D 90181 (Pages : 2) Name.....

Reg. No.....

FIFTH SEMESTER B.TECH. [ENGINEERING] (09 SCHEME) DEGREE EXAMINATION, NOVEMBER 2015

CS/IT/PTCS 09 504—OPERATING SYSTEMS

Time : Three Hours Maximum : 70 Marks

Part A

Answer **all** *the questions.*

1. Is OS a resource manager ? If so justify your answer.
2. What is process control block ?
3. What is critical section problem ?
4. What is virtual memory ?
5. What are the attributes of a file ?

(5 × 2 = 10 marks)

Part B

Answer any **four** *questions.*

6. Explain design factors of Operating System.
7. Explain various storage devices.
8. Write about Semaphores.
9. Explain dynamic loading and dynamic linking.
10. What are the various file operations ?
11. Write note on Efficiency and usage of disk space.

(4 × 5 = 20 marks)

Part C

Answer **all** *the questions.*

12. (a) Explain disk management in detail.

Or

(b) Explain the various threading issues.

13. (a) Write about the various CPU scheduling algorithms.

Or

(b) Explain the Banker's algorithm for deadlock avoidance.

Turn over

14. (a) Explain about configures memory allocation.

Or

(b) Explain the basic concepts of segmentation.

15. (a) Explain the various Directory structures.

Or

(b) Write notes about the protection strategies provided for files.

(4 × 10 = 40 marks)