Exam Seat No:_____ **Enrollment No:_____**

C.U.SHAH UNIVERSITY

WADHWAN CITY

University (Winter) Examination -2013

Course Name :M.Tech(CE)Sem-I **Subject Name: -Software Engineering Methodologies Duration :- 2:30 Hours**

Date : 15/1/2014 **Marks : 70**

Instructions:-

(1) Attempt all Questions of both sections in same answer book / Supplementary.
(2) Use of Programmable calculator & any other electronic instrument is prohibited.
(3) Instructions written on main answer Book are strictly to be obeyed.
(4) Draw neat diagrams & figures (If necessary) at right places.
(5) Assume suitable & Perfect data if needed.

SECTION-I

Q-1 Answer the following.

	a)	What is software engineering? Write the roles of a software engineer.	2
	b)	Enlist types of changes.	2
	c)	Compare hardware and software characteristics.	2
	d)	What is driver in unit testing?	1
Q-2	a)	Explain different types of software qualities.	5
	b)	Explain CMM.	5
	c)	Compare Coupling and Cohesion.	4

OR

Q-2	a)	Explain Layered Architecture of Software Engineering.	5
	b)	Justify: 'Which testing technique is better Black box or White box.'	5
	c)	Explain I-CASE Repository.	4
Q-3	a)	You have been appointed a project manager for a major software Product company. Your job is to manage the development of a next version of its widely used word processors software product. Because of competition, tight deadlines has been established and announced. Which team structure would you choose and why? Which software process models would you choose and why?	7
	b)	Explain Function Point Metric? Compute value of Function point for given information Number of user input: 32, Number of output: 60, Number of inquiries: 24, Number of file: 8, Number of external interface: 2. Assume weighting factor Simple for all data. And Summation of questioner is 45.	7

OR

Q-3	a)	Draw Class diagram and Use case diagram for online movie ticket booking system.	7
	b)	Explain Integration testing.	7

SECTION-II

Q-4 Answer the following.

	a)	Differentiate between Verification and validation.	2
	b)	Explain Beta Testing.	2
	c)	Compare Forward and Reverse Engineering.	2
	d)	Define Reuse in software engineering.	1

Q-5	a)	Explain Component based development methodology.	5
	b)	Explain Stack Holder.	5
	c)	Explain Web apps characteristics.	4
		OR	
Q-5	a)	Explain Clean room Software Development Method.	5
	b)	Explain Different types of Team Structure.	5
	c)	Explain COCOMO Model.	4
Q-6	a)	Explain ADL. Compare ADL with other Language.	7
	b)	Explain Cyclomatic Complexity with suitable example.	7
		OR	
Q-6	a)	Explain Different techniques for repairing interface mismatch in product line architecture.	7
	b)	Explain different myths present in Software Engineering.	7

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