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(21216)   Roll No. ....

B.C.A.-V Sem.

18023

B.C.A. Examination, Dec. 2016

Computer Network

(BCA-503)

(New Course)

Time : Three Hours]   *[Maximum Marks : 75*

Note : Attempt questions from all Sections as per instructions.

Section-A

(Very Short Answer Questions)

Attempt all the *five* questions. Each question carries 3 marks. Select the correct option from the given multiple choices for the following questions.   3×5=15

1.   A protocol is really :   3
   (a)   A sets of demands
   (b)   A set of rules
   (c)   A translation book of diplomats
   (d)   A call with very high authorization.

2.   Which of the following is used for modulation and demodulation?   3
   (a)   Modem
   (b)   Protocols
   (c)   Gateway
   (d)   Multiplexer
   (e)   None of the above.

3.   Error detection at the data link level is achieved by :   3
   (a)   Bit stuffing
   (b)   Hamming codes
   (c)   Cyclic redundancy codes
   (d)   Equalization.

4.   At what layer does a Gateway operate at?   3
   (a)   Data link layer
   (b)   Application layer
   (c)   Network layer
   (d)   None of the above.

5.   Which of the following uses the greatest number of layers in the OSI model?   3
   (a)   Gateway
   (b)   Repeater
   (c)   Bridge
   (d)   Router.

Section-B

(Short Answer Questions)

Answer any *two* questions out of the following three questions. Each question carries 7½ marks.   7½×2=15

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6. (a) What do you mean by network topology? Explain the advantages and disadvantages of bus, star and ring topology. 4

(b) What do you mean by Hub, Repeaters and Bridges? 3½

7. (a) Discuss the major functions performed by the presentation layer and application layer of ISO-OSI model. 4

(b) Write the concept of ALOHA. 3½

8. (a) What is computer networking? What are its benefits? 4

(b) Discuss stop and wait protocol. 3½

Section-C

(Detailed Answer Questions)

Answer any *three* questions out of the following five questions. Each question carries 15 marks. 15×3=45

9. (a) Explain the different methods for error correction and detection.

(b) State the advantages and disadvantages of TCP/IP. 5

10. Explain the following in detail : 5×3
   (a) ISDN
   (b) FDM
   (c) Routers.

11. (a) What are the major components of an optical communication system? 8

(b) Write a short note on quality of service of transport layer. 7

12. (a) Explain pocket switching in detail. 8

(b) What are the criteria used to evaluate transmission media? Explain throughput and wavelength. 7

13. (a) What is Local Area Network (LAN)? What is the difference between LAN and WAN? 8

(b) Write a short note on session layer. 7

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