NETTUR TECHNICAL TRAINING FOUNDATION

DIPLOMA IN ELECTRONICS ENGINEERING & EMBEDDED SYSTEM – CP04

III SEMESTER REGULAR & SUPPLEMENTARY EXAMINATION-JAN 2023

Subject: Analog Electronics-II **Total Time: 2 Hr.**
Subject Code: CP04301T **Total Marks: 50 Marks**

PART B

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

1.1 Name different types of transistor biasing circuits.
1.2 What is voltage gain?
1.3 Draw the symbol of op amp
1.4 What is filter and write its type?
1.5 Draw the block diagram of Oscillator
1.6 What do you mean by cross over distortion?
1.7 Draw the voltage follower circuit
1.8 Briefly explain the power amplifier with block diagram
1.9 Define Slew rate
1.10 Explain the concept of thermal resistance

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

2.1 Explain DC load line with the help of a diagram
2.2 What do you mean by zero crossing detector? Explain with neat sketch
2.3 Explain differentiator with neat circuit diagram.
2.4 Draw and explain PWM generation using op amp
2.5 Differentiate class A, class B and class AB power amplifier
2.6 List out the applications of filter
2.7 Explain the working of Hartley oscillator with neat diagram
2.8 Draw the circuit of subtractor by using double inversion method

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

3.1 Draw and explain about instrumentation amplifier by using three op amp
3.2 Draw and explain the working of RC phase shift oscillator circuit
3.3 Explain with circuit diagram of emitter follower as voltage regulator
3.4 Draw & explain the block diagram of Op amp
3.5 Design A non-inverting amplifier for Av=10& Vin=2V R1=1K & find Vout
3.6 Draw and explain the Schmitt trigger circuit