



UNIVERSITY OF NORTH BENGAL
B.Sc. Honours 1st Semester Examination, 2020

CC2-PHYSICS

MECHANICS

Full Marks: 40

ASSIGNMENT

*The figures in the margin indicate full marks.
All symbols are of usual significance.*

*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. Damped Oscillation.
2. Non-inertial frames and fictitious forces.
3. Special theory of relativity: variation of mass with velocity and mass-energy equivalence.
4. Kepler's Laws of planetary motion.
5. Gravitational potential and its value due to a spherical shell.
6. Rotation of a body about a fixed axis and kinetic energy of rotation.

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