



Reg. No. :

Name :

**Combined First and Second Semester B.Tech. Degree Examination,
April 2013
(2008 Scheme)**

08-109 : BASIC COMMUNICATION AND INFORMATION ENGINEERING

Time : 3 Hours

Max. Marks : 100



PART – A

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

1. Compare CE, CB and CC configurations with reference to voltage and current gain, input and output resistances and applications.
2. Explain how the disadvantage of class B amplifier is overcome by class AB amplifier ?
3. Explain the basic principle of MESFET.
4. Discuss the advantages of monolithic IC's over discrete components.
5. List the advantages and disadvantages of optical fibre communication.
6. List the microwave frequency bands.
7. Discuss the TCP/IP protocol.
8. Explain the concept of virtual memory.
9. Explain the principle of CDMA.
10. Explain the concept of GPRS technology.



PART – B

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

MODULE – I

11. Find the current gain and voltage gain, input and output resistance of common base configuration.
12. Explain the working of class B amplifier and find out its efficiency.
13. Explain the working of CMOS logic.

MODULE – II

14. Draw the block diagram of a CRO and explain the functions of each block. Also list the major controls and applications of CRO.
15. Explain the operation of an AM super heterodyne receiver with functions of each block.
16. Explain the working of a PAL colour television receiver with block diagram.

MODULE – III

17. List the features of 8085 microprocessor. Draw the functional block diagram of 8085 and explain the functions of each block.
18. Briefly explain the basic concepts of error detection and parity checking.
19. Explain different switching technologies.