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Reg. N

Name

Combined First and Second Semester B.Tech Degree Examination, May 2008
BASIC ELECTRONICS ENGINEERING (CMNPHETARUFB)
(2003 Scheme)

Time : 3 Hours

Max. Marks : 100

PART – A

Answer **all** questions. **Each** question carries **4** marks.

1. What are the important specifications of resistors ?

2. Write short notes on variable capacitors.

3. What is intrinsic and extrinsic semiconductors ?

4. What is the basic principle of an oscillator ?

5. What are the advantages of ICs ?

6. What are transducers ? What are the classifications of transducers.

7. Write down the final equation of Amplitude modulated signal and explain its each term.

8. What is the importance of biasing in electronics circuits ?

9. Explain what is a transponder.

10. List few applications of optical fiber communication.   (10×4=40 Marks)

PART – B

Answer **any two** questions from each Module. **Each** question carries **10** marks.

MODULE – I

11. Explain the constructional details of ceramic and paper capacitors.

12. Draw the VI characteristic of PN junction diode and zener diode. Also differentiate between the two.

13. Compare the characteristics of the three BJT configurations.

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MODULE – II

14. Draw the circuit diagram of a full wave rectifier with a capacitor filter. Explain its working.

15. a) Explain the working of Hartley Oscillator.

    b) Draw the frequency response of an RC coupled amplifier and explain.

16. a) Draw the block diagram of a digital computer and explain each block.

    b) Explain the need of an operating system.

MODULE – III

17. Draw the block diagram of an AM superheterodyne receiver and explain its operation.

18. Draw the block diagram of a TV transmitter receiver system and explain its operation.

19. Draw the block diagram of a Microwave System and explain its operation.

(6×10=60 Marks)

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