24042

B. Tech. 3rd Semester (CSE) F. Scheme
Examination, December–2014
DIGITAL ANALOG COMMUNICATION
Paper–EE – 217-F

Time allowed : 3 hours] *[Maximum marks : 100*

Note : ***Question no. 1 is compulsory*** *and attempt* ***four*** *more questions selecting* ***one*** *question from each section. All questions carry equal marks.*

1. Write short notes on the following :

(a) What are the sufficient conditions for existence of Fourier series ?

(b) Delay distortion.

(c) Synchronous transmission.

(d) Huffiman encoding.

(e) ISDN

Section–A

2. Explain communication system. Also discuss different components of communication system with diagram.

3. What are square waves give suitable example and hence find its Fourier series expansion ?

Section–B

4. Explain data encoding with special reference to Manchester encoding and differential Manchester encoding with diagram.

5. Explain types of communication media also discuss co-axial and fiber optics in detail.

Section–C

6. (a) Discuss unrestricted simplex protocol and stop and wait protocol.
   (b) Explain datagram and virtual circuit with diagram.

7. Explain the telephone system PSTN and asynchronous digital subscriber line.

Section–D

8. (a) Explain what are the transmission errors. Write down various methods to control such types of errors.
   (b) Explain different data encryption methods.

9. Write short notes on the following :
   (a) Run length encoding
   (b) Data compression
   (c) Frame check sequences
   (d) Hamming codes.