

D 23467

(Pages : 2)

Name

Reg. No.



FIFTH SEMESTER B.TECH. (ENGINEERING) DEGREE
EXAMINATION, DECEMBER 2011

IT 04 502—DIGITAL DATA COMMUNICATION

(2004 admissions)

Time : Three Hours

Maximum : 100 Marks

Answer all questions.

Part A

- I. (a) List out the advantages of distributed processing.
(b) Contrast an analog with a Digital signal.
(c) Explain bit synchronization.
(d) Explain how checksum is used for error detection.
(e) Discuss on link utilization.
(f) Explain the mechanism of Go back N for error control.
(g) What is byte stuffing in BSC ?
(h) Explain briefly about half duplex protocols.

(8 × 5 = 40 marks)

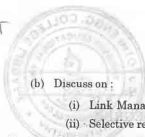
Part B

- II. (a) (i) Explain DTE-DCE interface. (8 marks)
(ii) Explain the categories of guided media in brief. (7 marks)
Or
(b) (i) Discuss the functions of each layer of OSI model. (8 marks)
(ii) Explain in detail about frequency division multiplexing. (7 marks)
- III. (a) Describe the mechanism of cyclic redundancy check with an example.
Or
(b) Write short notes on :
(i) Dynamic Huffman coding. (8 marks)
(ii) Transmission control circuits. (7 marks)
- IV. (a) Write in brief about the following error control strategies :
(i) Stop and wait protocol. (7 marks)
(ii) Sliding window protocol. (8 marks)

Or

Turn over

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(b) Discuss on :

(i) Link Management.

(7 marks)

(ii) Selective repeat.

(8 marks)

V. (a) Explain the three types of frames in HDLC protocol. Explain bit stuffing in HDLC.

Or

(b) (i) Explain the link access procedures.

(8 marks)

(ii) Discuss on logical link control in detail.

(7 marks)

[4 × 15 = 60 marks]

Part A

- (a) Explain the three types of frames in HDLC protocol.
- (b) Explain bit stuffing in HDLC protocol.
- (c) Explain the link access procedures in HDLC protocol.
- (d) Explain the logical link control in detail.
- (e) Explain the link management in HDLC protocol.
- (f) Explain the selective repeat protocol.
- (g) Explain the stop-and-wait protocol.
- (h) Explain the sliding window protocol.

Part B

- (a) Explain the link access procedures in HDLC protocol. (8 marks)
- (b) Explain the logical link control in detail. (7 marks)
- (c) Explain the link management in HDLC protocol. (8 marks)
- (d) Explain the selective repeat protocol. (7 marks)
- (e) Explain the stop-and-wait protocol. (8 marks)
- (f) Explain the sliding window protocol. (7 marks)
- (g) Explain the bit stuffing in HDLC protocol. (8 marks)
- (h) Explain the three types of frames in HDLC protocol. (7 marks)