PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2017
(Fifth Semester)

Branch- **INFORMATION TECHNOLOGY**

OPERATING SYSTEM

Time : Three Hours Maximum : 75 Marks

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

1 Define operating system. Give two examples of operating systems.
2 What is meant by deadlock?
3 What is a segment in operating system context?
4 Differentiate physical memory with virtual memory.
5 List the disk scheduling strategies.
6 What are the attributes for a file?
7 List four environment variables used in shell programming.
8 WTiat are the formatted output functions in Linux?
9 What is meant by a terminal?
10 List some conversion specifiers that can be used with time structure in Linux.

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

11 a Write a note on CPU scheduling criteria.
OR
b Describe the necessary conditions for deadlock.

12 a Describe the structure of page table.
OR
b Explain second chance page replacement algorithm.

13 a Explain SSTF scheduling of secondary.
OR
■ b Write a note on linked allocation method for file.

14 a Write a note on pipes and redirection in Linux.
OR
b Describe initial permissions that can be given for a file in Linux.

15 a Write a note on ctime, strf time and strp time functions.
OR
b How will you use /dev/tty in Linux? Give example.

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

16 Discuss the methods used for deadlock prevention.
17 Explain the basic method of segmentation.
18 Write a note on disk formatting and boot block.
19 Describe program arguments of linux environment.
20 Explain termios structure in detail.

Z-Z-Z END