С		Reg. No. :										
		Question Pap	er (Cod	e: S	542	05					
B.E. / B.Tech. DEGREE EXAMINATION, NOV 2018												
		Fourth	Sem	lester								
		Computer Scien	ce ar	nd En	gine	ering	5					
		15UCS405- SOFTW	/ARI	e en	GIN	EER	ING					
		(Regula	ation	2015	5)							
Dur	ation: Three hours	ion: Three hours Maximum: 100 Marks										
		Answer A	LL Ç	Juest	ions							
		PART A - (5	5x 1 =	= 5 N	Iarks	5)						
1.	What are attributes of good software?											CO1-
	(a) Software maintainability			(b) Software functionality								
	(c) Software development (d) Incremen						Proce	ess n	node	1		
2.	How many Scenarios are there in elicitation activities?										CO2-	
	(a) one	(b) two		(c) t	hree				(0	l) fo	ur	
3.	The importance of software design can be summarized in a single word											CO3- R
	(a) Accuracy	(b) Complexity		(c)]	Effic	iency	у		(0	l) Qi	ualit	У
4.	Behavioral testing is											CO4- R
	(a) White box testing	5		(b)	Blac	k boz	x test	ing				
	(c) Grey box testing			(d) Red box Testing								
5.	Which of the following are advantages of using lines of code (LOC) as a size-oriented metric?									CO5-		
	(a) LOC is a language independent measure											
	(b) LOC is a language dependent measure											
	(c) LOC is easily computed											
	(d) LOC can be computed before a design is completed											

PART - B (5 x 3= 15Marks)

- 6. Write short note on the model that used to develop the word-processing CO1-R software.
- 7. Identify ambiguities or omissions in the functional requirements. What CO2- Ana questions would you ask to clarify these functional requirements?
- 8. What is meant by regression testing? CO3- R
- 9. Compare alpha testing and beta testing. CO4- R
- 10. What is software evolution?

$$PART - C (5 \times 16 = 80 Marks)$$

(a) A university intends to develop an integrated student management CO1- U (16) system holding all details of registered students including personal information, courses taken, examination marks achieved and student graduation record. Develop the suitable software process model and justify for choosing that model.

Or

- (b) Describe the staged CMMI model. State its advantages and CO1- U (16) disadvantages.
- 12. (a) Describe the functional and behavioral models for software CO2-U (16) requirement process.

Or

- (b) Explore a software requirement specification (SRS) Document CO2-U (16) for Hotel Management system.
- 13. (a) What are the different architectural styles for software design and CO3- App (16) explain each style in detail

Or

- (b) Draw the level 0 and level 1 DFD for ATM system when a CO3- App (16) customer withdraws cash from the machine and explain.
- 14. (a) Discuss the types of system testing that are worthwhile for CO4-U (16) software-based systems.

Or

(b) Explain about White box testing CO4- U (16)

CO-5 App

15. (a) Apply COCOMO II method to compute all the estimates required CO5- App (16) for an embedded project of size 38,900 LOC. Use the following cost drivers: High use of software tools, very good programmer and low complexity.

Or

(b) Discuss in detail the empirical estimation models. CO5- U (16)