[A	Unit of Vivekananda Vidy	i <b>neering &amp; Technology,f</b> vavardhaka Sangha Puttur	®]						
Affiliated to VTU, Belagavi & Approved by AICTE New Delhi									
CRM08	Rev 1.10	<cse></cse>	<23/05/2021>						

## CONTINUOUS INTERNAL EVALUATION- 1

	ot:CSE Se e:25/05/2021 Tin		$\frac{4}{A \& B}$		erating Sys arks: 50	tems		ode:18 tive:N	
	te: Answer any 2					from each part.	Elec	uve.r	(
Q			Qu	iestions			Marks	RBT	CO
N			РАБ	RTA					
	Explain role of operating system from different view points. Explain the dual mode operation of an operating system.							L2	CO
	b Explain the UNIX system structure and layered approach structure of an operating system.							L2	CO
c	c With neat diagram explain the concept of virtual machine,							L2	CO
				OR					
2 a	a Distinguish between the following terms: i) Multiprogramming and multitasking ii) Multiprocessor systems and clustered systems.						9	L2	CO
b	b Compare and contrast short term, medium term and long term scheduling.							L1	CO
c	c Describe the implementation of inter-process communication using shared memory and message passing techniques .							L2	CO
	1		Р	ART B				1	
3 a	Draw the Gantt	Chart a	nd Calcula	ate average	waiting ti	me and turn	9	L3	CO
	around time fo lower number =		-	napshot of	processes	using (consider			
	1.Preemptive p	riority 2	2. Preempt	tive SJF.(SI	RTF)				
	3. Round Robir	n(TQ=2)	ms)						
		Process	Burst Time	Arrival Time	Priority				
		<b>p1</b>	8	0	3				
		p2	9	0	1	-			
		p3	4	3	4				
		p4	1	5	2				
b	bExplain the different multithreading issues in detail.							L2	CO
c	Draw the Gantt	Chart a	nd Calcula	ate average	waiting ti	me and turn	9	L3	CO
		r the fo	llowing si	-	-	using (consider			

				<b>College of E</b> Vivekananda	-	-		<b>hnology,Puttur</b> ha Puttur ®]	•		
		-			•		-	CTE New Delhi			
	CRM08			Rev 1.10		<(	CSE>		<23/05	/2021>	
L		<u>CC</u>	NTIN	UOUS INT	<u>rern</u>	IAL EVA	LU	ATION-1			
	1. FCFS	2. Nor	n preem	ptive SJF.	3.	Non pree	emp	tive priority			
			Process	Burst Time	Prio	rity					
			<b>p1</b>	8	5						
			p2	2	2						
			рЗ	1	3						
			p4	6	1						
				OR							
4 a	<ul> <li>a Draw the Gantt Chart and Calculate average waiting time and turn around time for the following snapshot of processes using (consider lower number = highest priority)</li> <li>1. Preemptive priority 2. Preemptive SJF.(SRTF) 3. Round Robin(TQ=2ms)</li> </ul>								9	L3	CO2
		Process	Burst T	ime Arrival	Time	Priority					
		<b>p1</b>	7	0		4					
	-	p2	6	2		3					
	-	p3	3	3		2					
	T T										
		p4	10	5		5					
h	Explain the				eat di				7	1.2	CO2
	Explain the r	multithre	ading m	odels with n		agrams.	and	furn	7	L2	
	Draw the Ga	multithre ntt Chart for the fo ighest pr	ading m and Cal ollowing iority)	odels with no	ge wa `proc	agrams. iting time esses usin	ng (c	onsider lower	7 9	L2 L3	
	Draw the Gar around time number = hi	multithre ntt Chart for the fo ighest pr 2. Non	ading m and Cal ollowing iority)	odels with no culate averag snapshot of	ge wa `proco Non j	agrams. iting time esses usin	ng (c	onsider lower	-		
	Draw the Gar around time number = hi	multithre ntt Chart for the fo ighest pr 2. Non	ading m and Cal ollowing iority) preemp	odels with ne culate averag snapshot of tive SJF. 3.	ge wa proce Non j Pr	agrams. iting time esses usin preemptiv	ng (c	onsider lower	-		
	Draw the Gar around time number = hi	multithre ntt Chart for the fo ighest pr 2. Non	ading m and Cal ollowing iority) preemp <b>rocess</b>	odels with no culate averag snapshot of tive SJF. 3. <b>Burst Time</b>	ge wa proce Non p	agrams. iting time esses usin preemptiv <b>iority</b>	ng (c	onsider lower	-		
	Draw the Gar around time number = hi	multithre ntt Chart for the fo ighest pr 2. Non	ading m and Cal ollowing iority) preemp rocess	odels with no culate averag snapshot of tive SJF. 3. <b>Burst Time</b> 3	ge wa `proco Non j Pr	agrams. iting time esses usin preemptiv iority 4	ng (c	onsider lower	-		CO2 CO2