PRESIDENCY UNIVERSITY
BENGALURU

SCHOOL OF ENGINEERING
MID TERM EXAMINATION - APR 2023

Semester : Semester VI - 2020
Course Code : CSE3079
Course Name : Sem VI - CSE3079 - Parellel Computing
Program : CSE

Date : 15-APR-2023
Time : 9:30AM - 11:00AM
Max Marks : 60
Weightage : 30%

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 Prefetching.

(CO1) [Knowledge]

3. Mention any 4 issues in pipeline computer design.

(CO1) [Knowledge]

4. Draw the structure of tree based network

(CO2) [Knowledge]

5. Define the term Granularity.

(CO2) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS   (6 X 5 = 30M)

6. Write notes on Array Processor

(CO1) [Comprehension]

7. Explain in detail about stages of Pipelining with example?

(CO1) [Comprehension]

8. Explain Flynns Classification

(CO2) [Comprehension]

9. Sketch and Explain any two Internetwork connection toplogies

(CO2) [Comprehension]

10. Write about all the Performance Metrics

(CO2) [Comprehension]

11. Explain dependancy issues in super scalar execution.

(CO1) [Comprehension]

PART C

ANSWER ALL THE QUESTIONS   (2 X 10 = 20M)

12. Use any 3 mechanism to achieve parallelism in Uniprocessor System

(CO1) [Application]

13. Apply one to all broadcast & all to one reduction for Matrix- Vector multiplication

(CO2) [Application]