

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2019
(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 List out the Scheduling Algorithms.
- 2 What are the four conditions for arising deadlock situations?
- 3 Define Paging.
- 4 What do you meant by Demand Segmentation?
- 5 How does FCFS disk scheduling work?
- 6 List out six basic file operations.
- 7 What is UNIX?
- 8 What are the uses of sterrorQ and perror() functions?
- 9 List out any four Linux Environment Variables,
- 10 How do you find the line speed of Terminal in Linux?

SECTION - B (25 Marks!)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

- 11 a How does the Round-Robin Scheduling work?
OR
b Write the steps of Deadlock Detection algorithm.
- 12 a Write the functions of Segmentation Flardware.
OR
b Discuss on the performance of Demand Paging.
- 13 a Write short notes on disk Structure.
OR
b Elucidate the characteristics of Contiguous Allocation Method.
- 14 a Narrate the topic "Shell as a Programming Language".
OR
b List out and give short notes on various standard I/O Library functions.
- 15 a Explain the usage of getopt and getopt long functions.
OR
b Write short notes on using terminfo capabilities.

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 Explain in detail about Multilevel Queue Scheduling.
- 17 Discuss about Segmentation with paging and explain about Intel 80386 Address Translation.
- 18 Write in detail about Magnetic Disk formatting and Boot Block.
- 19 How do you use the pipes and redirection in Linux? Explain with example.
- 20 Exnplain Linux environment variables and their uses.