IT 340 – Network Management Assignment No. 3

Due Date: 9rd April, 2016 (Saturday, 11:59 pm) <u>Total Marks:</u>5

Question No. 1

In addition to the management applications defined by the OSI model, we can consider reports such as system reports and user reports. Explain why. [0.5 mark] Useful for analysis, etc.

Question No. 2

The OSI model specifies five main management applications: configuration, performance, fault, security, and accounting. Give three details of configuration application. [1.5 mark]

Network topology discovery

Network provisioning

Inventory management

Question No. 3

How SNMPv3 addresses the following threats: masquerade and modification of information? [1 mark]

By the authentication module, respectively by verifying data origin and data integrity

Question No. 4

What is the advantage of a small cell size in ATM? To reduce the delay in switching and packetization [0.5 mark]

Question No. 5

Explain how MPLS combines between the richness of IP and the performance of ATM networks **[1 mark]** <u>The ingress and egress router process the packet header and add/remove label like in IP</u> <u>networks. However, inside the MPLS network, the switching of the packets between LSRs is rapid</u> <u>like in ATM networks</u>

Question No. 6

How using LSP traceroute in fault isolation?

[0.5 mark]

The packet is sent to the control plane of each transit LSR, which performs various checks that it is indeed a transit LSR for this path