

Code No: A5508, A6503

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M.TECH I SEMESTER EXAMINATIONS, APRIL/MAY-2012

DIGITAL DATA COMMUNICATIONS

(COMMON TO EMBEDDED SYSTEMS, WIRELESS & MOBILE COMMUNICATIONS)

Time: 3hours

Max.Marks:60

Answer any five questions

All questions carry equal marks

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- 1.a) Explain the generation of 16-QAM and draw its constellation diagram.
- b) Derive an expression for probability error of QPSK system.

- 2.a) What are the various network topologies? Discuss.
- b) What are the various transmission modes? Explain their applications.

- 3.a) Why do you need serial and parallel interfaces. Explain any of the serial interfaces.
- b) What is a protocol with respect to data communication? Explain.

- 4.a) Discuss the asynchronous and synchronous protocols.
- b) What are the various services provided by ISDN? Discuss.

- 5.a) What is Ethernet, give its frame format and explain.
- b) Compare Token ring and Giga bit Ethernet.

- 6.a) Discuss the importance of frame synchronization in data communication.
- b) What is statistical time division multiplexing? Explain.

- 7.a) Explain the importance of MAC Layer protocol in local area network?
- b) Discuss the MAC Layer protocol of IEEE 802.11 wireless local area network.

8. Write short notes on
 - a) Real time interactive video.
 - b) VOIP
 - c) Line encoding.
