

EIGHTH SEMESTER B.TECH. (ENGINEERING) [09 SCH) EXAMINATION, APRIL 2016

AI 09 802-DATA AND COMPUTER COMMUNICATION

Time: Three Hours

Maximum: 70 Marks

Part A

Answer all the questions.

Each question carries 2 marks.

- 1. What is networking?
- 2. What do you mean by synchronous transmission?
- 3. What is XDSL?
- 4. What is the use of brouter?
- 5. Bring out the need for a protocol.

 $(5 \times 2 = 10 \text{ marks})$

Part B

Answer any four questions.

Each question carries 5 marks.

- 6. Write the advantages of multiservice networks.
- 7. Write about cyclic redundancy error detection method.
- 8. Differentiate between bit and character oriented synchronization.
- 9. Write short notes on high speed LANs.
- 10. Explain the working principle of FDDI.
- 11. Draw the working architecture of Internet.

 $(4 \times 5 = 20 \text{ marks})$

Part C

Answer all questions.

12. (a) Discuss in detail about PSDN networks highlighting its advantages.

Or

(b) Explain in detail about various signal encoding techniques.

Turn over

13. (a) Discuss in detail about error correction circuits in digital data communication.

Or

- (b) Explain in detail about spread spectrum and Code Division Multiple Access.
- 14. (a) Explain in detail about LAN topologies and transmission medium.

Or

- (b) Discuss in detail about routine and congestion control in switched data networks.
- 15. (a) Explain in detail about application support protocol and network security.

Or

(b) Explain in detail about transport and inter network protocols.

 $(4 \times 10 = 40 \text{ marks})$