Roll No	 	 	•	•	
Printed Pages: 2					

1873

#### **BCA/M-15**

### INTRODUCTION TO LINUX

## Paper-BCA-362

Time allowed: 3 hours [Maximum marks: 80

Note: Attempt **five** questions in all, selecting at least one question from each unit. All questions carry equal marks.

# **Compulsory Question**

- 1. (a) What are the various types of shells in Linux?
  - (b) What are the various ways for shutting down Linux operating system?
  - (c) Explain any two file-oriented purpose commands in Linux.
  - (d) Discuss the purpose of sort filter in Linux.
  - (e) How many types of files exist in Linux?
  - (f) How a process can be started in Linux?
  - (g) What are the various shell variables in Linux?
  - (h) How a shell script is created in Linux?

#### **UNIT-I**

- 2. (a) Describe various features of Linux operating system.
  - (b) Differentiate between Linux and UNIX.
- 3. (a) Name various distributions of Linux. Describe the architecture of Linux operating system.
  - (b) Describe the procedure for starting, logging in and logging out in Linux. Can a simple user, who is not an administrator, shut down the system? If yes, how?

### **UNIT-II**

4. Write and explain any two commands in each category:

- (i) General Purpose commands.
- (ii) Directory-oriented commands.
- (iii) Communication-oriented commands.
- (iv) Process- Oriented commands.
- 5. (a) What is the purpose of grep command? How grep is different from fgrep and egrep? Explain with suitable examples.
  - (b) Explain the following regular expressions in detail:
  - $(i) + (ii) ^ (iii) [] (iv)*$

#### **UNIT-III**

- 6. Describe the structure and components of file system in Unix/Linux. What are the standard file systems that are supported by Unix/Linux? Explain.
- 7. What is Process? Describe the procedure for creating and stopping a process. Also discuss the purpose of init process.

#### **UNIT-IV**

- 8. (a) Explain various arithmetic operators used in shell programming.
  - (b) Describe various control structures in shell with suitable examples.
- 9. (a) What is vi editor? Discuss at least two commands in each working mode of vi editor.
  - (b) Write a shell script to find reverse of a number.