

University of Mumbai
Examination 2020

Program: BE Information Technology

Curriculum Scheme: Revised 2016

Examination: Second Year Semester IV

Course Code: ITC403 and Course Name: Operating System

Time: 1hour

Max. Marks: 50

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Note to the students:- All the Questions are compulsory and carry equal marks .

Q1.	A process is:
Option A:	Data of Program
Option B:	Code of Program
Option C:	Programming logic
Option D:	Program in execution
Q2.	Process control block is the data structure used for:
Option A:	Process Logic
Option B:	Process Context
Option C:	Processor specifications
Option D:	Process Arithmetic
Q3.	Which of the following is true for priority scheduling?
Option A:	Shortest process executes first
Option B:	Shortest process executes last
Option C:	High Priority process executes first
Option D:	High Priority process executes last
Q4.	Which of the following is not a state of a process
Option A:	Running
Option B:	Waiting
Option C:	Queuing
Option D:	Ready
Q5.	Which of the following is true for processes?
Option A:	Size of process is decided by programmer
Option B:	Processes are created and terminated.
Option C:	Process state transition never takes place
Option D:	A thread is made up of processes
Q6.	The scheduling policy SRT stands for:
Option A:	Simplest Remaining Task

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Option B:	Simplest Remaining Time
Option C:	Shortest Rounded Task
Option D:	Shortest Remaining Time
Q7.	If round robin scheduling algorithm is used, the average turnaround time for 5 process arriving at the same time $t=0$, having same execution time 10 units is:
Option A:	95.5 units
Option B:	50 units
Option C:	85.5 units
Option D:	100 units
Q8.	Semaphores are a solution for
Option A:	Deadlocks
Option B:	Mutual exclusion
Option C:	Ensuring Priority
Option D:	Computational Speedup
Q9.	Banker's algorithm is a used for _____.
Option A:	Deadlock Correction
Option B:	Mutual Exclusion
Option C:	Deadlock Avoidance
Option D:	Deadlock Prevention
Q10.	Swapper access which type of memory
Option A:	Primary and Pen drive
Option B:	Primary and Shared
Option C:	Primary and Secondary
Option D:	Primary and Magnetic
Q11.	Virtual Memory is type of _____.
Option A:	Physical memory
Option B:	Conceptual Memory
Option C:	Cache memory
Option D:	Optical Memory
Q12.	Segmentation suffers from:
Option A:	Internal fragmentation
Option B:	External fragmentation
Option C:	Both internal and external fragmentation
Option D:	Partial fragmentation
Q13.	Continuous memory allocation does not use:
Option A:	First fit
Option B:	Last fit
Option C:	Best fit

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Option D:	worst fit
Q14.	When page size is 1K and Base address is 2K, the physical address of logical address ABCD in hex is
Option A:	13DC
Option B:	23CD
Option C:	BCD
Option D:	ACD
Q15.	Which of the following is not an advantage of distributed system
Option A:	Resource Sharing
Option B:	Computational Speedup
Option C:	Reliability
Option D:	Simple System Design
Q16.	In the sequential access method, information in the file is processed _____.
Option A:	One disk after the other, record access doesn't matter
Option B:	One record after the other
Option C:	One text document after the other
Option D:	One bit after the other
Q17.	To access the services of operating system, the interface is provided by the _____.
Option A:	System calls
Option B:	API
Option C:	Assembly Instructions
Option D:	Library
Q18.	A _____ assigns only a few essential functions to the kernel, and other OS services are provided by processes.
Option A:	Monolithic Architecture
Option B:	Layered Architecture
Option C:	Microkernel architecture
Option D:	Multithreading
Q19.	_____ is a technique in which a process, executing an application, is divided into threads that can run concurrently
Option A:	Multiprogramming
Option B:	Multiprocessing
Option C:	Multitasking
Option D:	Multithreading
Q20.	Contiguous file allocation suffers from _____
Option A:	Internal fragmentation

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Option B:	External fragmentation
Option C:	Thrashing
Option D:	Page fault
Q21.	Which of the following activity is performed by OS in connection with process management?
Option A:	Scheduling processes and threads on the CPUs
Option B:	Deciding which processes or parts of processes and data to move into and out of memory
Option C:	Creating and deleting directories to organize files
Option D:	Keeping track of which parts of memory are currently being used and who is using them
Q22.	Which of the file allocation method has dedicated block/s to store pointers?
Option A:	Contiguous allocation
Option B:	Linked allocation
Option C:	Indexed allocation
Option D:	Random allocation
Q23.	_____ is the time for the disk arm to move the heads to the cylinder containing the desired sector.
Option A:	Rotational latency
Option B:	Seek time
Option C:	Access time
Option D:	Average access time
Q24.	In _____ algorithm, the disk arm starts at one end of the disk and moves toward the other end, servicing requests as it reaches each cylinder, until it gets to the other end of the disk.
Option A:	SSTF
Option B:	LOOK
Option C:	SCAN
Option D:	FCFS
Q25.	SSTF suffers from _____
Option A:	Slow performance
Option B:	Starvation
Option C:	Compaction
Option D:	Fragmentation