OLE-24227

B. Tech. 5th Sem. (EEE)
Examination – April, 2021

ANALOG ELECTRONIC CIRCUITS

Paper : EE-305-F

Time : Three hours]   *[Maximum Marks : 100*

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note :   Students have to attempt first common question. which is *compulsory* and *one* question from each of the four Units.

1. (a) Write about the feedback concept and the transfer gain with feedback.

   (b) Discuss general form of oscillator circuit.

   (c) What is the difference between ideal and practical oscillator ?

   (d) Discuss sample and hold circuits. $5 \times 4 = 20$

UNIT – I

2. (a) Explain RC coupled amplifier. $10 \times 2 = 20$

    (b) Discuss multistage CE amplifier.

3. (a) Write about general characteristics of negative feedback amplifiers. $10 \times 2 = 20$

    (b) Discuss current series feedback.

UNIT – II

4. Write a note on : $10 \times 2 = 20$

    (a) Sinusoidal oscillators

    (b) R-C phase shift oscillators

5. Explain : $10 \times 2 = 20$

    (a) Wien-bridge oscillator

    (b) Crystal oscillator

UNIT – III

6. Write about efficiency & distortion in class B and class C power amplifier. 20

7. (a) Write a note on inverting and non inverting amplifier. 10

    (b) Discuss transfer characteristics of a differential amplifier. 10

UNIT – IV

8. Discuss various linear applications of operational amplifiers including scale changer, phase shifter, adder, integrator and differentiator.   20

9. (a) Discuss logarithmic multiplier.   10

(b) What is a Miller & Bootstrap sweep generator ? 10

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