AN/2013

Reg. No.

(To be filled by the candidate)

09CS51

(2009 **Onwards**)

COIMBATORE INSTITUTE OF TECHNOLOGY

(Government Aided Autonomous Institution)

COIMBATORE 641 014

B.E. DEGREE EXAMINATIONS, NOVEMBER **2013** (Fifth Semester)

COMPUTER SCIENCE AND ENGINEERING BRANCH

09CS51 OPERATING SYSTEMS (Common to B.Tech. IT V Sem. 09/T51)

Time: 3 Hours

1. www.*

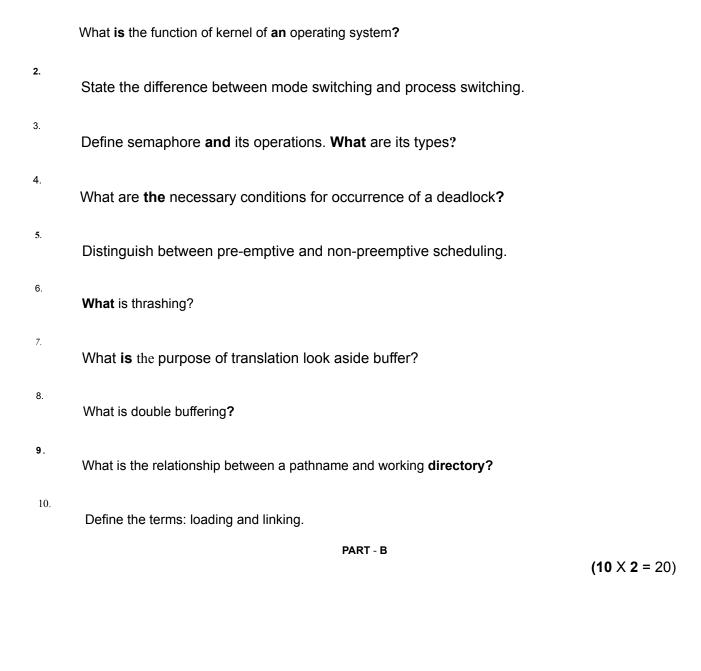
Max: 75 Marks

INSTRUCTIONS

- 1.
- 2.

Answer ALL questions in PART A and **as per** choice **in** PART **B.**PART **A and** PART **B** questions **should** be answered **separately** in the same answer sheet.

3. Question No. 11 is compulsory.



11. a) Explain the benefits of microkernel organization and its performance.	
b) Distinguish between the function of user level threads and kernel level threads .	
12. a) Which type of process is generally favored by a multilevel feedback queuing scheduler. A processor bound or an I/O bound process. Briefly explain why?	
•	(11 = 55)
	(6)
	(5)
	(5)
	(6)
b) Explain the following process scheduling algorithms with example.(i) Round Robin (ii) Fair share scheduling.	
(OR)	
13. a) Illustrate the hardware solution for enforcing mutual exclusion.	(5)

b) Write and Explain bankers' algorithm for deadlock avoidance . Explain with example	e. (6)
	Contd
14. a) Write short notes on buddy system.	
b) Explain various page replacement policies used .	
(OR)	
15. a) Explain paging and segmentation and Illustrate the address translation mechanism used in it.	
b) Write a note on Resident set management.	
16. a) Discuss about I/O buffering system.	
b) Write a short note on File Directories.	(5)
	(6)
	(6)
	(5)
	(6)
	(5)
(OR)	. ,
17. a) Explain the various disk scheduling algorithms and compare their performance.	
	(6)
b) Write a short note on secondary storage management.	(5)
19 a) Explain File system architecture	
18. a) Explain File system architecture.	(6)

b) Discuss the functions of macro processor.	(5)
(OR)	
19. a) Explain the design of Macroprocessor.	(5)
b) List and explain blocking methods.	(6)
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