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

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# MEDC-302(A)
## M.E./M.Tech., III Semester
Examination, December 2016
### Advanced Digital Communication (Elective-I)

*Time : Three Hours*

*Maximum Marks : 70*

*Note:* i) Attempt any five questions.
ii) All questions carry equal marks.

1. a) Explain the principle working of BPSK system.

   b) Discuss the working of optimum receiver for PCM.

2. a) Explain the working of QPSK system.

   b) Discuss briefly about the link budget analysis.

3. a) Discuss about estimation of carrier phase and symbol timings.

   b) Discuss about probability of error in detection of PAM with zero ISI.

4. a) Discuss about modulation codes for spectrum spacing.

   b) Discuss the working of optimum receiver for channels with ISI and AWGN.

5. a) Discuss about linear equalization and decision feedback equalization.

   b) Explain adaptive decision feedback equalizer.

6. a) Explain the principle working of direct sequence spread spectrum technique.

   b) Explain the principle working of frequency hopped spread spectrum techniques.

7. a) Discuss the characterization of fading multipath channels.

   b) Discuss about coded waveform for padding channels and their application.

8. Write short notes on any two of the following :

   a) OFDM

   b) Non selective slowly padding channels

   c) BFSK system

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