

BE / VII / CBGS / IT / SA / 06/06/16
Subj - Software Engineering I: Software Architecture

QP Code : 31601

(3 Hours)

[Total Marks : 80

- i. Q. 1. Compulsory.
- ii. Attempt any three from the remaining.
- iii. Assume suitable data.

Q1	a)	Explain 4+1 view in UML	(05)
	b)	Define the following i. Architectural style ii. Architectural patterns iii. Accuracy iv. Precision v. Views	(10)
	c)	What are different types of connector based on interactive services?	(05)
Q2	a)	What types of applications are applicable for the following styles and give examples of each i. Event based ii. Pipe and filter iii. Layered vi. Blackboard vii. Mobile code	(10)
	b)	What is a mapping problem in implementation? Differentiate between one way and round trip mapping.	(10)
Q3	a)	Discuss service oriented architecture (SOA) and web services	(10)
	b)	Explain various features of xADLs used as modeling language.	(10)
Q4	a)	Discuss various analysis goals with an example.	(05)
	b)	Explain various design issues for the following non-functional properties i. Efficiency and Complexity ii. Scalability and Heterogeneity	(10)
	c)	Explain simulation based software.	(05)
Q5	a)	Explain with an example software system mobility and Architecture.	(10)

[TURN OVER

FW-Con.12193-16.

MUPD16205 K.J.SOMAIYA INSTITUTE OF ENGINEERING AND INFORMATION TECHNOLOGY, SONPET
MUPDI

	b)	Explain with the help of suitable diagram architectural trade off analysis method (ATAM).	(10)
Q6		Write a short note (Any 2)	(20)
	a)	Ambiguity, Accuracy and precision in the characterization of Architectural Models	
	b)	Domain and Style Specific ADLs	
	c)	Light weight C2 framework	
