SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI

Summer Examination 2020

HVPM's College of Engineering and Technology, Amravati

Department of Electronics & Telecommunication Engineering

Bachelor of Engineering Sem :- III

Subject : Electronics Devices and Components **Code: 3XT05**

Instructions:

1) **Solve any two questions**

2) **All questions carry equal marks**

Que. 1		
a	Enlist the various types of resistors. Explain any of the two with neat sketches.	2 credit point
b	State various types of relays. Explain polarized relay.	2 credit point
c	Explain PCB manufacturing process.	2 credit point
d	Draw V-I characteristics of PN junction diode and explain.	2 credit point
e	Draw the V-I characteristics of Tunnel diode and explain it.	1 credit point
f	Explain PNP transistor with its neat diagram.	1 credit point
Que. 2		
a	Explain failures in fixed resistors and their causes	2 credit point
b	Explain various types of switches.	2 credit point
c	What is soldering? What are its types? Explain IR soldering.	2 credit point
d	Explain how Zener diode acts as a Zener regulator.	2 credit point
e	Describe the construction and working of photo diode.	1 credit point
f	Explain the concept of leakage current Icbo and Iceo.	1 credit point
Que. 3		
a	Explain failures in capacitors	2 credit point
b	Draw and explain various types of cables used in electronic circuits.	2 credit point
c	What is copper clad laminates? How are they prepared? Give their characteristics.	2 credit point
d	Explain testing of diode using ohmmeter and CRO.	2 credit point
e	Give the constructional details of Schottky diode.	1 credit point
f	Explain how transistor acts as an amplifier.	1 credit point
Que. 4		
a	Explain various types of capacitor with emphasis on application where they preferred.	2 credit point
b	Explain different types of fuses. Give construction and specification.	2 credit point
c	Describe the photo printing techniques for PCB fabrication?	2 credit point
d	Explain Zener diode.	2 credit point
e	Explain how a diode emits light.	1 credit point
f	Find the relation between α and β of a transistor	1 credit point