Roll No……..….. **Total No. of Printed Pages: 1**

Total No. of Questions: [09]

BBA (Semester – 6th)

NON- CONVENTIONAL ENERGY RESOURCES

Subject Code: BEEE0F94

Paper ID: [OE2150105]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(2 marks each)**

Q1. Attempt the following:

a. Write the classification of energy resources.
b. Define the term "solar constant" and explain its significance.
c. Discuss the basic principle of wind energy conversion.
d. Describe different sources of geothermal energy.
e. Outline the process of hydrogen production.
f. Explain the origin of tides
g. What is the principle of Ocean Thermal Energy Conversion?
h. What are different types of bio-fuels?
i. Express the advantages and disadvantages of Hydroelectricity.
j. List out various photovoltaic solar energy applications

Section – B **(5 marks each)**

Q2. Enumerate different types of solar concentrating type collectors.

Q3. Determine the use and working of wind sock in aviation industry

Q4. Classify the Biomass energy conversion systems and explain them in brief.

Q5. Distinguish between wave and tidal energy.

Q6. How do you classify hydrogen production methods? Explain any one in detail

Section – C **(10 marks each)**

Q7. Explain the working of pyranometer and pyrheliometer.

Q8. Explain with a sketch the basic components of the wind energy conversion system (WECS).

Q9. Write a note on

(a) magneto hydrodynamic power and (b) Nuclear fusion energy