

Reg. No. :

Name :

IV Semester B.C.A. Degree (CBCSS - Reg/Supp./Imp.) Examination, April 2019 (2014 Admission Onwards) Core Course 4B 08 BCA : OPERATING SYSTEM

Time : 3 Hours

Max. Marks: 40

SECTION - A

1. One word answer.

(8×0.5=4)

- a) Interval between the time of submission and completion of a job is called
- b) A scheduler which selects processes from a mass storage device is called
- c) The OS of a computer serves as a software interface between the user and the
- d) _____ algorithm is used to avoid deadlock in a system.
- e) TLB stands for
- f) _____ is the command used to make a directory.
- g) In a disk, a track is further divided into
- b) ______ occurs when a computer's virtual memory subsystem is in a constant state of paging.

SECTION - B

Write short notes on any seven of the following questions.

 $(7 \times 2 = 14)$

- 2. Write a note on swapping.
- 3. Define real time operating system.
- 4. Explain page fault.
- 5. What is latency time ?

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- 6. Define spooling.
- 7. What is memory compaction ?
- 8. Define threads.
- 9. Write the basic principle of SJF scheduling policy.
- 10. What is ASM ?
- 11. What is a deadlock ?

SECTION - C

Answer any four of the following questions.

- 12. What are the necessary conditions for a deadlock ?
- 13. What is demand paging ? Discuss the steps involved in handling a page fault.
- 14. With a neat diagram, explain the process life cycle.
- 15. List the components of a linux system.
- 16. Discuss any three general information models.
- 17. Discuss time sharing operating system.

SECTION - D

Write an essay on any two of the following questions.

 $(2 \times 5 = 10)$

 $(4 \times 3 = 12)$

- 18. Discuss virtual memory.
- 19. Explain the various scheduling algorithms.
- 20. Explain I/O schedulers and I/O device handlers.
- 21. Discuss the following :
 - a) Resource allocation graph
 - b) Segmentation.