

BASIC ELECTRONICS
2nd Exam/ECE/ETV/ECE-II/COMP/CSE/IT/EEE/0664/Sep'2020
(For 2018 Batch Onwards)

Duration: 1.15Hrs.

M.Marks:25

SECTION-A

Q1. Attempt any three questions. 3x5=15

1. Classify different types of solids based on energy band diagrams.
2. Discuss the advantages of FET over Conventional transistor.
3. Explain single stage transistor amplifier in detail.
4. Write a note on light emitting diode.
5. Draw circuit of full wave Rectifier and explain its working. Draw the output waveform.
6. What do you mean by thermal runaway?
7. Draw and explain series inductor Filter Circuits.
8. What is Zener Diode? Explain its Application as a voltage regulator.

SECTION-B

Q2. Attempt any one question. 1x10=10

1. Draw and Explain the Common base Configuration Characteristics.
2. Explain construction and working principle of MOSFET. Draw the neat diagram.
3. Write note on PN Junction and its biasing. Difference between the n-type and p-type Semiconductor.
4. Define biasing? Explain in detail any one type of biasing circuits.
5. Write note on any two
 - a. Photo diodes
 - b. Zener breakdown
 - c. Faithful amplification