4th Semester (B.Sc.-H) Final Internal Examination-2020 Department of Physics Prabhat Kumar College, Contai Paper-SEC-2 (RENEWABLE ENERGY AND ENERGY HARVESTING)

Group-A (Theory)

(Answer any one of the following)

- 1. Write short note on solar energy-its resource, harvesting and challenges.
- 2. What is fossil fuel? Discuss various types of fossil fuels and their yearly harvesting capacity in India.
- 3. Explain the construction of wind turbines to harvest wind energy.
- 4. What is geothermal energy? Schematically explain its harvesting.
- 5. Discuss the harvesting of ocean energy.
- 6. What is piezoelectricity? Explain how piezoelectricity can be an alternative resource of green energy.

Group-B (Practical)

(Answer any one of the following)

- 1. What is thermoelectricity? Discuss the Seebeck effect in this context to harvest energy from wasted heat.
- 2. What is solar cell? Discuss the basic principle of operation and I-V characteristics of a solar cell.
- 3. Discuss the theory of piezoelectric effect.

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