Tribhuvan University

Faculty of Humanities and Social Sciences

OFFICE OF THE DEAN

2020

BCA Fifth Semester

Subject: Computer Networking **Full Marks:60**

Time: 3hr **Pass Marks: 24**

Group B

Attempt any Six question (6*5=30)

2. Define protocols. Explain WWW and HTTP protocol. [1+2+2]

3. Define transmission impairment. Explain the causes of impairments. [1+4]

4. Define HDLC. Explain the HDLC frame formats. [1+4]

5. Define IP Address. Specify IPv4 address classes with their address ranges. [1+4]

6. Define Subnetting. Suppose you are given network address: 192.168.10.0 and subnet mask: 255.255.255.240 then calculate total number of subnets and numbers of hosts per subnet. [1+2+2]

7. Draw a User Datagram format. Explain UPD operations. [2+3]

8. Write short notes on (Any Two): [2.5+2.5]

a) DNS b) Public Key Cryptography c) VPN

Group C

Attempts any TWO questions. **[2x10=20]**

9. Critically analyze the OSI reference model. [10]

10. Explain the random-access protocols under the multiple access taxonomy. [10]

11. Explain the IPv4 Header format in detail. [10]

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2024

BCA Fifth Semester

Subject: Computer Networking **Full Marks:60**

Time: 3hr **Pass Marks: 24**

Group B

Attempt any Six question (6*5=30)

2. Explain the features of TCP/IP reference model.

3. Define switching. Explain the types of switching.

4. Explain the ALOHA with its performance.

5. Define IP Address.Explain the classes of IPv4.

6. Differentiate between the functions of TCP and UDP.

7. Explain the role of DHCP, FTP and HTTP Protocols.

8. Write short notes on (any two):

a) RSA b) CRC c) Firewall

Group C

Attempts any TWO questions. **[2x10=20]**

9. Explain transmission media with their major characteristics.

10. a) Differentiate between static and dynamic routing with suitable example.

b) Define Subnetting. Calculate total number of subnets and hosts per subnet for Network Address 192.168.20.0 an subnet mask is 255.255.255.128

11. Write the services provided by Transmission Control Protocol. Explain the TCP header segment in detail.