Reg. No. : ....

Name : ....

Sixth Semester B.Tech. Degree Examination, June 2015
(2008 Scheme)
08.606 DATA COMMUNICATION (R)

Time : 3 Hours

Max. Marks : 100

PART – A

Answer **all** questions :

1. Define data communication and state their characteristics.

2. List out the advantages of digital communication over analog communication.

3. List out the criteria used in evaluating transmission medium.

4. Explain how guided media differs from unguided transmission media.

5. Differentiate data signaling rate and modulation rate.

6. Compare and contrast TDM and FDM.

7. Define sampling and quantization.

8. Write a brief note on Hamming Codes.

9. What are the four generic architectural components of a public telecommunications network ?

10. Define convolution code and state its advantages. **(10×4=40 Marks)**

PART – B
Module – I

11. a) Explain the measures that can be taken to compensate for transmission impairments such as attenuation and noise. **(5+5)**

    b) Give the physical description of Satellite Microwave and state its applications. **10**

OR

12. a) With a help of block diagram explain the key elements of a communication model. **15**

    b) Write short note on Shannons theorem. **5**

P.T.O.

Module – II

13. Explain in detail the Pulse code modulation technique used in codes. **20**

OR

14. Describe NRZ coding technique and discuss how biphase coding techniques overcomes the limitations of NRZ codes. **20**

Module – III

15. a) Explain CRC error detection code with an example. **10**

    b) Differentiate packet switching and circuit switching. **10**

OR

16. Write short notes on the following :

    i) WiFi **10**

    ii) GPRS. **10**

(3×20=60 Marks)

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