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B. Com (Hons.) (Sem.- 6th)

NON-CONVENTIONAL ENERGY SOURCES

Subject Code: BEEE0-F94

Paper ID: OE2140305

Time Allowed: 3 Hrs.

MM: 60

Instructions to Candidates:

1. Section-A is **Compulsory**.
2. Attempt any **Four questions** from Section-B.
3. Attempt any **Two questions** from Section-C.

Section- A

(10x2 = 20)

Q1. Explain the followings:

- a. What do you mean by renewable energy sources?
- b. Define solar constant.
- c. List out the various types of solar energy collectors.
- d. What are the factors to be taken into account while selecting a site for wind energy power plant?
- e. What is photosynthesis?
- f. Give the list of prime movers for geothermal energy.
- g. Expand MHD.
- h. What are the advantages of hydroelectric energy?
- i. Which are the different methods of production of hydrogen for use as an energy carrier?
- j. What is the difference between spring and neap tides?

Section -B

(4x5 = 20)

Q2. Discuss the various advantages of renewable energy sources.

Q3. Explain any two biomass conversion technologies.

Q4. Discuss small scale hydroelectric development in India.

Q5. Explain thermo-ionic power generation.

Q6. Give a classification of solar energy storage systems. Explain each of them briefly.

Section - C

(2x10 = 20)

Q7. Give a detailed classification of solar energy collectors. Explain each type of them with the help of neat and clean diagrams.

Q8. Explain MHD power generator with the aid of neat and clean diagram.

Q9. Write short notes on:

- a. Geothermal energy resources
- b. Nuclear fusion energy