IV Semester B.Sc. Degree (CBCSS – Reg./Supple./Imp.) Examination, May 2017
(2014 Admn. Onwards)
GENERAL COURSE IN COMPUTER SCIENCE
4A14CSC : Operating System

Time : 3 Hours   Max. Marks : 40

SECTION – A

1. **One** word answer.   (8×0.5=4)

   a) TLB stands for _____

   b) In _____ systems, rigid time requirements have been placed on the operation of processor.

   c) _____ module gives control of the CPU to the process selected by the short-term scheduler.

   d) The address seen by the memory unit is called _____

   e) _____ is a memory management scheme that supports user view of memory.

   f) The situation in which CPU spend more time paging than executing is called _____

   g) Deadlocks are described in terms of a directed graph called _____

   h) In _____ page replacement algorithm, the page that will not be used for the longest period of time is replaced.

SECTION – B

Write short notes on **any seven** of the following questions.   (7×2=14)

2. What are multiprocessor systems ?

3. List any two activities of operating system in connection with process management.

4. What is a best-fit allocation algorithm ?

5. Explain external fragmentation.

6. Write notes on context switch.

7. Write short notes on TLB.

8. Write notes on swapping.

9. What are the methods for recovering from deadlock ?

10. List the advantages of virtual memory.

11. List the various CPU scheduling criteria.

SECTION – C

Answer **any four** of the following questions.   **(4×3=12)**

12. Explain process states.

13. Explain resource allocation graph with example.

14. Explain banker's algorithm for deadlock avoidance.

15. Explain SJF scheduling with an example.

16. Write notes on demand paging.

17. Write notes on multiprogrammed systems.

18. Explain SSTF disk scheduling with an example.

SECTION – D

Write an essay on **any two** of the following questions.   **(2×5=10)**

19. Explain any three page replacement algorithms with examples.

20. Explain in detail about paging and segmentation.

21. Explain any four disk scheduling algorithms.

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