



Progressive Education Society's
Modern College of Arts, Science & Commerce Ganeshkhind, Pune – 16 (Autonomous)
End Semester Examination: OCT / NOV 2024

Program: Bsc Semester: **I**
Program (Specific): FYBsc Course Type: **Regular**
Class: FYBSC ELECTRONICS Max.Marks: **30**
Name of the Course: FYBSC GENERAL Electronics Time: **2Hr**
Course Code: 24ELE11101
Paper: Basics of Electronic Devices and Systems

Instructions to the candidate:

- 1) *There are 4 sections in the question paper. Write each section on separate page.*
- 2) *All Sections are compulsory.*
- 3) *Figures to the right indicate full marks.*
- 4) *Draw a well labelled diagram wherever necessary.*

SECTION: A

Q1) Define. [5 X 2= 10]

1. Define Semiconductor
2. Define Regulation of Zener Diode
3. Define Cutoff voltage of PN diode
4. Define Insulator
5. Define Conductor

SECTION: B

Q2) Very short answer questions (Attempt any 4/6) [4 X 3= 12]

1. What is meant by Valence band and Conduction band
2. What is meant by doping
3. What type of impurities are added to form Ptype Semiconductor
4. Write name of dopant material used to get N type Semiconductor
5. What type of impurities added to get Ntype Semiconductor
6. Write the name of material added to get P type semiconductor

SECTION: C

Q3) Short answer questions (Attempt any 2/4) [2 X 4 = 8]

1. Write difference between intrinsic Semiconductor and extrinsic Semiconductor
2. Explain Photodiode working
3. Draw and explain I V charectistics of PN diode
4. What is difference between PNP and NPN Transistor