

3244
BOARD DIPLOMA EXAMINATION, (C-09)
MARCH/APRIL - 2019
DIPLOMA IN ELECTRICAL & ELECTRONICS ENGINEERING
ELECTRONICS ENGG
THIRD SEMESTER EXAMINATION

Time: 3 Hours**Total Marks: 80**

PART - A (10 x 3 = 30 Marks)

Note 1: Answer all questions and each question carries 3 marks

2: Answers should be brief and straight to the point and shall not exceed 5 simple sentences

1. Draw the circuit of a Zener diode voltage regulator.
2. Define rectifier efficiency and ripple factor.
3. Write the applications of UJT.
4. Write the applications of photo transistor.
5. Write the applications of LED.
6. Define stability factor.
7. Draw a circuit diagram of voltage shunt feedback.
8. Define efficiency of a power amplifier.
9. Draw the circuit of Tuned collector Oscillator.
10. What is meant by sensitivity in a CRO?

PART - B (5 x 10 = 50 Marks)

Note 1: Answer any five questions and each question carries 10 marks

2: The answers should be comprehensive and the criteria for valuation is the content but not the length of the answer

11. a) Explain the working of a HW rectifier with a C filter. 7m
 b) Draw the circuit FW rectifier with center tapped transformer with LC filter. 3m
12. a) Explain the construction and working of solar cell. 7m
 * b) Write the applications of solar cell. 3m
13. a) Explain DC load line in transistor biasing.
 b) Explain how transistor works as an amplifier.
14. Explain the use of OP-AMP as Differentiator and Scale changer.
15. a) Draw and explain the frequency response of RC coupled amplifier. 7m
 b) Write the applications of RC coupled amplifier. 3m
16. Draw the practical CE amplifier and explain the function of each component.
17. Draw and explain the working of Crystal Oscillator.
18. Draw and explain the internal block diagram of 555 timer.

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