THREE YEAR B.Sc. DEGREE EXAMINATION, OCTOBER - 2022 CHOICE BASED CREDIT SYSTEM FOURTH SEMESTER

PART -II: COMPUTER SCIENCES

Paper -C5: Operating Systems

(Under CBCS New Regulation w.e.f the academic year 2021-22)

Time: 3 Hours Max. Marks: 75

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer any five of the following questions in Part A.

Part B consists of 5 Units. Answer one full question (A or B) from each unit (i.e. Q.No 9 from Unit-I, Q.No 10 from Unit - II, Q.No 11 from Unit - III, Q.No 12 from Unit - IV, Q.No 13 from Unit - V). Each question carries 10 marks.

Part-A

Answer any FIVE of the following. Each question carries Equal marks. (5×5=25)

- 1. What is Operating System?
- 2. What is Booting?
- 3. Define Process Abstraction?
- 4. What is Algorithm?
- 5. What is Synchronization?
- 6. Define Recovery
- 7. Define File Operations?
- 8. Define Paging

PART-B

Answer all the questions. Each question carries equal marks.

 $(5 \times 10 = 50)$

UNIT-I

9. a) Function of Operating System?

(OR)

b) Write about Workstations and hand held devices operating system?

UNIT-II

10. a) Explain preemptive scheduling algorithms?

(OR)

b) Explain the system view of the process and resources & process hierarchy

UNIT-III

11. a) Explain the necessary and sufficient conditions for deadlock?

(OR)

b) Define the process synchronization & it's types

UNIT-IV

12. a) Explain the physical and virtual address space

(OR)

b) Explain the different memory allocation strategies?

UNIT-V

13. a) Explain the security policy mechanism & protection

(OR)

b) Explain the procedure of small application development using android development framework?