

NETTUR TECHNICAL TRAINING FOUNDATION
DIPLOMA IN ELECTRICAL & ELECTRONICS – CP23
II SEMESTER REGULAR & SUPPLEMENTARY EXAMINATION-JUNE 2023

Subject: Analog Electronics-I
Subject Code: CP23203T

Total Time: 2 Hr.
Total Marks: 50

PART B

1.0 ANSWER ANY EIGHT OF THE FOLLOWING **2*8=16**

- 1.1 List the types of clippers
- 1.2 What is rectifier and name the types of rectifiers?
- 1.3 Draw the symbol of phototransistor & photodiode.
- 1.4 Describe the regions of operations of transistor
- 1.5 Name the different types of biasing circuits
- 1.6 Write the role of coupling capacitors in amplifier
- 1.7 Define CMRR
- 1.8 List the types of FET
- 1.9 Compare JFET and BJT
- 1.10 Define ripple factor

2.0 ANSWER ANY SIX OF THE FOLLOWING **3*6=18**

- 2.1 Draw the block diagram of regulated power supply
- 2.2 Explain the operation of Peak detector with neat sketch
- 2.3 Explain the working of LED with neat sketch
- 2.4 Describe the CC configuration of transistor
- 2.5 Draw & explain the working of voltage divider biasing circuit
- 2.6 Explain Common collector amplifier or Emitter follower with neat diagram
- 2.7 Explain basic differential amplifier with the help of neat diagram
- 2.8 Why BJT is called as current controlled device?

3.0 ANSWER ANY FOUR OF THE FOLLOWING **4*4=16**

- 3.1 Explain positive clamper with neat circuit diagram
- 3.2 Draw the circuit of full wave rectifier and explain its working.
- 3.3 Explain the working of NPN transistor with neat sketch
- 3.4 Draw the block diagram of op-amp & List down the various parameters of op-amp
- 3.5 Briefly explain the working of RC coupled CE amplifier.
- 3.6 Write a short note on Zener regulator

