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Question Paper Code: 59713

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2020

Elective

Agriculture Engineering

15UAG920 – ENERGY AUDITING AND MANAGEMENT

(Regulation 2015)

Duration: One hour

Maximum: 30Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

- Liquid fuel density is measured by an instrument called CO1- R
(a) Tachometer (b) Hygrometer (c) Anemometer (d) None of the above
- Trapped heat inside the earth is known as _____ CO1- R
(a) Heat energy (b) Kinetic energy (c) Geothermal energy (d) Thermal energy
- Which instrument is used to monitor O₂, CO in flue gas? CO2- R
(a) Combustion (b) Power analyzer (c) Pyrometer (d) Pyrite
- The judicious and effective use of energy to maximize profits and enhance competitive positions". This can be the definition of CO2- R
(a) Energy conservation (b) Energy management
(c) Energy policy (d) Energy Audit
- Desirable boiler water pH should be? CO3- R
(a) 5 - 7 (b) 7 - 9 (c) 9 - 11 (d) None of the above
- Thermal efficiency of a thermal power plant is of the order of CO3- R
(a) 15 % (b) 20 % (c) 30 % (d) 45 %
- Maximum demand charges are given in CO4- R
(a) kWh (b) kVA (c) kVAr (d) All of the above
- The ratio of current year's production to the reference years production is called CO4- R
as
(a) Demand factor (b) Production factor
(c) Utilization factor (d) Load factor

9. Which of the following is not a financial indicator CO5- R
(a) CPM (b) IRR (c) NPV (d) ROI
10. Proposed new technologies, process modifications, equipment replacements are the elements of CO5- R
(a) Financing (b) Contracting (c) Technical design (d) Implementation

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11. Explain Prototype Carbon Fund. CO1- U (8)
12. Compare 'preliminary energy audit' and 'detailed energy audit'. CO2- Ana (8)
13. Explain various losses in Boiler. CO3- U (8)
14. Build the energy conservation opportunities in motors. CO4- Ana (8)
15. Summarize the industrial energy auditing and conservation measures. CO5- U (8)