



Reg.No. _____

End Semester Examination – Nov/Dec - 2016

Code : **11MT203/12MT202** Semester : **2016-17 ODD**
Sub. Name : **Electronic Devices/Electronic Devices** Duration : **3 hrs**
Max. marks : **100**

Q. No.	Questions	Marks
PART-A(10X1=10 MARKS)		
1.	Purest form of semiconductor is referred as _____	(1)
2.	The lower energy level of a semiconductor is called as the _____ band.	(1)
3.	Define Doping.	(1)
4.	N type Semiconductor is formed by adding _____ impurities.	(1)
5.	Varactor diode is also called as _____	(1)
6.	Tunnel diode is a semiconductor diode with _____ resistance region.	(1)
7.	FET is a _____ controlled device.	(1)
8.	MOSFET is also called as _____	(1)
9.	Draw the symbol of UJT.	(1)
10.	Define Intrinsic Standoff Ratio.	(1)

PART B(5 X 3= 15 MARKS)		
11	Draw the energy band structure of Insulator.	(3)
12	State the difference between drift current and diffusion current.	(3)
13	What do you mean by Zener breakdown?	(3)
14	Define pinch off voltage.	(3)
15	Draw the equivalent circuit of UJT.	(3)

PART C(5 X 15= 75 MARKS)		
16.	Explain the motion of charge particles in electric field.	15
(OR)		
17.	Derive the electrostatic and magnetic deflection sensitivity.	15
18.	Discuss hall effect and derive the continuity equation.	15
(OR)		
19.	Explain the VI characteristics of PN junction diode	15
20.	Discuss tunneling effect in detail with suitable diagrams.	15
(OR)		
21.	Write short notes on a) Photo Diode b) Light Emitting Diode	15
22.	Elucidate the characteristics of transistor in CB configuration	15
(OR)		
23.	Explain in detail the drain and transfer characteristics of JFET.	15
24.	Discuss the operation of SCR with two transistor model.	15
(OR)		
25.	Explain the characteristics of UJT with its equivalent circuit.	15

ALL THE BEST