

**(Following Paper ID and Roll No. to be filled in your Answer Books)****PAPER ID :****Roll No.**

--	--	--	--	--	--	--	--	--	--

**M.C.A. (DUAL DEGREE)****Theory Examination (Semester-II) 2015-16****OPERATING SYSTEM****Time : 3 Hours****Max. Marks : 100****SECTION – A**1. Attempt **all** question parts: **10 × 2 = 20**

- (a) Define operating system.
- (b) What are the advantages of cooperating processes?
- (c) What is a system call?
- (d) What is the difference between primary memory and secondary memory?
- (e) Define monitor. What does it consist of?
- (f) What is the advantage of single continuous memory allocation?
- (g) What is demand paging?
- (h) Mention any four attributes of file system.
- (i) Differentiate between relative path Vs absolute path.
- (j) What is seek time & latency time?

**SECTION – B**2. Attempt **any five** questions: **5 × 10 = 50**

- a) Describe briefly about Inter Process Communication.
- b) What is semaphore? Explain its two parameter.
- c) Explain free space management in detail.
- d) Write the characteristic of I/O devices.
- e) Explain Disk Scheduling in detail with examples.
- f) Explain Banker's Deadlock Avoidance algorithm with suitable example.
- g) What is the role Access matrix for operation? Explain.
- h) Explain Directory structure briefly.

**SECTION – C**Attempt **any two** questions: **2 × 15 = 30**

- 3. How does deadlock avoidance different from deadlock prevention? Write the deadlock avoidance algorithm in detail.
- 4. Explain CPU scheduling in detail with examples.
- 5. Compare & contrast stable storage & directory storage with examples.

[www.uptunotes.com](http://www.uptunotes.com)