## **SLR-SR-19**

Seat	Set	D
No.	Set	

	B.C		(CBCS) Examination Mar/Apr-2018 ING SYSTEM	
Time	: 2½ Ho	urs	Max. Marks: 7	0
Instr	uctions	: 1) All Questions are compulsor 2) Figures to the right indicate		
Q.1	•	oose the correct alternatives:  To access the services of opera	ating system, the interface is provided by the	0
		a) System calls c) Library	<ul><li>b) API</li><li>d) Assembly instructions</li></ul>	
	2)	operating systems system interactively at the same a) Batch c) Real-time	s allows many users to use a computer e time. b) Multiprogramming d) Time-Sharing	
	3)	•	manipulate the same data concurrently and epends on the particular order in which the b) Entry Section d) Synchronization	
	4)	LRU stands for  a) Light Repeat Unit c) Last Recent Used	<ul><li>b) Least Recently Used</li><li>d) Local Recent Used</li></ul>	
	5)	With a page is brown is made to a location on that part a) Prepaging c) Page buffering	ight into main memory only when a reference age. b) Demand paging d) Swapping	
	6)	is a Memory-Managaddress space of a process to be a) Paging c) Fragmentation	•	
	7)	•	to a partition due to the fact that the block of a partition, is referred to as  b) Internal fragmentation d) Dynamic fragmentation	
	8)	are a set of blocked waiting to acquire a resource he a) Deadlocks c) Bankers	d processes each holding a resource and eld by another process. b) Mutual Exclusion d) All the these	
	9)	Which scheduling policy is best a) First come first served c) Round Robin	suited for time-sharing operating systems? b) Shortest Job First d) None of these	

	10) A process is selected from the que be executed.	eue by the	scheduler, to	
		Wait, long term Ready, long term		
Q.1	<ul> <li>B) State whether True or False:-</li> <li>1) In a fixed partition system, main memory is of the same size.</li> <li>2) One of the disadvantages of the priority schelead to some low priority process waiting ind</li> <li>3) A process in the running state is currently be</li> <li>4) Virtual memory space is always smaller than</li> </ul>	eduling algorithm is definitely for the CPI eing executed by the	that: it can J. e CPU.	04
Q.2	<ul> <li>Solve any seven from the following.</li> <li>a) What are components of operating system?</li> <li>b) Define Resource Allocation Graph?</li> <li>c) What is multilevel Queue scheduling?</li> <li>d) What is Swapping?</li> <li>e) What is Compaction?</li> <li>f) List out File Types.</li> <li>g) Define real time OS.</li> <li>h) Define layered structure.</li> <li>i) Define thread and list its types.</li> </ul>			14
Q.3	<ul> <li>A) Solve any two of the following.</li> <li>1) Explain short term and Long term scheduler.</li> <li>2) Explain File Protection.</li> <li>3) Explain virtual machine.</li> </ul>			10
	B) Explain Critical Region.			04
Q.4	<ul> <li>Answer any two from the followings:-</li> <li>a) Explain Banker Algorithms with example.</li> <li>b) Consider the following page reference string: Reempty</li> <li>1, 2, 3, 4, 2, 1, 5, 6, 2,1,2, 3, 7, How many page faults would occur for the LRU acceptable.</li> <li>c) Explain dining philosopher problem.</li> </ul>	, 6, 3, 2, 1, 2, 3	3, 6.	14
Q.5	<ul> <li>Answer any two from the followings:-</li> <li>a) Explain segmentation in details.</li> <li>b) Example semaphore in details.</li> <li>c) Consider the all the following 5 processes arrive burst time are as follows. Solve FCFS, SJF and</li> </ul>	RR (quantum = 10	ms)	14

Process	Burst Time (ms)
P1	10
P2	29
P3	3
P4	7
P5	12

algorithm would give the minimum average waiting time?

scheduling algorithms for the set of processes. Draw Gantt chart. Which