(Please write your Exam Roll No.) *Exam Roll No. .....*

END TERM EXAMINATION

FOURTH SEMESTER [BCA] MAY-JUNE 2016

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 (a) What are the two types of line configuration? (2.5)
(b) List four design issues in DLL of OSI model. (2.5)
(c) What is bandwidth-delay product? (2.5)
(d) Name two types of connectors for fiber-opertebles. (2.5)
(e) A multiplexer combines four 100kbps channels cables. Using a time slot of 2 bits. What is the frame rate and frame duration? (2.5)
(f) What is dynamic routing? (2.5)
(g) What is SYN flooding alteak? (2.5)
(h) Define Piggybacking and its benefit. (2.5)
(i) What does the Shannon capacity have to do with deta communication? (2.5)
(j) What is the use of sockets in process-to-process communication? (2.5)

UNIT-I

Q2 (a) Explain multimode and single mode for propagating light along optical channels. (5)
(b) Discus various design issues for presentation and application layer of OSI model. (7.5)

Q3 (a) What is the role of DTE-DCE interface in internetworking? Explain with some examples. (7.5)
(b) Describe the three types of transmission impairment. (5)

UNIT-II

Q4 (a) Discuss LRC, VRC and CRC error detection mechanisms. (7.5)
(b) What is Normal response mode and asynchronous balanced mode in data link control protocols. (5)

Q5 (a) What is Synchronous Time-division multiplexing? Explain the process of Interleaving in TDM. (7.5)
(b) What is Broadband ISDN? How BRI and PRI works? (5)

UNIT-III

Q6 (a) What is a Router? How router boots up? Explain the role of IOS in routers. (7.5)
(b) What is flooding in routing? Discuss the working of any dynamic routing algorithm. (5)

Q7 (a) Explain the different types of classes in IPV4 addressing (classfull addressing) (5)
(b) Describe distance vector and link state routing algorithm. (7.5)

UNIT-IV

Q8 (a) What is port addressing? list three ICANN ranges for port addressing. (5)
(b) With respect to TCP discus the role of the following:- (7.5)
(i) Sequence Number
(ii) Acknowledgement Number.
(iii) Window size
(iv) Urgent points.

Q9 (a) Compare client-server and peer-to-peer application layer Paradigms (5)
(b) With respect to UDP discus the role of the following:-
(i) Pseudo header (3)
(ii) Destination port number (2)
(iii) Length field. (2.5)

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