Code : 303503

BCA 5th Semester Exam., 2019

COMPUTER NETWORK, DATA COMMUNICATION AND CLIENT SERVER TECHNOLOGY

Time : 3 hours *Full Marks* : 60

Instructions :

(i) The marks are indicated in the right-hand margin.

*(ii) There are **SEVEN** questions in this paper.*

*(iii) Attempt **FIVE** questions in all.*

*(iv) Question Nos. **1** and **2** are compulsory.*

1. Answer/Choose the correct answer (any *six*) : 2×6=12

(a) What are the features provided by layering?

(b) What are the two interfaces provided by protocols?

(c) What is DHCP?

(d) Combination of two or more networks is called

(i) Internetwork

(ii) WAN

(iii) MAN

(iv) LAN

(e) Which topology covers security, robust and eliminating traffic factor?

(i) Mesh

(ii) Ring

(iii) Star

(iv) Bus

(f) National Internet Service Provider (ISP) networks are connected to one another by private switching stations called

(i) Network Access Points

(ii) Peering Points

(iii) National ISP

(iv) Regional ISP

(g) Elapsed time between an inquiry and a response is called

(i) Transit time

(ii) Delay time

(iii) Processing time

(iv) Response time

(h) Bus, ring and star topologies are mostly used in the

(i) LAN

(ii) MAN

(iii) WAN

(iv) Internetwork

(i) OSI stands for

(i) Open Systems Interconnection

(ii) Online Systems Interconnection

(iii) Open Systems Internet

(iv) None of the above

(j) What is redundancy? What is the purpose of hamming code?

2. Answer any *three* of the following : 4×3=12

(a) What are different data transfer modes? Explain each briefly.

(b) What are TCP and UDP and their difference?

(c) What is a Firewall? Explain with diagram.

(d) What is DNS? What is the difference between a Domain and a Workgroup?

(e) What are the different types of a network? Explain each briefly.

3. Draw and explain OSI model. 12

4. Explain CRC with an example. 12

5. What is Time Division Multiplexing? Explain Synchronous TDM. 12

6. Explain different types of network topologies and brief its advantages. 12

7. Draw and explain IPv4 packet format. 12

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