

KERALA AGRICULTURAL UNIVERSITY B.Tech.(Food Engg. & Technology) VIII Semester Final Re- Examination – July 2023 2019 Admission

Fden.3208

I

II

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IV

Energy for Food Industries (1+1)

Marks: 50 Time: 2 hours

(10x1=10)Fill in the blanks 1. Cost reduction in energy is dealt in 2. effect is the conversion of sunlight energy into electricity. convert power of sunlight into electric power. 3. Device used for distillation is 4. 5. Electricity can be generated using State True or False Energy can be converted from one form to another. 6. Local solar time is measured using a sun dial. 7. 8. A focusing type solar collector is a special form of flat plate collector. 9. Wind turbine is a wind energy converter. Answer the following What is MSW? 10. Write short notes on ANY FIVE of the following (5x2=10)1. What is the major difference between renewable and non-renewable energy? What is solar radiation? 2. What are solar air collectors? 3. 4. What is a solar dryer? 5. Mention some advantages of solar pv system. What is biomass gasification? 6. 7. What is meant by waste heat recovery? Answer ANY FIVE of the following 1. What is energy management? Define solar time. Mention its types. 2. 3. Write short notes on natural convection solar dryer. What is the principle of PV effect? 4. 5. How does solar distillation unit works? What is wind energy? How is electricity produced from wind? 6. 7. What is biomass? Mention few biomass. Write an essay on ANY ONE of the following (1x10=10)What are the different types of solar dryer? With a neat sketch explain the construction 1. and working of a solar dryer for food.

What is the importance of solar distillation? Write in detail on the principle of operation 2. and industrial applications of solar distillation.

(5x4=20)