PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2018
(Third Semester)

Branch - **COMPUTER TECHNOLOGY**

OPERATING SYSTEMS

Time : Three Hours Maximum : 75 Marks

SECTION-A (20 Marks!
Answer **ALL** questions
ALL questions carry **EQUAL** marks (10 x 2 = 20)

1 Write the use of program counter.
2 Define Throughput.
3 What is mutual exclusion?
4 What are the algorithms available for Deadlock avoidance?
5 Comment on dynamic loading.
6 Define Virtual memory.
7 What is polling?
8 Mention the use of Buffer.
9 What is a File?
10 List out any four fie accesses methods.

SECTION - B (25 Marks)
Answer **ALL** Questions
ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

11 a Explain priority scheduling with example.
OR
b Discuss about the MS-DOS layer structure with a neat sketch of it.

12 a Demonstrate how circular wait leads to deadlock.
OR
b Critically examine the resource preemption technique for recovery from deadlock.

13 a Write short notes on demand paging.
OR
b Explain the placement and replacement algorithms.

14 a Discuss about direct memorv access.
OR
b Write about the various characteristics of I/O devices.

15 a Discuss in detail file system.
OR
b Write notes on access control.

SECTION - C (30 Marks)
Answer any **THREE** Questions
ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

16 Explain the storage hierarchy in a detail manner.

17 Discuss in detail the methods involved in the detection and recovery of deadlock.

18 Explain in detail about the fixed and dynamic partitioning.

19 Elaborately discuss about Secondary storage structure.

20 Explain with neat sketch about the schematic view of a virtual file system.