MAHATMA GANDHI UNIVERSITY

MCA DEGREE EXAMINATION MODEL QUESTION PAPER (2011 Revised Syllabi) Fourth semester

MCA 403 LINUX AND SHELL PROGRAMMING

Time: Three hours Maximum: 75 Marks

Part A

Answer any ten questions. *Each question carries 3 marks*.

- 1 Compare the features of UNIX and Linux
- What do you mean by i-nodes? Explain
- 3 Explain expr command with example.
- 4 Explain the syntax of case-esac construct with an example.
- 5 What are functions of editors?
- 6 Explain the file naming conventions in Linux.
- 7 How can the ownership of a file be changed to a different user?
- 8 How can a user be disabled temporarily?
- 9 Explain the following commands with at least two options
- (a) uname (b) du (c) hostname
- How can a file system be mounted?
- 11 Write a short notes on samba.
- 12 Explain the e-mail facility in Linux.

 $(10 \times 3 = 30 \text{ marks})$

Part B

All questions carry equal marks.

13 A. Explain the Architecture of Linux Operating System.

OR

B. Explain the redirection, filter and pipes in Linux with suitable examples.

14 A. With suitable examples, explain the conditional and controls structures in Shell scripting.

OR

- B. How can shell script be used to automate system tasks? Explain with an example.
- 15 A. Discus various system administrative tasks? Mention the important configuration files and purposes.

OR

- B. How are user and groups created and managed? Explain.
- 16 A. Explain how the packages are installed and removed in Linux?

OR

- B. Explain the Back up and restore utilities in Linux
- 17 A. Discuss the communication facilities in Linux

OR

- B. Write short note on the following
 - (a)Proxy Server
- (b) Web Server
- (c) SSH

(5 X 9 = 45 marks)