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Question Paper Code: 37304

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

Seventh Semester

Electrical and Electronics Engineering

01UEE704 - ELECTRIC POWER UTILIZATION AND ENERGY CONSERVATION

(Regulation 2013)

Duration: One hour

Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

1. The voltage used for suburban train in D.C system is usually
(a) 12V (b) 24V (c) 220v (d) 600V to 750V
2. The unit of luminous flux is
(a) Steradian (b) Candela (c) Lumen (d) Eddy current
3. Candela is the unit of which of the following quantity
(a) Wave length (b) Luminous intensity (c) Luminous flux (d) Frequency
4. The lighting which is mainly used for indoor light decoration purpose is
(a) Direct lighting (b) Indirect lighting
(c) Semi-direct lighting (d) Semi-indirect lighting
5. The transfer of heat within a fluid by mixing of one portion of the fluid with another is called as
(a) Convection (b) Conduction (c) Radiation (d) Reflection
6. A filler metal in the form of a wire or rod used in the welding process is known as
(a) Crater (b) Clamp (c) Flux (d)Electrodes
7. Which of the following instrument is used to measure the solar radiation?
(a) Pyranometer (b) Anemometer (c) radiometer (d) Aerogenerator
8. A concentration type solar collector

- (a) First absorbs the radiation and then increases its concentration
 - (b) Increases the density of solar radiation before absorbing it
 - (c) Dilutes the density of solar radiation before absorbing it
 - (d) Increases the intensity of solar radiation and then reflects it back
9. The range of wind speed suitable for wind power generator is
- (a) 0 to 5 m/s
 - (b) 5 to 25 m/s
 - (c) 25 to 50 m/s
 - (d) 50 to 75 m/s
10. Which of the following is a renewable energy source?
- (a) Bitumen
 - (b) Wind Energy
 - (c) Coal
 - (d) Natural Gas

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11. What are the various types of electric braking used in traction? Discuss in detail. (8)
12. Explain the principle of operation and working of a mercury vapour lamp. (8)
13. Discuss in details about any two types of resistance welding. (8)
14. Analyze the effect of solar radiation on tilted surface. (8)
15. With a neat diagram, explain how wind energy can be converted into electrical energy. (8)