

UG-352

BCHEA-01

**B.Sc. DEGREE EXAMINATION —
DECEMBER, 2019.**

First Year

Chemistry

GENERAL PHYSICS

Time : 3 hours

Maximum marks : 75

PART A — (3 × 5 = 15 marks)

Answer any THREE questions out of Five.

1. State the conditions for good acoustics of buildings.
2. State the laws of thermodynamics.
3. Note down the applications of Raman effects.
4. State the laws of electromagnetic induction.
5. Illustrate the basic principles of FET.

PART B — ($4 \times 15 = 60$ marks)

Answer any FOUR questions.

6. (a) State and explain Kepler's laws of planetary Motion.

Or

- (b) Determine the centre of gravity of a solid hemisphere and solid cone.

7. (a) State Hooke's law. Define and explain three moduli.

Or

- (b) Describe the experiment to determine the young's modulus of a bar by non-uniform bending.

8. (a) Obtain an expression for energy of a capacitor.

Or

- (b) Explain Raman effect and its applications.

9. (a) Describe Carey Foster's bridge with neat circuit diagram.

Or

- (b) State the laws of electromagnetic induction. Write a note of self and mutual induction coils.

10. (a) Explain Zener diode characteristics study.

Or

(b) Explain the principles of light emitting diode.
