



C16-AEI-302

6214

BOARD DIPLOMA EXAMINATION, (C-14)

OCT/NOV—2018

DAEI—THIRD SEMESTER EXAMINATION

ELECTRONIC CIRCUITS

Time : 3 hours]

[Total Marks : 80

PART—A

3×10=30

Instructions : (1) Answer **all** questions.
(2) Each question carries **three** marks.
(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. Classify FETs.
2. List the applications of UJT.
3. Define the term stabilization.
4. Define DC load line.
5. State the need of multistage amplifiers.
6. Classify negative feedback amplifiers.
7. List different types of heat sink.
8. Classify oscillator circuits.

* 9. Give any three remedies for instability in oscillator.

10. Classify multivibrators.

PART—B

10×5=50

Instructions : (1) Answer *any five* questions.

(2) Each question carries **ten** marks.

(3) The answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. Explain the construction and working of SCR with its characteristics.

12. Explain potential divider method of biasing.

13. Explain the principle of operation of two-stage transformer-coupled amplifier with circuit diagram and draw its frequency response.

14. Explain the emitter follower circuit and mention its advantages.

15. (a) Distinguish between negative feedback and positive feedback.

(b) Explain bootstrap sweep circuit.

16. Draw and explain the working of Hartley oscillator circuit.

* 17. Draw and explain the working of Wein bridge oscillator.

18. Draw and explain the working of transistorised astable multivibrator with waveforms.
