F 3658 (Pages : 2) Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, NOVEMBER 2014

Fifth Semester

Branch : Computer Science and Engineering / Information Technology

CS 010 505 /IT 010 504 – OPERATING SYSTEMS (CS, IT)

(New Scheme – 2010 Admission onwards)

[Regular/Improvement/Supplementary]

Time : Three Hours Maximum : 100 Marks

Part A

Answer **all** *questions.*
Each question carries 3 *marks.*

1. What is operating system?
2. What is process concept?
3. What is the process synchronization?
4. Write the importance of memory management?
5. What is file concept?

(5 × 3 = 15 marks)

Part B

Answer **all** *questions.*
Each question carries 5 *marks.*

6. State the operating system operations.
7. Write the interprocess communication.
8. State the deadlock characterization.
9. Explain the page replacement algorithms.
10. Write the directory implementation in detail.

(5 × 5 = 25 marks)

Part C

Answer **all** *questions.*
Each question carries 12 *marks.*

11. (a) Explain in detail about the time sharing and real time systems.

Or

(b) Write the system structures in detail.

Turn over

12. (a) Explain in detail about the process management.

Or

(b) Explain the process scheduling.

13. (a) Write the Peterson's solution and synchronization hardware in detail.

Or

(b) Briefly explain the methods for handling deadlocks.

14. (a) Explain in detail about the multi level paging.

Or

(b) Write in detail about the contiguous memory allocation.

15. (a) Explain the directory structure in detail.

Or

(b) Write the disk scheduling in detail.

(5 × 12 = 60 marks)