SSN COLLEGE OF ENGINEERING, KALAVAKKAM – 603 110
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
B.E. Computer Science and Engineering
CS6801 MULTICORE ARCHITECTURES & PROGRAMMING

Date: 26-2-2018, 8.00-9.30 AM **UNIT TEST – 3** **Max. Marks: 50**
Academic Year: 2017-2018 EVEN **Batch: 2014-2018**
Semester: 8 **Faculty: Dr.DVVPrasad / K.Lekshmi**

Qn. No	Part - A	Marks	(KL,COn)
1.	What is Guided Scheduling	2	K1,CO3
2.	What are Pragmas ?	2	K1,CO3
3.	What is MPI?	2	K1,CO4
4.	Suppose comm._sz = 4 and suppose that x is a vector with n = 14 components. How would the components of x be distributed among the processes in a program that used a block-cyclic distribution with blocksize b= 2?	2	K3,CO3
5.	What is REDUCTION CLAUSE Give its Syntax.	2	K1,CO3
	Part – B Answer all questions (16+16+8)		
6.	Explain in detail the OpenMP Implementation of Odd-Even Transposition sort.	16	K2,CO3
	OR		
7.	Explain the OpenMP Program Execution model.	16	K1,CO5
8.	Explain the MPI Program Execution model.	16	K1,CO4
	OR		
9.	Write an OpenMP implementation of finding the area of a Trapezoid.	16	K2,CO3

10.	Consider the loop
	a[0] = 0;
	for(i=1; i<n; i++)
	a[i] = a[i-1] + i;
	
	There is clearly loop carried over dependency, as the value of a[i] can't be computed without the value of a[i-1]. Can you see any way to eliminate this dependency and parallelize the loop?
		8	K3,CO4

	OR		
11.	Write a note on OpenMP Directives. Refer Standard Text book	8	K1,CO3

************B E S T O F L U C K************

Prepared by	

Reviewed by HoD, CSE