Sanjay Ghodawat University, Kolhapur

2020-21

Established as State Private University under Govt. of Maharashtra. Act No XL, 2017

EXM/P/09/00

Year and Program: T.Y.B.Tech CSE	**School of Technology**	**Department: : Computer Science and Engineering**
Course Code: CST 302	**Course Title: Computer Organization and Architecture**	**Semester : VI**
Day :Monday **Date: 07/06/2021**	**End Semester Examination**	**Time:2 Hrs.** **Max Marks:50**

Instructions: 1) All Questions are compulsory.

2)Draw neat and suitable diagrams whenever necessary.

		Marks	Bloom's Level	CO
Q.1	**Answer/Solve the following (any Two)**			
a)	Compare and Explain UMA and NUMA shared memory multiprocessors.	8	4	1
b)	What is CRAY-1 ? Explain it with neat diagram.	8	1	1
c)	Explain S-Access memory organization.	8	5	2
Q.2	**Answer/Solve the following (any two)**			
a)	Distinguish and Illustrate the features of Tightly Coupled Multiprocessor with and without private cache	8	2	3
b)	Illustrate the use of prefetching as a way of reducing latency.	8	2	2
c)	Describe the technique of scalable coherent multiprocessor model with distributed shared memory.	8	3	4
Q.3	**Answer/Solve the following (any two)**			
a)	Analyze Data dependency and Explain Bernstein's condition of parallelism in detail	9	4	4
b)	Identify and Explain levels of Parallelism in program partitioning and scheduling.	9	3	4
c)	Explain GPU architectures in detail.	9	2	4

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