UNITIII			
	PART-A (Multiple Choice Questions)		
Q. No	**Questions**	**Course Outcome**	**Competence BT Level**
1	Parallelism representation is critical to the success of ---------- **a)High-performance computing**. b)Low-performance computing c)Scaling d)Vectorization	CO4	BT1
2	Parallel programming through a combination of ----------and ---------- **a.Patterns, examples** b.Algorithms , flowcharts c.Models , methods d.Classes ,objects	CO4	BT1
3	What is multithreaded programming? a) It's a process in which two different processes run simultaneously b) **It's a process in which two or more parts of same process run simultaneously** c) It's a process in which many different process are able to access same information d) It's a process in which a single process can access information from many sources	C04	BT1
4	Which of these are types of multitasking? a) Process based b) Thread based c) **Process and Thread based** d) Task Based	CO4	BT2
5	What will happen if two threads of the same priority are called to be processed simultaneously? a) Anyone will be executed first lexographically b) Both of them will be executed simultaneously c) None of them will be executed d) **It is dependent on the operating system**	CO4	BT2
6	Which of these statements is incorrect?	CO4	BT2

	a) By multithreading CPU idle time is minimized, and we can take maximum use of it b) By multitasking CPU idle time is minimized, and we can take maximum use of it c) Two thread in Java can have the same priority d) **A thread can exist only in two states, running and blocked**		
7	Identify the technique that allows more than one program to be ready for execution and provides the ability to switch from one process to another. a) multitasking b) multiprocessing c) multitasking d) **multiprogramming**	CO4	L2
8	The technique that increases the system's productivity. a) multiprogramming b) multitasking c) multiprocessing d) single-programming	CO4	L1
9	_____is a property in which more than one operation can be run simultaneously but it doesn't mean it will be. a. Concurrency b.Semaphore c.Mutual exclusion d.parallel process	CO4	L1
10	_____ is a light-weight cooperatively-scheduled execution unit.	CO4	L3

	a. gevent.Greenlet b. gevent.spawn() c.gevent.spawn_later() d.gevent.spawn_raw()		
11	Which keyword is used to define methods in Python? (a) function (b) def (c) method (d) All of these	CO4	L2
12	_____is a builtin python module where all possible types are defined a) overload b)typing c)function d)literal	CO4	L2
13	_____type represents a specific value of the specific type a) overload b) typing c) literal d) None of the above	CO4	L1
14	_____ is required to define multiple function declarations with different input types and results. a) overload	CO4	L1

	b) typing c) literal d) None of the above		
15	Which among the following is not the blocking objects for task Synchronization. a) Events b) Mutexes and semaphores c) waitable timers d) stack		
16	Which among the following is not the Synchronization primitives in python. a) Lock b) M-Lock c) Semaphores d) R-lock		
17	Which is/are the Method for Programming Parallel: a) Message Passing b) Shared Memory c) Data Parallel d) all the above		
18	Which among the following is not the Parallel programming model. a) Phase Parallel b) Divide and Conquer c) Pipe line d) Backtracking		
19	Multi Threading can be achieved by importing which library in python a) threading b) threaded c) thead		

	d) Multi thread		
20	Process and Pool class models follows _____ policy for scheduling and execution. a) LIFO-last in first out b) FIFO-first in first out c) LRU-least recently used d) LFU- least frequently used		
21	Which among the following is not Pure Function. a) strlen() b) pow() c) sqrt() d) printf()		
22	Which among the following is not Impure Function. a) strcpy() b) printf() c) rand() d) time()		
23	Which among the following is not an mutable data type? a) List b) bool c) dictionary d) set		
24	Which among the following is not an immutable data type? a) List b) bool c) string d) tuple		
25	Which of the following is/are function programming tool: a) filter(function, sequence) b) map(function, sequence)		

	c) reduce(function, sequence) d) all the above		
PART B (4 Marks)			
1	Differentiate parallel programming with functional programming	CO4	L2
2	Explain about Multithreading	CO4	L1
3	Explain about Multiprocessing.	CO4	L1
4	Demonstrate Multiprocessing module in Python	CO4	L3
5	Describe about Process class.	CO4	L2
6	Design a Pool class in Python	CO4	L3
7	State Concurrent programming paradigm.	CO4	L1
8	Compare multiprocessing and multitasking.	CO4	L2
PART C (12 Marks)			
1	Write a python program to implement the producer consumer problem.	CO4	L3
2	Implement the concept “Pool class” by importing a package pool	CO4	L3
3	Write a python program to implement the dining philosopher problem.	CO4	L3
4	Explain the differences between multithreading and multiprocessing with an example?	CO4	L1
5	Compare Concurrent programming paradigm and functional programming paradigm with example program.	CO4	L2