

**MCS172- UNIX OPERATING SYSTEM**

**07/11/2020**

**CAT2-Continuous Assessment Test2**

**CIA Rubrics**

**Evaluation Criteria: Total Marks 25**

- Execution (10X 2) = 20 Marks
- Viva (5) = 5 Marks

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1. Write an interactive shell program to get the following information using UNIX commands. (5\*2 =10)

- a) Set the priority of the given process
- b) Change the priority of the given process
- c) Stop the running process
- d) Display all information related to process
- e) Display Process hierarchy

2(a) Write a C program in UNIX platform to implement the concept of IPC for producer consumer problem using thread. (10 Marks)

OR

2(b) Write a C program in UNIX platform to create two pipes and fork a child process to implement the following scenarios (10 Marks)

- i) Parent sends the message as “I am your parent! “and “My ID is <pid-of the-parent-process>” through pipe1 and the child receives this message and displays the same message on the screen.
  - ii) The child writes back to its parent as “Hi Parent, My ID is <pid-of-the-child>” through pipe2. The parent then displays the message received from the child on the screen.
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