S.No. 5329 16 SCCEL 2

(For candidates admitted from 2016-2017 onwards)

B.Sc. DEGREE EXAMINATION, APRIL 2022.

Part III — Electronics — Major

ELECTRIC AND ELECTRONIC CIRCUITS

Time : Three hours Maximum : 75 marks

PART A — (10 × 2 = 20)

Answer ALL questions.

1. Define RMS value.

2. Define Phase angle.

3. State Nortons theorem.

4. State maximum power transfer theorem.

5. What is 'λ' parameter?

6. define amplifier.

7. Define q point.

8. What is self bias?

9. Define oscillation.

10. Draw a crystal oscillation.

PART B — (5 × 5 = 25)

Answer ALL questions. Choosing either (a) or (b).

11. (a) Write short notes on time perior and wave length.

Or

(b) Explain Kirchoff's law.

12. (a) Explain maximum power transfer Theorem.

Or

(b) State and Explain current divider.

13. (a) Explain the Hybrid formulas of CE amplifier.

Or

(b) State the amplifier Expression.

14. (a) Explain base bias with emitter feed back.

Or

(b) Explain the hybrid Equivalent circuit of a transistor.

15. (a) Explain voltage divider bias.

Or

(b) Explain source bias.

PART C — (3 × 10 = 30)

Answer any THREE questions.

16. Explain the analysis of series circuit, parallel circuit, series parallel circuit.

17. Explain millmans theorem.

18. Explain H-parameter in detail.

19. Explain CE amplifier parameter.

20. Explain oscillators and its types in detail.

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