

B.Tech. (ECE) 4th Semester (G-Scheme)
Examination, July-2022
ANALOG CIRCUITS
Paper- PCC-ECE-206-G

Time allowed : 3 hours]

[Maximum marks : 75

Note : Question No. 1 is compulsory and attempt one question from each section.

1. (a) Briefly explain distortion in Amplifiers. 4
- (b) Discuss high frequency response of Emitter follower circuits. 4
- (c) Discuss Series Voltage regulator. 4
- (d) Explain Virtual Ground. 3

Section - I

2. Write short notes on: 15
 - (i) Cascode amplifier
 - (ii) Darlington Pair Amplifier
 - (iii) Direct coupled Amplifier.
3. What is feedback in Amplifier? Describe principle of feedback in amplifiers. Give advantages and disadvantages of -ve feedback. 15

Section- II

4. Explain the following: 15
- (i) Crystal Oscillator
 - (ii) Hartley Oscillator
5. Classify Power amplifiers according to their operation. 15

Section- III

6. Discuss the following: 15
- (i) IC Voltage Regulator
 - (ii) SMPS
7. Discuss various steps used for the process of IC-fabrication. 15

Section- IV

8. Explain OP-Amp as Inverting and Non-Inverting amplifiers. 15
9. Explain OP-Amp as square wave generator. 15