

Code No: A6505, A0603, A5510

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M.Tech I-Semester Examinations, October/November-2011

DIGITAL DATA COMMUNICATIONS

**(Common to WIRELESS AND MOBILE COMMUNICATIONS, DIGITAL SYSTEMS AND
COMPUTER ELECTRONICS, EMBEDDED SYSTEMS)**

Time: 3hours

Max. Marks: 60

Answer any five questions

All questions carry equal marks

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- 1.a) Draw a scheme for generation of BFSK signal and explain its operation.
- b) Give the comparison for FSK and PSK system. [12]

- 2.a) What are the two basic kinds of data communications circuit configurations? Explain.
- b) Describe the basic functions of LCU in a data communications circuit. [12]

- 3.a) Describe the physical, electrical and functional characteristics of RS-232 interface.
- b) Explain the following:
 - i) Modern synchronization
 - ii) Modern equalizers. [12]

- 4.a) Describe the difference between asynchronous and synchronous protocols.
- b) Briefly describe the architecture of ISDN. [12]

5. Identify and explain the various sections of an Ethernet II frame layout. [12]

- 6.a) Describe Bell system T₁ carrier system.
- b) Describe the basic concepts of WDM. [12]

- 7.a) Describe addressing mechanism of IEEE 802.11.
- b) Discuss the specific functions of L2CAP (Logical link control and Adaptation protocol). [12]

- 8.a) Explain how streamy live audio/video differs from streaming stored audio/video.
- b) Distinguish between spectral compression and temporal compression. [12]

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