



C09-EC-402

**3468**

**BOARD DIPLOMA EXAMINATION, (C-09)  
SEPTEMBER/OCTOBER - 2020  
DECE—FOURTH SEMESTER EXAMINATION  
ELECTRONIC CIRCUITS—II**

*Time : 3 hours ]*

*[ Total Marks : 80*

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**PART—A**

3×10=30

**Instructions :** (1) Answer **all** questions.

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

1. Compare negative and positive feedback.
2. What is class AB amplifier?
3. Define efficiency of a power amplifier.
4. Classify oscillator circuits.
5. What is Barkhausen criterion?
6. Differentiate between voltage and current time base generation.
7. Draw the circuit of negative biased clipper.

- \* 8. What is the principle of LDR?
9. What is the principle of optocoupler?
10. List the applications of PLL.

**PART—B**

10×5=50

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

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

11. Draw the circuit of class B push-pull amplifier and explain its working.
12. Describe the working of class C tuned power amplifier with wave forms.
13. Explain the working of RC-phase shift oscillator with circuit diagram.
14. Draw and explain working of Colpitts oscillator. What is the expression for frequency of oscillations of Colpitts oscillator?
15. Explain the working of transistor astable multivibrator with waveforms.
16. (a) Explain simple current sweep circuit with waveform.  
(b) Draw positive clamper circuit and explain its working.

5+5=10

- \* 17. Draw the block diagram of 555 IC and explain.
18. Explain frequency multiplier using PLL.

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