-



(10×2=20)

Part B

Answer any **six** questions.

Each question carries **5** marks.



#### QP CODE: 24019916

Reg No : ...... Name : .....

# B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, MAY 2024

### Second Semester

## Core Course - EL2CRT03 - ELECTRONIC CIRCUITS

(Common for B.Sc Electronics and Computer Maintenance Model III, B.Sc Electronics Model III)

#### 2017 ADMISSION ONWARDS

C75E990D

Time: 3 Hours

Max. Marks : 80

Part A

Answer any ten questions.

#### Each question carries **2** marks.

- 1. What is the value of percentage voltage regulation of voltage supply providing 100V unloaded and 95V full loaded?
- 2. Define stability.
- 3. What is an Emitter Follower?
- 4. What are the advantages of negative feed back?
- 5. Name the four basic ways of connecting the feedback signal.
- 6. Name the different feedback amplifier circuits.
- 7. Oscillator use which type of feedback ?
- 8. Define Piezo Electric Effect.
- 9. Draw the circuit Diagram of a Complementary Symmetry Push Pull amplifier circuit.
- 10. What is a biased clipper?
- 11. Define clamping.
- 12. Define an Astable multivibrator.





- 13. Compare the three rectifiers.
- 14. What are the advantages of a bleeder resistor used in filter circuits?
- 15. Derive equations for hybrid parameters in transistor circuits.
- 16. Compare BJT and FET circuits.
- 17. Explain the basic principle of feedback amplifiers.
- 18. With a neat sketch ,explain a Current series feed back amplifier.
- 19. A transistor RC phase shift oscillator has an output frequency of 1KHz. If the value of R is  $1K\Omega$  find the value of C.
- 20. Explain how to overcome crossover distortions in push pull amplifiers?
- 21. Draw the circuit of an RC integrator and explain its working.

(6×5=30)

#### Part C

#### Answer any **two** questions. Each question carries **15** marks.

- 22. Explain load and line regulations with necessary equations.
- 23. Explain an RC coupled amplifier with a neat sketch. Also explain frequency response .Give its advantages and disadvantages.
- 24. Draw the circuit diagram of a class C power amplifier. Explain its working.
- 25. Explain the working of a bistable multivibrator with necessary diagrams.

(2×15=30)