C 4368 (Pages : 2) Name..................................

Reg. No..................................

SECOND SEMESTER (CBCSS—UG) DEGREE EXAMINATION, APRIL 2021

Electronics

ELE 2C 02—ELECTRONIC CIRCUITS

Time : Two Hours Maximum : 60 Marks

Section A

*Answer at least **eight** questions.*
Each question carries 3 marks.
All questions can be attended.
Overall Ceiling 24.

1. Why bridge rectifier is preferred to a centre-tapped two diode rectifier ?

2. What is the basic purpose of a filter circuit ?

3. Define voltage regulation.

4. What are the factors affecting the stability of Q-point ?

5. Define current gain of a common emitter amplifier.

6. Draw the frequency response of RC coupled amplifier.

7. Explain two basic types of feedback in amplifiers.

8. Why power amplifiers are also known as large signal amplifiers ?

9. Define the term power dissipation capability as applied to power amplifiers.

10. What do you meant by an electronic oscillator ?

11. State two Barkhausen conditions required for sustained oscillations.

12. What is the basic difference between astable and monostable multivibrator ?

$(8 \times 3 = 24 \text{ marks})$

Section B

*Answer at least **five** questions.*
Each question carries 5 marks.
All questions can be attended.
Overall Ceiling 25.

13. Define ripple factor. Derive the equation for ripple factor of a full wave rectifier.

14. With neat diagram explain the working of SMPS.

Turn over

15. Mention the importance of a biasing circuit and explain any one type of biasing.

16. List the advantages and disadvantages of employing negative feedback in amplifiers.

17. Explain the classification of power amplifiers in detail.

18. Briefly explain the basic principle of RC oscillators.

19. What is a multivibrator ? Explain the principle on which it works.

$(5 \times 5 = 25 \text{ marks})$

Section C

Answer any **one** *question.*
The question carries 11 marks.

20. With neat diagram explain the working of RC coupled amplifier. List its advantages and disadvantages.

21. With the help of waveforms explain the working of monostable multivibrator.

$(1 \times 11 = 11 \text{ marks})$