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BOARD DIPLOMA EXAMINATION
MARCH/APRIL - 2019
DIPLOMA IN ELECTRICAL AND ELECTRONICS ENGINEERING
ELECTRONICS ENGINEERING - II
FOURTH SEMESTER EXAMINATION

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

PART - A   (3m x 10 = 30m)

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. **State the conditions required for sustained oscillations**.

2. Draw the circuit diagram of Hartley oscillators

3. List the specifications of 741 IC

4. List design rules for implementing ON-Timer using 555 IC

5. Define Band width of AM wave

6. Define demodulation

7. Draw R-2R ladder network of D/A converter

8. State the need for D/A converter

9. **List the advantages and disadvantages of LVDT**.

10. State the need of Transducers in Measurement systems

PART - B   (10m x 5 = 50m)

Note 1:Answer any five questions and each 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) **Draw the circuit diagrams of RC phase shift and colpitts oscillators**.   **6M**

     (b) **State the need for Square wave Oscillator**   **4M**

12. (a) **Explain the need for AF Oscillator**   **3M**

     (b) **Explain UJT relaxation Oscillator**   **7M**

13. **Draw the Pin diagram of 555 IC and explain the function of each pin**.

14. (a). **Explain the Operational Amplifier as differentiator**   **7M**

     (b). **List the applications of OP Amps**   **3M**

15. (a) **Explain the generation of side bands in AM**   **6M**

     (b) **Compare AM and FM**   **4M**

16. Explain D/A conversion using R-2R ladder network

17. (a). Write about Semiconductor Sensors   6M

    (b). List the applications of Sensors   4M

18. (a). Explain the factors influencing the choice of Transducers   6M

    (b). List the applications of Transducers   4M

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