



Excelssior Education Society's
K.C.College Of Engineering and Management Studies and Research
(Affiliated to the University of Mumbai)

Mith Bunder Road, Near Hume Pipe, Kopri, Thane (E)-400603

Department of Humanities & Applied Sciences

CLASS TEST-II

Semester: I Class:F.E.(2015-16) Date:30/10/15
Marks: 15 Subject: Applied Physics I Duration: 1 Hr.

Note : 1)Attempt any THREE questions.

2)Assume suitable data wherever necessary.

Q.1)Explain the following terms: [5M]

- (a)Dielectric materials (b)Electric flux (c)Polar dielectrics (d)Non-polar dielectrics
- (e)Electric polarization

Q.2)A hall of dimension(20x15x10)m³ has average absorption coefficient 0.1 . Find the [5M]
reverberation time. If a curtain cloth of 100m² is suspended at the centre of the hall
with coefficient of absorption 0.66 What will be the change in reverberation time?

Q.3)Explain various stages of hysteresis curve and give the significance of its loop. [5M]

Q.4)State magnetostriction effect? Explain magnetostriction oscillator. [5M]

Q.5)Consider air toroid with 500 turns, with a cross section of 6cm², mean radius [5M]
of 15 cm and coil current of 4 A. Calculate m.m.f. , reluctance, magnetic flux
and flux density.

*****BEST OF LUCK *****