St. Joseph's College (Autonomous), Bangalore I Semester IA Examination, Aug 2016 M.Sc (Computer Science) CS 7315 : Data Communication And Computer Networks

Time 1.5Hrs

Max Marks 35

PART- A

Answer any FIVE questions

 $7 \times 5 = 35$

- 1. Explain the functions of OSI Model.
- 2. a) What is data rate and signal rate in digital transmission.
 - b) Write about the Channel capacity.
- Explain about NRZ of polar scheme in line coding.
- 4. Explain the Quantization process in PCM.
- 5. Explain in detail about Delta modulation.
- 6. Explain in detail about the guided media.
- 7. a) Consider a noiseless channel with a bandwidth of 3000 Hz transmitting a signal with two signal I levels. Calculate the maximum bit rate.
 - b) An Analog signal carries 4 bits per signal element. If 1000 signal elements are sent per second find the bit rate.