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| **National University of Computer and Emerging Sciences, Lahore Campus** | | | | |
| C:\Users\saif\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\final design.jpg | **Course Name:** | **Computer Networks** | **Course Code:** | **CS3001** |
| **Program:** | **BS(Data Science)** | **Semester:** | **Fall 2023** |
| **Duration** | **20 minutes** | **Total Marks:** | **15** |
| **Paper Date:** | **29-November-2023** | **Section:** | **7B** |
| **Exam Type:** | **Quiz 5 – Chapter 5** | **Page(s):** | **2** |
| **Name: Roll No. Section:** | | | | |

**Question 01: Answer the multiple-choice questions by choosing one option.**

1. Inter-AS routing is\_\_\_\_\_\_\_\_ while Intra-AS routing is\_\_\_\_\_\_\_\_\_?
   1. Within an AS, between different ASes
   2. Outside an AS, between different ASes
   3. Between different ASes, within an AS
   4. None of the above
2. RIP uses\_\_\_\_\_\_\_ while OSPF uses\_\_\_\_\_\_\_\_\_\_:
   1. Distance vector, Link State
   2. Link State, Distance Vector
   3. Both Link State
   4. None of the above
3. If direct link cost between node w and node z is infinity this indicates:
   1. There is no path between w and z
   2. There is a direct link between w and z
   3. There is no direct link between w and z
   4. There is a path between w and z, but another path is better
4. The notation p(v) when we discussed a routing algorithm indicated the:
   1. Predecessor of node v from the least cost path from source node u to node v
   2. Predecessor of node u from the least cost path from source node u to node v
   3. Predecessor of node v from the least cost path from source node v to node u
   4. Least cost path from source node u to node v
5. Explain Hot-potato and Cold Potato Routing with an example? (3m)
6. Applying Bellman Ford algorithm on a given graph (N, E), what were the two resulting outputs that we attained? (8m)

