

# Yashwantrao Chavan College of Science Karad

Department of Computer Science

Class B.Sc. Entire I Subject – Electronics

Paper Name – Electronics Devices and circuit II

## Que 1) Long Answer

- 1) Explain Structure and working of JEFET
- 2) Explain I-V characteristics of and parameter of JEFET
- 3) Explain structure and working of N channel- MOSFET
- 4) Explain Characteristics and application of N channel- MOSFET
- 5) Explain classification of amplifier
- 6) Explain Class A and Class B amplifier based on frequency response and Q point
- 7) Explain Class AB and Class A amplifier based on frequency response and Q point
- 8) Explain Direct Coupled amplifier in detail
- 9) Explain RC coupled amplifier in detail
- 10) Explain RC phase shift oscillator
- 11) Explain LC Colpitt's oscillator
- 12) Explain crystal oscillator
- 13) Explain block diagram of operational amplifier
- 14) Explain ideal and practical characteristics of operational amplifier
- 15) Explain parameters of operational amplifier
- 16) Explain inverting amplifier with its output equation
- 17) Explain non- inverting amplifier with its output equation
- 18) Explain virtual concept of operational amplifier
- 19) Explain op- amp as a adder with its output equation
- 20) Explain op- amp as a subtractor with its output equation
- 21) Explain op amp as a integrator with its output equation
- 22) Explain op- amp as differentiator with its output equation
- 23) Explain op- amp as Comparator
- 24) Explain phase shift oscillator using op-amp
- 25) Explain working of half wave rectifier
- 26) Explain working of full wave rectifier
- 27) Explain working of bridge rectifier

- 28) Explain types of filter
- 29) Explain load and line regulation
- 30) Explain Zener as a voltage regulator
- 31) Explain 3 pin positive and negative voltage regulator
- 32) Explain SMPS

## **Que 2) Short answer questions**

- 1) Explain parameters of operational amplifier
- 2) Explain FET as voltage variable resistance
- 3) Explain class A amplifier
- 4) Explain class B amplifier
- 5) Explain class AB amplifier
- 6) What is need of multistage amplifier
- 7) Draw the diagram for Direct amplifier
- 8) Draw the diagram for the RC coupled amplifier
- 9) Explain pin diagram of IC 741
- 10) Explain ideal characteristics of op- amp
- 11) Explain practical characteristics of op-amp
- 12) Explain parameters of op-amp
- 13) Explain any one application of op-amp
- 14) Draw the diagram and waveforms of half wave rectifier
- 15) Draw the diagram and waveforms of full wave rectifier
- 16) Draw the diagram and waveforms of bridge rectifier
- 17) Explain any one type of filter
- 18) Explain line regulation
- 19) Explain load regulation
- 20) Draw the diagram of SMPS