Combined First and Second Semester B.Tech. Degree Examination, January 2019
(2008 Scheme)
08-109 : BASIC COMMUNICATION AND INFORMATION ENGINEERING
(CMNPHERARUFBS)

Time : 3 Hours

Max. Marks : 100

PART – A

Answer all questions. Each question carries 4 marks.

1. Why BJT’s are called current operated devices?

2. Discuss the basic structure of N-channel FET. Draw its symbol.

3. Write down the characteristics of ideal OP-Amps.

4. Distinguish between combinational and sequential circuits.

5. Explain D Arsonoval Movement.

6. Discuss the interlaced scanning.

7. Why the uplinking frequency is more than the down linking frequency in satellite communication?

8. Describe the concept of virtual memory.

9. Write a note on CDMA.

10. What are the features of scripting languages?

PART – B

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

Module – I

11. a) Draw the circuit set up for the input and output characteristics of a CB transistor.

   b) Explain the input and output characteristics.

P.T.O.
12. a) What is meant by an oscillator?
   
   b) Draw the circuit of RC phase shift oscillator and explain the working.

13. With the help of neat figures explain the various steps involved in IC fabrication.

**Module – II**

14. Draw and explain the block diagram of a CRO. How AC waveforms are displayed on CRO screen? Write a note on Lissajous pattern.

15. a) Draw the block diagram and explain AM transmitter.

   b) What is the advantage of super heterodyne receiver?

16. Explain the Color TV receiver.

**Module – III**

17. Draw the block diagram and explain working of microprocessor 8085.

18. a) Explain global system for mobile communication.

   b) Write short notes on:
      
      i) Bridges
      
      ii) Router.

19. a) Distinguish between circuit switching and packet switching.

   b) Explain TCP/IP.

combined s1 & s2