



C09-EC-402

3468

BOARD DIPLOMA EXAMINATION, (C-09)

MARCH / APRIL - 2019

DECE - IV SEMESTER EXAMINATION

ELECTRONIC CIRCUITS-II

Time : 3 Hours]

[Total Marks : 80

PART - A

3×10=30

- Instructions :**
- (1) Answer **ALL** questions.
 - (2) Each question carries **THREE** marks.
 - (3) Answer should be brief and straight to the point.

- 1 What is a Class AB Power amplifier ?
- 2 List the merits of complimentary symmetry push pull power amplifier.
- 3 Draw the circuit of double tuned amplifier.
- 4 What are the requirements of an oscillator ?
- 5 List the applications of Crystal oscillators.
- 6 State the principle of Clamper circuit.
- 7 Mention any three applications of Multivibrators.
- 8 Mention any three applications of LED.
- 9 What is the working principle of Photo conductive cell ?
- 10 Draw the circuit of Astable multivibrator using OpAmp.

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[Contd...

PART - B**10×5=50**

Instructions :

- (1) Answer any **FIVE** questions.
- (2) Each question carries **TEN** marks.
- (3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

- 11 (a) Mention the advantages of negative feedback Amplifier.
(b) Draw and explain the block diagram of negative feedback amplifier.
- 12 Draw and explain the operation of Class A amplifier with transformer load at collector and derive an expression for its efficiency.
- 13 Draw and explain the working of Tuned Collector Oscillator.
- 14 (a) List the demerits of RC oscillators.
(b) Explain the working of Transistor Crystal oscillator with a neat circuit diagram.
- 15 (a) Define sweep voltage and state its purpose.
(b) Distinguish between voltage and current time base generators and list their applications.
- 16 Draw the Miller sweep circuit and explain its working.
- 17 (a) Explain the operation of LDR with its characteristics.
(b) Explain the construction of LED.
- 18 (a) Draw the block diagram of PLL.
(b) Explain FM Demodulator using PLL.