

# END TERM EXAMINATION

FOURTH SEMESTER [BCA] MAY- JUNE 2015

Paper Code: BCA-210

Subject: Computer networks

Time: 3 Hours

Maximum Marks: 75

Note: Attempt any five questions including Q.No 1 which is compulsory.  
Select one question from each unit.

- Q1 Attempt all.
- (i) In OSI network architecture, the framing is done by (2)
    - (a) session layer
    - (b) network layer
    - (c) data link layer
    - (d) none of the above
  - (ii) Which of the following communication modes support one-way traffic? (2)
    - (a) simplex
    - (b) half duplex
    - (c) all of the above
    - (d) none of the above
  - (iii) The loss in signal power as light travels down the fiber is called (2)
    - (a) attenuation
    - (b) propogation
    - (c) modem
    - (d) microwave systems
  - (iv) Which of the following is not a transmission medium? (2)
    - (a) telephone lines
    - (b) coaxial cables
    - (c) modem
    - (d) microwave systems
  - (v) WAN stands for (2)
    - (a) Wireless network
    - (b) Wideband network
    - (c) Wide area network
    - (d) None of above
  - (vi) What are the advantages of the ring topology? (2)
  - (vii) What are the disadvantages of the mesh topology? (2)
  - (viii) Explain Shannon Capacity theorem? (2)
  - (ix) Differentiate between attenuation and distortion? (2)
  - (x) Differentiate between TDM and FDM? (2)
  - (xi) Differentiate between static and dynamic routing? (2)
  - (xii) Differentiate between Circuit switching and packet switching? (3)

## Unit-I

- Q 2 Discuss the different components required for data communication?(12.5)
- Q 3 What are the advantages of having layered model for networking? Explain OSI model mentioning the different functions performed by different layers? (12.5)

## Unit-II

- Q 4 What do you understand by the error detection and error correction? Explain any one of the error correction technique with suitable example?(12.5)
- Q 5 Write down a detailed note on ISDN? (12.5)

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**Unit-III**

- Q 6 What is the purpose of networking device? Explain the following networking devices:- (12.5)
- (a) Repeaters
  - (b) Bridges
  - (c) Routers
  - (d) Gateways

- Q 7 What do you understand by routing? Explain any routing protocol in details? (12.5)

**Unit-IV**

- Q 8 Discuss any two protocols that are used at application/presentation layer? (12.5)
- Q 9 Discuss the role of transport layer in details? (12.5)

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