Reg. No. : | | | | | | | | | | |

Question Paper Code: 53205

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2019

Third Semester

Computer Science and Engineering

01UCS305 - OPERATING SYSTEMS

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions.

PART A - (10 x 2 = 20 Marks)

1. What is meant by user visible processor registers?
2. Define interrupt. How will you handle interrupt?
3. What is meant by context switch?
4. What is non - preemptive scheduling? Write two examples for non-preemptive scheduling algorithms
5. What is Belady's anomaly?
6. Define effective access time.
7. What are the functions of virtual file system (VFS)?
8. What is disk stripping?
9. What is meant by Para virtualization?
10. List out the components of DNS.

PART - B (5 x 16 = 80 Marks)

11. (a) (i) Explain briefly about the operating system services. (8)

(ii) What is mean by Thread? Explain the different types of Threads. (8)

Or

(b) (i) Discuss about the services provided by the operating system. (8)

(ii) What are the different types of Multithreading models? Explain. (8)

12. (a) With a help of diagram discuss the structure of a monitor. (16)

Or

(b) What is meant by a process? Explain states of process with neat sketch and discuss the process state transition with a neat diagram. (16)

13. (a) Give the basic concepts about paging and give a note on techniques for structuring the page table. (16)

Or

(b) Discuss the hardware support for segmentation and explain the mapping of logical address to physical address. (16)

14. (a) Enumerate why file protection is necessary? Write notes about the protection strategies provided for files. (16)

Or

(b) Discuss about different types of disk scheduling algorithm. (16)

15. (a) Outline the concept kernel I/O subsystem. (16)

Or

(b) Write notes about disk management and swap-space management. (16)