No. of Printed Pages : **2**

Sl. No.

21BSC2C2ELL

B.Sc. II Semester (NEP) Degree Examination, September/October - 2022

ELECTRONICS

Electronic Circuits

Time : 3 Hours Maximum Marks : 60

Note : *Answer* ***all*** *Sections.*

SECTION - A

1. Answer the following questions. **10x1=10**

(a) What is power supply ?
(b) What is filter ?
(c) Define operating point.
(d) Define Stability factor.
(e) What is Amplification ?
(f) What is Cascaded Stage ?
(g) What is decibel ?
(h) What is ripple factor ?
(i) What is regenerative feedback ?
(j) What is monolithic IC regulator ?

SECTION - B

Answer **any four :** **4x5=20**

2. With neat circuit diagram explain the zener diode voltage regulator.

3. Explain Base resistor method transistor biasing.

4. Classification of amplifiers on the basis of parameters.

5. What is Darlington pair transistor ? Explain it.

6. With neat block diagram explain transistor audio power amplifier.

7. Define positive and negative feedback amplifier and merits of it.

P.T.O.

SECTION - C

Answer **any three.** **3x10=30**

8. Explain the working of centre tapped Full Wave rectifier. Obtain the expressions for the efficiency.

9. Explain the working of emitter-feedback biasing network and obtain different expressions.

10. Explain the working of transformer coupled amplifier and discuss the frequency response.

11. Explain the working of Class-B push-pull amplifier obtain the expression for the power efficiency.

12. Define the expression for the voltage gain of the negative feedback amplifier. Mention its merits.

13. Write a short note on :
(a) 78 XX Series regulators
(b) Hybrid parameters

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