$\boxed{\text{Set—02}}$

Shahjalal University of Science and Technology
Department of Computer Science and Engineering
3rd year 2nd Semester Final Examination—December 2020 (Session 2017-18)
Course No.—**CSE 361**
Course Title—**Computer Networking**

Time—**5 Hours**   Credit: **3.00**   Total Marks#**30**

(Answer All the Questions)

Group A

1. Answer the following **Five** Questions. $5 \times 1 = 5$

   (a) What is the EMI?

   (b) Name the PDUs generated by presentation and data-link layers.

   (c) A layer-4 firewall CANNOT block which type of traffic? [HTTP/ICMP/TCP]

   (d) TFTP and SNMP use the _____ their layer 4 (transport) protocol.

   (e) What is HTTP and what port does it use?

2. Answer the following **Two** Questions. $2 \times 2.5 = 5$

   (a) Explain the collision handle technique in CSMA/CD used by IEEE 803.

   (b) What is the broadcast and network address for host 222.129.199.222/21?

3. Explain TCP 3-Way Handshake Process.   5

Group B

1. Answer the following **Five** Questions. $5 \times 1 = 5$

   (a) The reason why does IP use the time-to-live (TTL) field in the IP datagram header is _____.

   (b) Name the PDUs generated by application and transport layers.

   (c) Primary benefit of using connection-oriented protocol like TCP is _____.

   (d) True or False? If False, write the correct statement: IP is a connection-oriented protocol.

   (e) True or False? If False, write the correct statement: A single program may have several open sockets at any time.

2. Answer the following **Two** Questions. $2 \times 2.5 = 5$

   (a) Contrast between the client-service and P2P service model. Name some common applications.

   (b) Why is it said that FTP sends control information "out-of-band"?

3. An IPv4 datagram has arrived with the following information in the header (in hexadecimal): 0x45 00 00 54 00 03 58 50 20 06 00 00 7C 4E 03 02 B4 OE OF 02. Answer the followings: 5

   • Is the packet fragmented?

   • What is the size of the data?

   • How many more routers can the packet travel to?

   • What is the identification number of this packet?