

**STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086**  
**(For candidates admitted during the academic year 2019 – 2020 and thereafter)**  
**SUBJECT CODE: 19CS/PC/NA34**

**M.Sc. DEGREE EXAMINATION, NOVEMBER 2022**  
**INFORMATION TECHNOLOGY**  
**THIRD SEMESTER**

**COURSE : MAJOR CORE**  
**PAPER : NETWORK MANAGEMENT AND ADMINISTRATION**  
**TIME : 3 HOURS** **MAX. MARKS: 100**

**SECTION – A**

**Answer all the following:** **(10 \* 2 = 20)**

1. Define Computer Network.
2. What are the primary functions of RPM?
3. Compare setuid and setgid.
4. What is meant by Sticky bit?
5. What is the use of IP Aliasing?
6. Expand TCP and UDP
7. How to install GRUB natively using GRUB's command shell from inside the running Linux operating system?
8. What is Public Key Cryptography?
9. What are the three categories of NAT?
10. Write a short note on the mechanism of DHCP.

**SECTION – B**

**Answer any SIX from the following:** **(6 \* 5 = 30)**

11. Discuss briefly on classification of Networks.
12. Write a short note on Cron tab file.
13. How ARP works? What are the basic steps of ARP?
14. How Services are Enabled and Disabled in Linux?
15. Differentiate Active FTP and Passive FTP
16. Examine the five predefined chains in iptables Netfilter implementation.
17. Discuss about the Decision making statements in shell scripting.
18. Identify the benefits of Computer Networks.

**SECTION – C**

**Answer any FIVE from the following:** **(5 \* 10 = 50)**

19. How to perform basic software management tasks on Debian-like distros? Explain it in detail.
20. What is meant by Volume Management? Explain about creating a partition, Physical volume and Logical volume.
21. Explain how a typical TCP/IP packet flow in an Ethernet with a neat diagram.
22. Determine the use of ifconfig, ping, and route commands in the network devices configuration on sample server.
23. Elaborate the ssh client program in open SSH and explain how secure tunnel can be created with a neat diagram.
24. Explain how to configure DHCP server in detail.
25. Discuss about the Command line User management and GUI users in User Management tools.

\*\*\*\*\*