PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2018 (Fifth Semester)

Branch- INFORMATION TECHNOLOGY

OPERATING SYSTEM

1 ime : Three Hours

Maximum : 75 Marks

SECTION-A 120 Marks!

Answer ALL questions

ALL questions carry EQUAL marks

 $(10 \times 2 = 20)$

- 1 What do you mean by non preemptive scheduling?
- 2 How a dead lock can be represented?
- 3 What is paging?
- 4 What is the necessary of page replacement?
- 5 Write about the on-disk structures of file systems.
- 6 What do you mean by seek time and rotational time?
- 7 Write about pipes in Linux?
- 8 What do you mean by 'everything is a file' in Linux?
- 9 What do you mean by a canonical behavior?
- 10 Write the syntax and usage of FSEEK function in Linux.

SECTION - B (25 Marks)

Answer ALL Questions

- ALL Questions Carry EQUAL Marks $(5 \times 5 = 25)$
- 11 a Discuss about the FCFS Scheduling algorithm with example,

OR

b Explain about the Resource allocation graph with example.

12 a Explain the LRU page replacement algorithm with example.

OR

b Explain about the page buffering algorithm.

13 a Discuss about contagious allocation of file system allocation methods.

OR

b Write about "Bad Block".

14 a Explain any 5 functions used for formatted input and output.

OR

b Write about the control structures in Linux Shell Programming.

15 a Discuss about the hardware model of the Terminal.

OR

b Discuss the usage of Environment Variables.

SECTION - C (30 Marks)

Answer any **THREE** Questions ALL Questions Carry EQUAL Marks $(3 \times 10 = 30)$

- 16 Explain about the multilevel queue scheduling.
- 17 Discuss in detail about "Demand Paging" concept of memory management
- 18 Explain in detail about Disk Formatting.
- 19 Discuss in detail about the 'Scanning Directories' in Linux.
- 20 Write in detail about 'TERMIOS' structure in Linux.

Z-Z-Z

END