



UNIVERSITY OF NORTH BENGAL
B.Sc. Honours 2nd Semester Examination, 2021

CC3-PHYSICS

ELECTRICITY AND MAGNETISM

Full Marks: 40

ASSIGNMENT

The figures in the margin indicate full marks.

[For each question, the candidates will be graded according to the quality of the presentation of the topic (8 marks) and originality of language (2 marks). Maximum word limit of each topic is 400]

Write short notes on any four of the following topics

10×4 = 40

1. Gauss's law and its applications to charge distribution with spherical symmetry.
2. Electrostatic energy of a system of point charges and uniformly charged sphere.
3. Electric dipole and derivation of field and potential due to electric dipole.
4. Biot-Savart's law and its applications.
5. Series LCR circuit.
6. Maximum power transfer theorem and its application to dc circuits.

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