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63/2 (SEM-3) MCA 3.3

2022

(Held in 2023)

MCA

(Theory Paper)

Paper Code : MCA-3.3

(System Administration)

Full Marks – 75

Pass Marks – 30

Time – Three hours

The figures in the margin indicate full marks for the questions.

1. Answer any *five* of the following questions :

2×5=10

- (a) What is System Administration ?
- (b) Explain Open source and Paid software.
- (c) What is the purposes of Proxy server ?
- (d) Explain Local agent and Master agent.

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- (e) Why routing protocol is required in computer network ?
- (f) What is RAID ?
- (g) What is Cloud ?

2. Answer any *five* of the following questions :

5×5=25

- (a) Define how a file permission can be changed in Linux. Explain with example.
- (b) Explain how a c-program can be edited, compiled and run in vi editor.
- (c) Define the configuration of FTP and TELNET Server in Linux.
- (d) What are the common media used in Computer Network ? Explain.
- (e) Write shell program to check a number is palindrome or not.
- (f) Write a shell program to find the factorial of an integer number.
- (g) Explain TCP/IP protocol in brief.
- (h) Write the Linux command for the following :
 - (i) Broadcast a message to all the users in network
 - (ii) Add and delete new user

(iii) Provide password for a user

(iv) Display the first 10 lines of a file

(v) To check whether a network or a server is reachable or not.

3. Design a Network architecture of Bodoland University. (Mention the devices used, communication media, IP address schemes, security issues etc.) 15

4. Explain the procedure of installation of VM ware and also define the installation procedure of any operating system on it. 15

5. Write short notes on any *two* of the following : 5×2=10

- (a) Network security
- (b) Router
- (c) Gateway.