## 2008 - SIKKIM MANIPAL UNIVERSITY OF HEALTH MEDICAL & TECHNOLOGICAL SCIENCE

M.C.A COMPUTER APPLICATION II SEMESTER ASSIGNMENT PAPER OPERATIG SYSTEMS WITH UNIX

TIMES-2 HOUR MARKS-60

## Book ID: B0714

1 Write output of command: ? # ps –l And describe each field for the output obtained. (7 Marks) 2. Write the code used for implementing fork () system call and pipe () system call.(9 marks) 3. Write a brief note on flavors of UNIX shells. (7 marks) 4. Use cat command to carry out following functions: ? Display text "Hello, Welcome to SMU" ? Redirect this text to a file with name MCA ? Append another word "Manipal" to the original text stored in file MCA (10 Marks) 5. Which is the command to view Environment settings of your system? How do you set the following environment variable values using that command: i. HOME with SMU ii. TERM with Suprit007 iii. PATH with /usr/local/bin (6Marks) 6. Which command is used to: ? Copy a file named Gangtok to directory called Sikkim ? Rename a file called "Vangpurappu Venakta Sai Laxman" as VVS Laxman (you can't use rename command) ? If we use my command to move file-Gangtok from Directory-Sikkim to Directory-India and cp command to move VVSLaxman from Directory-India to to Directory-Deccan-Chargers. What is the difference you notice in directories Sikkim and India (9 Marks)

7. Discuss conditions that cause Deadlock. Depict a deadlock situation with a block diagram. (7 Marks)

8. How can we detect Deadlock using cycle detection algorithm. Give complete algorithm. (5 Marks)