



Reg. No. :

Name :



M 9931

V Semester B.Sc. Degree (CCSS-Reg./Supple./Imp.)

Examination, November 2015

Core Course in Physics

5B06 PHY : ELECTRODYNAMICS – I

Time : 3 Hours

Max. Weightage : 30

SECTION – A

(Choose the correct answer. Each bunch carries a weightage of 1).

1. i) In the equation $p = \alpha E$, α is

a) Dipole moment	b) Polarization
c) Susceptibility	d) Atomic Polarizability
- ii) Two metal spheres of radii R_1 and R_2 are charged to the same potential. The ratio of charges on the spheres

a) $\sqrt{R_1} : \sqrt{R_2}$	b) $R_1^2 : R_2^2$	c) $R_1 : R_2$	d) $R_1^3 : R_2^3$
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- iii) Volume current density is

a) Current per unit Volume	b) Current per unit Area
c) Current per unit length	d) Charge per unit length
- iv) A soap bubble is negatively charged. Its radius

a) Decreases	b) Increases
c) Remains uncharged	d) Cannot be predicted

(W = 1)
2. i) A current carrying loop is placed in a uniform magnetic field. The torque acting on it doesnot depend on

a) Shape of the loop	b) Area of the loop
c) Value of current	d) Magnetic field
- ii) Domain formation is the necessary feature of

a) Diamagnetism	b) Paramagnetism
c) Ferromagnetism	d) All of the above

