[21-BS425-B] AT THE END OF FOURTH SEMESTER (CBCS PATTERN) DEGREE EXAMINATIONS COMPUTER SCIENCE IV(B) - OPERATING SYSTEMS

UG PROGRAM (4 YEARS HONORS)

(w.e.f. Admitted Batch 2020-21)

Time: 3 Hours

Maximum: 75 Marks

SECTION-A

I. Answer any FIVE questions.

 $(5 \times 5 = 25)$

- 1. Define Operating system. Explain the brief history of Operating system.
- 2. Briefly explain about system calls.
- 3. Explain in detail about process state diagram.
- 4. Discuss about Virtual memory.
- 5. Write about Android Development Framework.
- 6. Write about process Scheduling.
- 7: Write about thread issues.
- 8. Write about logical and physical addresses.

SECTION-B

II. Answer ALL the questions.

 $(5 \times 10 = 50)$

9. a) Explain objectives and functions of an operating system.

(OR)

- b) Explain about various types of operating systems.
- 10. a) What is Thread? Explain about Threads and its types.

(OR)

- b) Write about scheduling algorithms.
- 11. a) What is Deadlock? Explain methods for handling deadlocks.

(OR)

- b) What is Process Synchronization? Explain Critical section problem.
- 12. a) Write about Continguous memory allocation.

(OR)

- b) Explain about paging concept.
- 13. a) Describe the file allocation methods.

(OR)

b) Discuss about Disk Scheduling algorithms.