

D 120062**(Pages : 2)****Name.....****Reg. No.....****SIXTH SEMESTER (CBCSS—UG) DEGREE EXAMINATION
MARCH 2025****B.C.A./B.Sc. Computer Science****BCA 6B 12 / BCS 6B 12—OPERATING SYSTEMS****(2019 Admission onwards)****Time : Two Hours****Maximum : 60 Marks****Section A (Short Answer Type Questions)***Answer all questions.**Each correct answer carries a maximum of 2 marks.**Ceiling 20 marks.*

1. What do you mean by an Operating System ?
2. What do you mean by Serial Processing ?
3. Draw the process state diagram.
4. What is meant by mutual exclusion ?
5. Explain the meaning of the commands cat, cp, pwd and cd.
6. Explain the relational operators in linux shell programming ?
7. What is meant by SJF scheduling ?
8. What do you mean by a critical section ?
9. What is meant by thrashing ?
10. Differentiate between logical address and physical address ?
11. What are the features of a mobile os ?
12. What do you mean by swapping ?

Turn over

Section B (Short Essay Type Questions)

*Answer **all** questions.*

Each correct answer carries a maximum of 5 marks.

Ceiling 30 marks.

13. Explain the operations on processes.
14. Explain the informational commands used in linux shell programming.
15. What is meant by free space management ?
16. Explain the concept of virtual memory ?
17. What do you mean by a semaphore ?
18. Explain the scheduling criteria.
19. What are the different file permissions in linux shell programming ? How can you set the permissions ?

Section C (Essay Type Questions)

*Answer any **one** question, correct answer carries 10 marks.*

20. Explain the dining philosophers problem in detail.
21. What do you mean by paging ?

(1 × 10 = 10 marks)