

[November/December 2008]

4 (a) Describe what is meant by a *magnetic field*.

For
Examiner's
Use

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.....
.....

[3]

(b) A small mass is placed in a field of force that is either electric or magnetic or gravitational.

State the nature of the field of force when the mass is

(i) charged and the force is opposite to the direction of the field,

..... [1]

(ii) uncharged and the force is in the direction of the field,

..... [1]

(iii) charged and there is a force only when the mass is moving,

..... [1]

(iv) charged and there is no force on the mass when it is stationary or moving in a particular direction.

..... [1]