

Seat	
No.	

S. Y. B. Tech. (Part - II) (Semester - IV) (CBCS)

Examination, May - 2025

Computer science and Engineering AIML

Operating Systems

Sub. Code : 86170

Day and Date : Wednesday, 21/05/2025

Total Marks : 70

Time : 10.30 a.m. to 1.00 p.m.

- Instructions :**
- 1. Question no. 6 is compulsory.**
 - 2. Solve any four questions from Q. No. 1 to Q. No. 5.**
 - 3. Figures to the right indicate full marks.**
 - 4. Assume suitable data wherever necessary.**

- Q.1.** a) Explain Evolution of Operating System. [8]
b) Explain types of operating system. [7]
- Q.2.** a) Explain Design and Implementation of Operating System. [8]
b) Draw and explain PCB. [7]
- Q.3.** a) Draw and explain schematic of Scheduling. [8]
b) What is deadlock? Explain two process deadlock with an example. [7]
- Q.4.** a) Draw and explain file system and the IOCS. [8]
b) Explain operations on files. [7]
- Q.5.** a) Draw and explain directory organized as a B+ tree. [8]
b) Draw and explain architecture of UNIX System. [7]

Q.6. Write short notes on: (Any two)

[10]

- a) Static and dynamic memory allocation.
- b) Device Driver
- c) Comparison of paging and segmentation

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