Module 1

Q Define the term wave?
Q write short note on waves on a string.?
Q How can you classify the waves discuss in details?
Q What do you mean by Harmonic waves?
Q Derive the wave equation for a wave on a string.?
Q Explain the process of reflection and transmission of waves at a boundry?
Q what are standing waves?
Q List out the properties of standing waves
Q Define the term aigen Frequency? and
Q Explain the aigen frequency of standing waves ?

Module 2

Q Explain How gradient and curl act on a fn and give its physical significance?
Q what is divergence. Explain with a suitable example?
Q write short note on the physical significance of
(1) Line "
(2) Surface integral
(3) Volume "
Q Discuss the physical significance of surface Integral and Volume Integral?
Q what are Maxwells equation. State and explain in detail. Define the laws

Q Give the differential and integral form of Maxwell's equation

Q Explain the concept of displacement current in detail and list out it's importance.

Q Write shortnote on electromagnetic waves? and list out it's properties.

Q Derive the electromagnetic wave eqn in free space.

Q Explain the plain electromagnetic waves in free space and give the wave eq's?

Q Explain Hertz's Experiment & Discuss the Outcomes?