

Total No. of Questions : 4]

SEAT No. :

P-5372

[Total No. of Pages : 1

[6185]-55

F.E. (Insem.)

BASIC ELECTRONICS ENGINEERING
(2019 Pattern) (Semester - I) (104010)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Attempt Q.1 or Q.2, Q.3 or Q.4.*
- 2) *Figures to the right indicate full marks.*

- Q1)** a) Compare half wave rectifier and full wave rectifier. [5]
b) Explain the construction and working principle of LED. [5]
c) Explain impact of Electronics on society and industry. [5]

OR

- Q2)** a) Compare active and passive components. [5]
b) Explain the operation of bridge rectifier circuit with diagram. [5]
c) Explain the construction and working of photodiode. [5]

- Q3)** a) Draw and explain input and output characteristics of BJT in common emitter configuration, show different regions of operation. [5]
b) Compare BJT and MOSFET. [5]
c) Draw and explain Internal Block diagram of OP-AMP. [5]

OR

- Q4)** a) Explain with suitable diagram operation of NPN transistor [5]
b) Explain construction and operation of n-channel E-MOSFET. [5]
c) State and explain practical parameters of OP-AMP. [5]

