Reg. No. : ....

Name : ....

Combined First and Second Semester B.Tech. Degree Examination, April 2015
(2008 Scheme)
08-109 : BASIC COMMUNICATION AND INFORMATION ENGINEERING
(CMNPHETARUFBS)

Time: 3 Hours
Max. Marks : 100

PART – A

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

1. Why junction transistors are called bipolar devices ?

2. What is meant by α of a transistor ? Derive the relation between α and β of a transistor.

3. Why NAND gate is known as a Universal Gate ?

4. Draw the block diagram of a digital multimeter.

5. What are the advantages of FM over AM ?

6. Compare LCD and Plasma TV.

7. What is meant by a Geo Stationary Satellite ?

8. What is the function of Cache Memory ? What is the difference between L_1 and L_2 Cache ?

9. Compare ASK, PSK and FSK.

10. Write a note on Scripting Languages.

PART – B

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

Module – I

11. a) Draw the output characteristics of CE Transistor. Indicate different regions of operations, on the characteristics.

    b) Why the current gain in CE configuration is always greater than 1 ?

12. a) Draw the block diagram of OP-Amp.

    b) Explain the working of a comparator using OP-Amps.

13. a) What is meant by cross over distortion in power amplifier ? How it is eliminated.

    b) Compare A, B, AB and C power amplifiers.

Module – II

14. a) Draw the block diagram and explain function generator.

    b) Explain frequency modulation. Draw block diagram of FM Transmitter.

15. a) Write a note on TV standards.

    b) Explain closed circuit TV.

    c) Discuss the Radar equation.

16. a) Explain GPS with the help of Schematics.

    b) Describe Satellite transponder.

Module – III

17. a) Draw the functional diagram of a computer and explain various parts.

    b) Compare analog and digital data transmission.

18. a) Why cellular communication is called so ?

    b) Explain the principle of GPRS.

19. a) Write a note on IP Addressing.

    b) Compare HTML and XML.

    c) What are the advantages of computer networking ?