



Fden.3208

KERALA AGRICULTURAL UNIVERSITY

B.Tech. (Food. Engg.)

One-Time Re-examination-February-2018

2014 Admission VII Semester

Energy for Food Industries (1+1)

Marks: 50

Time: 2 hours

(10x1=10)

I Fill in the Blanks

- 1is an example for Primary Energy Source.
- 2is an example of renewable source of energy.
- 3 Photovoltaic energy is the conversion of sunlight into.....
- 4 Solar energy can be used to cook food in a

State True or False

- 5 Wind energy can be used to run flour mill.
- 6 In solar water heater, hot water is not available to use at night.
- 7 Grasses are examples of biomass.
- 8 Biogas is used for lighting applications.

Define the following

- 9 Biomass
- 10 Waste heat

II Answer any FIVE of the following

(5x2=10)

- 1 Anaerobic digestion of organic matter
- 2 Different classification of wind mills
- 3 Advantages of solar energy
- 4 Secondary energy sources with examples
- 5 Energy management and its fundamental goal
- 6 Application of Biomass gasification in food industries
- 7 Benefits of Waste Heat Recovery

III Answer any FIVE of the following.

(5x4=20)

- 1 Liquid flat plate collector with neat diagram.
- 2 Solar air heater (Flat plate collector for heating air)
- 3 Generation of electricity in solar cells.
- 4 Solar PV sprayer.
- 5 Disadvantages of PV system.
- 6 Uses of Photovoltaic (PV) Systems.
- 7 Different Process Zones in gasifier systems.

IV Write an essay on any ONE of the following

(1x10=10)

- 1 Concentrating collector
- 2 Energy Audit and various types of energy audit
