

School of Engineering

B.TECH Electronics and Communication Engineering
Summer / Backlog - Semester End Examination - Jul /Aug
2024

Duration : 180 Minutes
Max Marks : 100

Sem III - G2UC301C / BECE2015 - Electronic Devices and Circuits

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) Write about formation of unbiased PN junction diode. K1(2)
- 2) Explain the operation of forward biased and reverse biased PN junction Diode. K2(4)
- 3) Explain the working of NPN and PNP transistor. K2(6)
- 4) Define cutoff and active region of a transistor. K3(9)
- 5) Draw and explain the input/output characteristics of a transistor in CE configuration K3(9)
- 6) Define the current ICEO for an transistor circuit. K5(10)
- 7) What are the features of JFET? K4(12)
- 8) Why is emitter follower so named? K5(15)
- 9) Explain single and double tuned amplifier, Compare Single Tuned and Double Tuned Amplifier in terms of examples. K5(15)
- 10) Draw the circuit diagram of a current series feedback amplifier and derive expressions for voltage gain with and without feedback. K6(18)