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CS-68

BACHELOR OF COMPUTER APPLICATIONS (BCA) (Pre-Revised)

Term-End Examination

June, 2016

01286

CS-68 : COMPUTER NETWORKS

Time : 2 hours *Maximum Marks : 60*

Note : *Question number **1** is **compulsory**. Attempt any **three** questions from the rest.*

1. (a) For n devices in a network, what are the number of cable links required for mesh and ring topologies in a full duplex mode ? *4*

(b) What is the responsibility of the network layer in OSI model ? *3*

(c) Discuss various multiplexing techniques. *3*

(d) Compare and contrast the selective repeat ARQ with Go-Back-N ARQ protocols. *4*

(e) What is the purpose of BGP ? *3*

(f) What are the two main categories of DNS messages ? *3*

(g) Which one has more complexity : a bridge or a router ? *3+1*

(h) How is an ATM virtual connection identified ? 3

(i) What are the various advantages of ISDN ? 3

2. (a) Differentiate between hubs and switches. 4

(b) What are the various communication modes in computer networks ? 3

(c) Illustrate packet switching. 3

3. (a) What are the benefits of ATM ? 5

(b) Explain the fields of TCP header. 5

4. (a) What is a collision in Ethernet ? 5

(b) Illustrate the use of UDP at transport layer. 2

(c) How does RPC work ? 3

5. Write short notes on the following : $4 \times 2\frac{1}{2} = 10$

(a) DNS

(b) Router

(c) FDM

(d) NFS