

Name of the Student: \_\_\_\_\_

Max. Marks : 17 Marks

Time : 17 Minutes

Mark Schemes

### Q1.

- (a) gradient =  $\frac{250 - 0}{50 - 0}$   
allow any correct pair of values substituted 1
- speed = 5.0 m/s  
allow 5 (m/)  
allow the use of  $s = v t$  1
- (b) gravitational force 1
- (c)  $W = 30 \times 250$  1
- $W = 7500$  1
- J 1
- (d) frictional 1
- kinetic 1
- chemical 1
- [9]

### Q2.

- (a) electrostatic 1
- gravitational 1
- (b) D 1
- (c) bring two unlike poles close together  
allow north and south poles

*allow opposite poles*

1

bring two like poles close together

*allow two north / south poles*

*allow N for north and S for south*

1

(d) induced magnetism

1

(e) all 4 poles correctly labelled north and south

*allow N for north and S for south*

*allow 1 mark for 2 or 3 correctly labelled poles*

2

**[8]**