

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FIFTH SEMESTER B.TECH DEGREE EXAMINATION, DECEMBER 2017

Course Code: IT363

Course Name: UNIX SHELL PROGRAMMING(IT)

Max. Marks: 100

Duration: 3 Hours

PART A

Answer any two full questions, each carries 15 marks.

Marks

- | | | |
|---|--|-----|
| 1 | a) Explain the architecture of Unix system. | (6) |
| | b) Explain Unix file and directory permissions. What is a sticky bit? | (6) |
| | c) Describe the usage of the utilities.
i) bc ii) calc iii) cat | (3) |
| 2 | a) How does <i>ln</i> and <i>rm</i> commands affect inode and directory? | (3) |
| | b) Explain Unix file system structure. What is the maximum file size? | (6) |
| | c) Explain methods for manipulating the timestamps in files/directory. | (6) |
| 3 | a) What are the differences between hard and soft links? | (3) |
| | b) How to do the following activities using vi editor.
1. Text replacement | (6) |
| | 2. Delete text | |
| | (c) What is inode? How does it affect when you perform the following activities?
1. Copy file | (6) |
| | 2. Delete file | |

PART B

Answer any two full questions, each carries 15 marks.

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|---|--|-----|
| 4 | a) How do we find process hierarchy in a system? | (4) |
| | b) Explain the application of wild card characters with example. | (5) |
| | c) 1.How do we control process priority?
2.Explain killing processes with signals | (6) |
| 5 | a) Explain command substitution | (6) |
| | b) Explain single and double quoting. | (6) |
| | c) Write the output of <code>cd *</code> | (3) |
| 6 | a) Explain job scheduling with example. | (6) |
| | b) How do we move jobs to background and foreground? | (3) |
| | c) Give the application of the following utilities
1 finger | |
| | 2. rsh | (6) |
| | 3.telnet. | |

PART C

Answer any two full questions, each carries 20 marks.

- 7 a) Details of linux users are available in /etc/passwd. Format of this file is user_name:x:uid:gid: : : :. Write a shell script to list the members of a given gid. (8)
- b) Explain switches available with grep command. (4)
- c) Explain awk control flow construct with example. (4)
- d) Explain context addressing in sed. (4)
- 8 a) Explain text editing with sed. (4)
- b) What is the application of
1.eval.
2.exec (4)
- c) How do we do line addressing using sed? (4)
- d) Write a shell script to receive student name, register number, marks of four subjects of n students. Decide appropriate grade and prepare mark card for each student. Store the mark card in files with the names of register number. (8)
- 9 a) Explain filtering with awk. (6)
- b) What is conditional parameter substitution. (6)
- c) Explain arrays in awk programming. Write an awk script to print squares of numbers from 1 to 100. (8)

