

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 A1. Answer the following **Five** Questions.

5 × 1 = 5

- (a) What is the default subnet masks of Class A and Class C networks?
- (b) What is the Loopback address?
- (c) Write the IP address 222.1.1.20, subnet mask 255.255.255.192 in CIDR notation.
- (d) What is a Man-in-the middle attack?
- (e) What is the purpose of class E address?

2. Answer the following **Two** Questions.

2 × 2.5 = 5

- (a) Define the runt frame and jumbo frame. How will the NIC detect these type of frames?
- (b) Define cancellation techniques for noise minimization with proper example.

3. An organization needs at least 5 subnets with the network address fixed as X.Y.Z.0 where X, Y, Z are 8 bit integers. Design the subnets and represent in schematic diagram with following specifications (any 2 subnets): subnet address, broadcast address, host IP addresses.

5

Group B1. Answer the following **Five** Questions.

5 × 1 = 5

- (a) What is RFI?
- (b) HTTP and POP use the _____ as their layer 4 (transport) protocol.
- (c) _____ protocol is used to resolve the IP address of any host like www.sust.edu
- (d) True or False? If False, write the correct statement: End systems, or hosts, communicate with each other using either server or client models.
- (e) True or False? If False, write the correct statement: Both UDP and TCP require that the applications recognize their own data formats.

2. Answer the following **Two** Questions.

2 × 2.5 = 5

- (a) Is Fiber cable affected by RFI or EMI? List some merits of using fibre.
- (b) What is the difference between Integrated services (IntServ) and Differentiated services (DiffServ)?

3. What is VLAN? What are the benefits of implementing VLANs? Explain two different types of VLAN.

5