

Roll No.

Total No. of Pages: 02

Total No. of Questions: 09

B.Sc. (Agriculture) (2014 & Onwards) (Sem. – 6)

RENEWABLE ENERGY

M Code: 74351

Subject Code: BSAG-608

Paper ID: [74351]

Time: 3 Hrs.

Max. Marks: 60

INSTRUCTIONS TO CANDIDATES:

1. **SECTION-A is COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

SECTION A

1. Write short note on the following:

- a) Solar constant
- b) Non-commercial sources of energy
- c) Wind energy
- d) Solar pond
- e) Solar dryers
- f) Trans-esterification
- g) Coefficient of performance
- h) Briquetting
- i) Pyrolysis
- j) Bio-mass

SECTION B

2. What are primary and secondary energy sources available on Indian farm?
3. Describe different component of wind mill.
4. What are producer gas and its utilization?
5. Define solar energy. Write its advantages and disadvantages of solar energy?
6. What are the site selection criteria for installation of wind mill?

SECTION C

7. What is solar energy? Describe solar flat plate and focusing plate solar energy collectors.
8. Write down the digester design considerations of biogas plant. What are the different factors considered for site selection of biogas plant?
9. Discuss energy requirement of rural consumers and state the possible alternative source of energy to meet the demand.