East West University CSE 405 (Computer Networks) Lab Test

Total Marks: 20

Time: (35min +5min) = 40min

Part A: Please answer the following questions. (10 marks)

- 1) Please draws and show orientation of a Straight-through cable for CAT 5 cables. (2 marks)
- 2) What is the function of ARP protocol? (2 marks)
- 3) Data packets usually have a TTL that tells how long the packet will last; briefly explain why a clock is not possible to implement in the packet's header to denote its age. (2 marks)
- 4) What is subnet mask in decimal notation for the any "B" class IP if 10 bits are taken to create subnets? (2 marks)
- 5) What is the 'wild card' mask's IP if the subnet mask is 255.255.240.0? (2 marks)

Part B: Please answer the following question. (10 marks)

1) Draw the following network diagram on paper and fill in the IP addresses manually to all the interfaces. In addition, write routing tables only for 'Router 2' and 'Router 3' for all possible destinations considering the network follows link state routing algorithm. While writing the routing tables assume you are in 'config' mode in the CLI.

