

KNT/KW/16/5131

Bachelor of Science (B.Sc.) Semester—III (C.B.S.) Examination

COMPUTER SCIENCE (Operating Systems)

Paper—II

Time : Three Hours]

[Maximum Marks : 50

N.B. :— (1) **ALL** questions are compulsory and carry equal marks.

(2) Illustrate your answers with suitable examples and diagrams wherever necessary.

EITHER

1. (A) Explain the concept of Concurrent Process. 5
- (B) What is the difference between Process and Thread ? 5

OR

- (C) Explain Round Robin algorithm in brief. 5
- (D) Explain the structure of Operating System. 5

EITHER

2. (A) What are the conditions for deadlock ? 5
- (B) Explain Mutual exclusion in detail. 5

OR

- (C) Explain Hold and Wait Condition in brief. 5
- (D) Explain Queuing Analysis. 5

EITHER

3. (A) Explain the concept of dynamic loading and dynamic linking. 5
- (B) Explain the concept of segmentation with paging. 5

OR

- (C) Explain the method of multiple partition memory management. 5
- (D) Explain the term swapping. 5

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(Contd.)

EITHER

4. (A) Explain different aspects of I/O devices. 5
- (B) What is I/O buffering ? Explain circular buffering in brief. 5

OR

- (C) Explain File Allocation Method in brief. 5
- (D) Explain the term user authentication. 5

EITHER

5. (A) What is the difference between process and program ? 2½
- (B) Explain circular wait with example. 2½
- (C) What do you mean by logical address ? 2½
- (D) Explain the term secret key cryptography. 2½