

Roll No



**PRESIDENCY UNIVERSITY  
BENGALURU**

**SCHOOL OF ENGINEERING  
MID TERM EXAMINATION - OCT 2023**

**Semester :** Semester V - 2021

**Course Code :** CSE3079

**Course Name :** Sem V - CSE3079 - Parellel Computing

**Program :** B. TECH

**Date :** 31-OCT-2023

**Time :** 11:30AM - 1:00PM

**Max Marks :** 50

**Weightage :** 25%

**Instructions:**

- (i) Read all questions carefully and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Scientific and non-programmable calculator are permitted.
- (iv) Do not write any information on the question paper other than Roll Number.

**PART A**

**ANSWER ALL THE QUESTIONS**

**(5 X 2 = 10M)**

1. What is meant by Concurrency?  
(CO1) [Knowledge]
2. Define the term Pipelining  
(CO1) [Knowledge]
3. Define Prefetching.  
(CO1) [Knowledge]
4. Define the term Granularity.  
(CO2) [Knowledge]
5. What are the performance metrics used to evaluate parallel programs?  
(CO2) [Knowledge]

**PART B**

**ANSWER ALL THE QUESTIONS**

**(4 X 5 = 20M)**

6. Write notes on Array Processor  
(CO1) [Comprehension]
7. Explain and Compare Tightly Coupled System and Loosely Coupled System.  
(CO1) [Comprehension]
8. Write about all the Performance Metrics  
(CO2) [Comprehension]

9. Sketch and Explain any two Internetwork connection topologies

(CO2) [Comprehension]

**PART C**

**ANSWER THE FOLLOWING QUESTION**

**(1 X 20 = 20M)**

10. i). Explain how 16 numbers are added using various granularity approach (10)  
ii). Describe about send and receiving operations in Blocking & Non-Blocking communications.(10)  
(CO2) [Application]