## K18U 1007

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Reg. No. : .....

Name : .....

IV Semester B.C.A. Degree (CBCSS - Reg./Sup./Imp.) Examination, May 2018 (2014 Admn. Onwards) Core Course 4B08BCA : OPERATING SYSTEM

Time: 3 Hours

# SECTION - A

1. One word answer :

a) The address seen by the memory unit is called

b) is a program is execution.

c) \_\_\_\_\_ page replacement algorithm suffers from Belady's anomaly.

d) An OS component that is responsible for hiding the complexity of an I/O device is known as

e) Degree of multiprogramming is controlled by \_\_\_\_\_ scheduler.

f) What does PCB stands for ?

q) A thread is a \_\_\_\_\_ process.

h) The number of processes completed per unit time is known as

#### SECTION - B

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

2. What is meant by concurrent processing ?

3. What are virtual devices ?

4. What are overlays ?

5 What is seek time?

6. What is the principle of optimality with reference to page replacement ?

 $(8 \times 0.5 = 4)$ 

Max, Marks: 40

#### K18U 1007

7. What is a safe state ?

8. What is LFS ?

9. Write notes on any two Linux shells.

10. What is multiprogramming ?

11. Define Kernal.

#### SECTION - C

Answer any four of the following questions :

12. Compare internal and external fragmentation.

13. Write about various process states.

14. Explain OS structure.

15. List the major features of Linux.

16. Briefly describe spooling technique.

17. Explain the basic concepts of time sharing systems.

#### SECTION - D

Write an essay on any two of the following questions.

(2×5=10)

18. Explain I/O management schemes.

- Discuss contiguous memory allocation, paging and any three page replacement algorithms.
- 20. Define and discuss the characteristics of deadlock. Explain how deadlock can be detected.
- 21. Describe about process scheduling.

 $(4 \times 3 = 12)$