Total No. of Questions : 8]   *[Total No. of Printed Pages : 2*

Roll No ....

IT-5005(3)-CBGS
B.E. V Semester
Examination, December 2020
Choice Based Grading System (CBGS)
Data Communication

Time : Three Hours

Maximum Marks : 70

Note: i)   Attempt any five questions.

      ii)   All questions carry equal marks.

1. a)   Explain what do you understand by Baseband and Broadband Transmission.

    b)   Explain various types of Transmission modes?

2. a)   Draw and explain simple, half duplex and full duplex data transmission.

    b)   Explain following codes with suitable examples

      i)   Unipolar and polar line codes

      ii)   Non return to zero codes

      iii)   return to zero codes

3. a)   Differentiate synchronous and asynchronous transmissions.

    b)   Write a short note on MODEM.

4.   List out the five line coding techniques used in data transmission.

5. a)   What are various techniques of serial transmission? Explain their differences.

    b)   Explain Pulse code modulation with suitable example.

IT-5005(3)-CBGS   PTO

6. a) Define Digital Subscriber Line. What is the difference between asymmetric and symmetric DSL. Explain ADSL in detail.

   b) What is synchronous digital hierarchy? Explain give Frame format for STM-1 frame.

7. a) Compare and explain circuit switching, packet switching and message switching.

   b) Give the conceptual view of ISDN on following points:
      i) ISDN interface
      ii) Reference points
      iii) ISDN services

8. Write short notes :
   i) Microwave Transmission
   ii) RJ - 45 connection
   iii) Radio waves
   iv) Band

******

IT-5005(3)-CBGS