



## Computer Networks Questions

### Answer only five Questions

#### Question 1: Definitions (10 Marks)

- (a) Define Five only: protocol, network topology, IP address, Signal, Router, Node. (5 Marks)
- (b) What is a "firewall" in the context of computer networks? (3 Marks)
- (c) What is "bandwidth" in a computer network? (2 Mark)

#### Question 2: Enumeration (20 Marks)

- (a) Enumerate four advantages of using a computer network. (10 Marks)
- (b) List three types of wireless network technologies. (10 Marks)

#### Question 3: Explanation only one a or b (20 Marks)

- (a) Explain the difference between "TCP" and "UDP" protocols. (20 Marks)
- (b) Briefly explain the purpose of the OSI model. (20 Marks)

#### Question 4: Diagram and Analysis solve a and b (20 Marks)

- (a) Draw and label a simple star network topology. (10 Mark)
- (b) Analyze one advantage and one disadvantage of using a star topology. (10 Mark)

#### Question 5: True or False (2 Marks)

- (a) IPv6 addresses are 32 bits long. (1 point)
- (b) A router operates at the application layer of the OSI model. (1 point)

#### Question 6: Fill in the Blanks (2 Marks)

- (a) The main purpose of a \_\_\_\_\_ is to translate domain names into IP addresses. (1 Mark)
- (b) The maximum data transfer rate of a network is known as its \_\_\_\_\_. (1 Mark)