2018

M.Sc. 1st Seme. Examination

ELECTRONICS

PAPER—ELC-106

(Practical)

Full Marks : 50

Time : 3 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Analog Circuit and Design Laboratory

Answer any *one* question selecting it by a lucky draw.

1. 'Use OPAMP to design a differentiation. Take a function & study its performance. Draw the fransfor characteristic curve.

2. Design fixed bias transistoriesed anylities & mesure V_{BE}, V_{CE}, V_{CB}, I_C, I_E at Q point

3. Use OPAMP to design an integrator. Take a function & study its performance in the circuit. Draw the transfer characteristic curve.

4. Design & study the performance of 2nd order high pass filter with following characteristics :

   Cutt-off frequency :

   Gain :

   (To be supplied during examination).

5. Design a regulated power supply using OPAMP comparator :

   Output voltage :

   Current :

   (To be supplied during examination).

6. Design an active low pass filter (1st order) with following specification

   Cut-off frequency :

   Gain :

   Study the performance of the filter.

7. Design an active high pass filter (1st order) with the following specifications :

   Cut-off frequency :

   Gain :

   Study the performance of the circuit.

8. Design a regulated power supply with following specifications :

   Output voltage :

   Current :

   (To be supplied during examination)

9. Design and study the performance of 2nd order low pass filter with following specification :

   Cut-off frequency :

   Gain :

   (To be supplied during examination)

Distribution of marks

Experiment	35
Viva Voce	10
Laboratory Note Book	5
Total	50