Reg. No.:

Question Paper Code: 42306

B.E. / B.Tech. DEGREE EXAMINATION, JUNE 2021

Second Semester

Civil Engineering

14UEE206- BASIC ELECTRICAL AND ELECTRONICS ENGINEERING

(Common to Mechanical Engineering)

(Regulation 2014)

Duration: 1.45 hours Maximum: 50 Marks

PART A - $(10 \times 2 = 20 \text{ Marks})$

(Answer any TEN of the following questions)

- 1. State moving iron instrument.
- 2. What are the advantages of electromechanical measuring instruments?
- 3. What are the different types of DC generator?
- 4. Why single phase induction motor is not a self starting?
- 5. Give importance of commutator in D.C machine.
- 6. Define doping in semiconductor theory.
- 7. Compare PN junction diode and Zener diode.
- 8. What is meant by uncontrolled rectifiers?
- 9. State V-I characteristics of Zener diode
- 10. What are shift registers?
- 11. What is a counter?
- 12. Define RS flip flop
- 13. What is meant by modulation?
- 14. Define numerical aperture.
- 15. Define the term modulation.

PART - B (3 X 10 = 30 Marks)

(Answer any THREE of the following questions)

- 16. Explain the terms power and power factor in connection with AC circuits.
- 17. Explain the working principle of transformer with its construction details.
- 18. Explain the working of the CE configuration of a BJT.
- 19. Explain the operation of JK flip flop with suitable logic diagram.
- 20. Draw the block diagram of an AM transmitter and explain its operation.