## PSG COLLEGE OF ARTS & SCIENCE
### (AUTONOMOUS)

## MCA DEGREE EXAMINATION MAY 2018
### (Third Semester)

### Branch - **COMPUTER APPLICATIONS**

### OPERATING SYSTEM

Time: Three Hours                                            Maximum: 75 Marks

### SECTION -A (30 Marks)
Answer **ALL** questions
**ALL** questions carry EQUAL Marks ( 5 x 6 = 30)

1   a Describe about various types of operating systems.
                              OR
    b Write short notes on scheduling criteria.

2   a Explain the following :
        (i)  The Bounded - Buffer problem
        (ii)  Necessary conditions for arising deadlock situation
                              OR
    b Expound on Recovery from Deadlock.

3   a Discuss on Swapping.
                              OR
    b What are the needs for page replacement? Explain.

4   a What are the possible file operations? Explain.
                              OR
    b Describe about naming and transparency.

5   a   What is a Shell? Give the syntax of shell and write example for shell
        commands.
                              OR
    b   Give notes on the Terminal Driver and general Terminal Interface.

### SECTION -B (45 Marks)
Answer any **THREE** questions
**ALL** questions carry **EQUAL** Marks (3 x 15^ 45)

6       Discuss on process scheduling.

7       Explain in detail about monitors for process synchronization.

8       Explain the following : (i) Procedure for handling the page fault with
        diagram (ii) Demand segmentation.

9       Write in detail about 3 types of Disk Space allocation methods.

10      Explain about standard I/O Library and detecting key strokes.

                              Z-Z-Z                                    END