:**  
**ENGINEERING MATERIALS AND TECHNOLOGY**  
**(HIGHER LEVEL – 300 MARKS)**

MARKING SCHEME: 2001

**Question 1 Section A: 50 marks.**

Any Ten @ 5 marks each.

- (a) 3 + 2
- (c) 2 + 3
- (d) 2 + 3
- (e) 2 + 2 + 1
- (h) Name: .5 + .5 + 1  
Function: 1 + 1 + 1
- (j) 3 + 2
- (k) 3 + 2.
- (l) 3 + 2.

**All other parts 5 marks each.**

**Question 1 Section B: 50 marks.**

Answer all questions:

- (n) (i) 5  
(ii) 3 + 2.
- (o) (I) 5. (ii) 5.
- (p) 5 + 5
- (q) 10.
- (r) 4 + 3 + 3

**Question Two: 50 marks.**

- (a) Redraw: 3 marks.  
Matching graphs: 3 + 3 + 3.  
Outline Ductility: 2 + 2 + 2.
- (b) (i) 6 + 6.  
(ii) 2 + 2 + 2.
- (c) Name: 3 marks.  
Principles: 8 marks.  
Applications: 3 marks.

**Question Three: 50 marks.**

- (a) Redraw: 3 marks.  
Six labels @ 3 marks each.
- (b) (I) 4 + 4 .  
(ii) 6 + 6.
- (c) 9 marks.

**Question Four: 50 marks.**

- (a) Any Two: 8 + 8.  
(b) Redraw: 6 marks.  
Identify: 3 marks each.  
Explain: 3 marks each.
- (c) 10 marks.

**Question Five: 50 marks.**

- (a) Any Two @ 9 marks each.
- (b) Explain: 8 marks.  
Three reasons @ 3 marks each.
- (c) Diagram: 6 marks.  
Features: 3 marks.  
Operation: 4 marks.  
Application: 2 marks.  
**OR**
- (c) Three terms @ 5 marks each.

**Question Six: 50 marks.**

- (a) 6 marks each.
- (b) Bonding: 3 + 3.  
Properties: 3 + 3.  
Structures: 3 + 3.
- (c) Equipment: 6 marks.  
Process: 6 marks.  
Product: 2 marks.

**Question Seven: 50 marks.**

- (a) Any Three @ 6 marks each.
- (b) Any Two @ 8 + 8 marks.
- (c) Any Four @ 4 marks each.
- OR**
- (c) Any Four @ 4 marks each.

**Question Eight: 50 marks.**

- (a) Identification: 6 marks.  
Explanation: 10 marks.
- (b) Any Two @ 9 + 9 marks.
- (c) Identification: 3 marks each.  
Application: 4 marks.  
**OR**
- (c) 16 marks.