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B.Tech. 4th Semester (EEE) Examination, May-2016

PRINCIPLE OF COMMUNICATION SYSTEMS

Paper-EE-220-F

Time allowed : 3 hours]

[Maximum marks : 100

Note : Attempt five questions. Question No. 1 is compulsory and attempt one question from each of four section.

1. (a) Classify the systems in brief. 5
- (b) Explain vestigial side band. 5
- (c) Compare DPCM and DM. 5
- (d) Explain Noise figure. 5

Section-A

2. Explain at least five Fourier properties of signals with proof. 20
3. Obtain the Fourier transform of impulse function and exponentially decaying function. 20

Section-B

4. Explain filter method and phasing method for SSB generation. 20
5. (a) Explain relationship between PM and FM. 10
- (b) Explain NBFM and WBFM in detail. 10

Section-C

6. (a) Explain sampling theorem. 10
- (b) Differentiate between PAM and PCM. 10

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7. (a) Explain Delta modulation technique. 10
(b) Explain differential pulse code modulation technique. 10

Section-D

8. Explain the following :
(i) ASK
(ii) FSK
(iii) BPSK. 7,7,6
9. Explain the following :
(i) QPSK
(ii) M-array PSK
(iii) Signal to Noise ratio. 7,7,6

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