Roll No.

Total No of Pages: 3

6E6026

B. Tech. VI-Sem. (Main/Back) Exam., April/May-2016 **Computer Science & Engineering 6CS6.1A Advance Topics in Operating Systems** CS, IT

Time: 3 Hours

Maximum Marks: 80

Min. Passing Marks (Main & Back): 26

Instructions to Candidates:-

Attempt any five questions, selecting one question from each unit. All Questions carry equal marks. Schematic diagrams must be shown wherever necessary. Any data you feel missing may suitably be assumed and stated clearly.

Units of quantities used/ calculated must be stated clearly.

Use of following supporting material is permitted during examination. (Mentioned in form No. 205)

1. NIL

2. NIL

UNIT-I

Give brief introduction of four advanced operating systems. Q.1 (a)

[8]

[8]

(b) Discuss clock synchronization in distributed system of agreement algorithm.

OR

Give account of three synchronization problems.

[8]

Describe timestamp base concurrency control algorithm.

[8]

<u>UNIT-II</u>

Q.2	(a)	Describe model of deadlock each with example.	[8]
	(b)	What are the advantages & disadvantages of distributed shared memory	? [8]
Q.2	(a) (b)	OR Write short notes on RAID. WSN on security issues & method in Advance Operating System.	[8]
	(-)	UNIT-III	5-3
Q.3	(a)	Explain in detail Kernel structure of LINUX operating system.	[8]
	(b)	WSN on process scheduling in LINUX operating system.	[8]
		<u>OR</u>	
Q.3	(a)	Explain the network file system of LINUX in detail.	[8]
	(b)	Write short note on security system of LINUX O.S.	[8]
		<u>UNIT-IV</u>	
Q.4	(a)	Explain the FAT & NTFS in context with windows OS.	[8]
	(b)	Explain the Kernel structure of windows OS.	[8]
<u>OR</u>			
Q.4	(a)	Write short note on POSIX.	[8]
	(b)	Write short note on process scheduling in windows.	[8]
[6E6	026]	Page 2 of 3	[2780]

UNIT-V

- Q.5 (a) Write short note on Compression Technique in multimedia operating system. [8]
 - (b) Write short note on Real Time scheduling in multimedia operating system. [8]

<u>OR</u>

- Q.5 (a) Explain real time scheduling in multimedia operating system.
 - (b) Write short note on disk scheduling algo in multimedia operating system. [8]

[2780]