CS-68

BACHELOR OF COMPUTER APPLICATIONS
(BCA) (Pre-Revised)
Term-End Examination
01205 December, 2016

CS-68 : COMPUTER NETWORKS

Time : 2 hours   *Maximum Marks : 60*

Note : *There are five questions in this paper. Question number 1 is **compulsory**. Answer any **three** questions from the rest.*

1. (a) Illustrate four basic topologies in terms of configuration.   *4*

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

    (c) Explain the multiplexing techniques used in data communication using examples.   *6*

    (d) Explain the reasons for moving from Stop and Wait to ARQ protocol.   *3*

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

    (f) Distinguish between a bridge and a router.   *4*

    (g) Explain why padding is unnecessary in AAL1, but necessary in other AALs.   *4*

    (h) What are the functions of RIP message ?   *3*

2. (a) What are the various types of bridges ? Explain. **4**

(b) Differentiate between TCP reference model and OSI reference model. **6**

3. (a) What is the motivation for using ISDN ? Describe BRI interface. **5**

(b) On which layers do the following devices work ? **5**
   (i) Hub
   (ii) MODEM
   (iii) Switch
   (iv) Gateway
   (v) Repeater

4. (a) Explain the working of MAC sub-layer. **5**

(b) Broadly describe various transmission media. **3**

(c) How does link bandwidth affect bit transmission ? **2**

5. Write short notes on the following : $4 \times 2\frac{1}{2} = 10$
   (a) FTP
   (b) WWW
   (c) Packet Switching
   (d) RPC