

End Semester Examinations - 2015-16 Even Semester - May 2016

14EC2091 Electron Devices and Instrumentation

Set B

Time : 3 hrs
Total Marks: 100

1. i) Discuss in detail about Drift and Diffusion current in semiconductor with neat diagram. (14)
ii) Explain in detail about the Intrinsic and Extrinsic Semiconductor. (6)

OR

2. i) Discuss about the I-V characteristics of PN junction diode with neat diagram. (12)
ii) Describe about Half wave rectifier with its circuit diagram. (8)

3. Discuss in detail about MOSFET with its I-V Characteristics.(20)

OR

4. i) Discuss about any full wave rectifier with its circuit diagram. (16)
ii) Describe the total current in the semiconductor. (4)

5. i) Discuss in detail about TRIAC with its I-V characteristics. (10)
ii) Discuss in detail about DIAC with its I-V Characteristics.(10)

OR

6. i) Discuss in detail about Silicon Controlled Rectifier (SCR) with its I-V Characteristics. (16)
ii) Define latching current in SCR (4)

7. i) Explain about Potentiometer based transducer with neat diagram. (8)
ii) Discuss in detail about Linear Variable Differential Transformer with neat diagram.(12)

OR

8. i) Explain about Gunn Diode with its I-V characteristics.(5)
ii) Explain in detail about the digital Multimeter with its block diagram. (15)

9. i) Computer based Data Acquisition Systems? (15)
ii) Describe about the architecture of virtual instruments with neat diagram. (5)

Wishing you All the Best