

BCA 2nd Semester Exam., 2021

OPERATING SYSTEM AND UNIX

Time : 3 hours

Full Marks : 60

Instructions :

- (i) The marks are indicated in the right-hand margin.
- (ii) There are **SEVEN** questions in this paper.
- (iii) Attempt **FIVE** questions in all.
- (iv) Question Nos. 1 and 2 are compulsory.

1. Answer any six of the following : 2×6=12

(a) What is the relationship between operating systems and computer hardware?

(b) What is the difference between job and process?

(c) What is batch processing system?

(d) Define real time system.

(e) Define process.

(f) Define thread.

(g) What is memory management?

(h) Define deadlock.

(i) What do you mean by paging?

(j) What is scheduling?

2. Answer any *three* of the following :  $4 \times 3 = 12$

(a) What is the difference between kernel mode and user mode?

(b) What criteria affect the scheduler's performance?

(c) When does a page fault occur?

(d) What are the advantages and disadvantages of batch processing system?

(e) Write some features of Linux Operating System.

3. Describe system calls and its type. 12

4. Describe the difference among user level, kernel level and hybrid level thread. 12

5. Discuss the methods for handling deadlock. 12

6. Explain the various address translation techniques in paging. 12

7. Discuss the file management technique of Linux. 12

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