

Question	Answer	Marks	AO Element	Notes	Guidance
1	electrons	1			
2	6(.0) (V) (1) 0.40 × 15 (1) (V =) I × R OR R = V / I	3			
3(a)	4.8 V	1			
3(b)	20 Ω (1) 1 / R _T = 1 / R ₁ + 1 / R ₂ OR (R _T =) R ₁ R ₂ / (R ₁ + R ₂) OR 1 / R _T = 1 / 24 + 1 / 12 OR 1 / R _T = 3 / 24 OR (R _T =) 24 × 12 / (24 + 12) (1) 8.0 (Ω) (1)	3			
3(c)	2.9 V (1) V = ER / R _T in any form OR 4.8 × 12 / 20 OR I = E / R in any form OR 0.24 seen (1)	2			

[Total: 10]