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Time: 3 hrs.

ARSOCIP-710N'S PriP MAHA www.FirstRanker.com

G. II 41 www. First Ranker.com 01S81 OF ENGINF-ERMG

Eighth Semester B.E. Degree E, CAiiinatioirjir **Software Architecture**

an.2020

(08 Marks)

(04 Marks)

Max. Marks:100

Note: Answer FIVE full questions, selecting at least TWO questions from each part.

$PART _ \Delta$

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1 a	1 a. Define software architecture. What is a architecture business cycle? Explain with a neat	
	diagram.	(08 Marks)
	b. Explain the varis process recommendations as used by an architect while developing	
	software architectures.	(06 Marks)
	c. Define architectural model. reference model, reference architecture and bring t the	
	relationship between them.	(06 Marks)
2	a. Explain the process control paradigm with varis proces control definitions.	(08 Marks)

- b. What are the basic requirements for a mobile robot's architecture? How the implicit
 - invocation model handles them? c. Write a note on heterogenes arc hitectures. (04 Marks)
- a. Briefly explain the testability tactics. (07 Marks)
 - b. What are the qualities of the system? Explain the modifiability general scenario. (07 Marks)
 - c. Explain how faults are detected and prevented, using availability tactics. (06 Marks)
- a. List and explain the benefits and liabilities of pipes and filters pattern. (08 Marks)
 - b. Define architectural pattern for blackboard. Briefly explain the steps to implement the blackboard architectural pattern. (08 Marks)
 - c. Write a short note on HEARSAY II system.

PART - B

- 5 a. What do y mean by broker architecture? What are the steps involved in implementing distributed broker architecture patterns. (08 Marks)
 - b. Give the CRC cards for top level, intermediate level and bottom level PAC-agents. Highlight the limitations of PAC pattern. (08 Marks)
 - c. Depict the dynamic behavior of MVC, with any one scenario. (04 Marks)
- a. Discuss the benefits and liabilities of reflection architectural pattern and also highlight the known uses of reflection architectural pattern.
 - b. Explain in brief, the components comprising the structure of microkernel architectural pattern with OMT (Object Modeling Technique) diagram. Also draw the CRC cards for each component. (08 Marks)
 - c. Explain the steps involved in implementing the Microkernel system. (05 Marks)
- 7 a. With a neat sketch, explain the typical dynamic scenario of a proxy structure. Highlight the consequences of proxy structure. (07 Marks)
 - b. List and explain the steps to implement whole part structure. (07 Marks)
 - c. Give the structure of master slave design pattern with CRC. And discuss the variants of master slave design pattern. (06 Marks)
- a. Explain with a neat diagram, the evolutionary delivery life cycle model. (07 Marks)
 - b. Briefly explain the different steps performed while designing an architecture using the ADD method. **(07 Marks)**
 - c. Explain the three step procedure for choosing the views for yr project. (06 Marks)