ROLL NO.	

Subject: SOFTWARE ENGINEERING Code: AC63/ AT63

AMIETE - CS/IT

JUNE 2013 Time: 3 Hours Max. Marks: 100

PLEASE WRITE YOUR ROLL NO. AT THE SPACE PROVIDED ON EACH PAGE IMMEDIATELY AFTER RECEIVING THE QUESTION PAPER.

NOTE: There are 9 Questions in all.

- Question 1 is compulsory and carries 20 marks. Answer to Q.1 must be written in the space provided for it in the answer book supplied and nowhere else.
- The answer sheet for the Q.1 will be collected by the invigilator after 45 Minutes of the commencement of the examination.

Q.1	C	Choose the correct or the best alternative in the following: (2×1)				
	hanges to the customer requirements and the ents change?					
		(A) Customer risks(C) Technology risks	(B) Requirements risks(D) Estimation risks			
	b.	Which of the following is a metric	for specifying non-functional requirements?			
		(A) Speed (C) POWER	(B) Line of codes(D) None of these			
	c.	Name the approach where the syst their relationships?	em is described in terms of operations and			
		(A) Model-based approach(C) Algebraic approach	(B) Interface approach(D) System modelling approach			
	d.	COTS stands for				
		 (A) Commercial-of-the-self (B) Commercial-on-the-self (C) Commercial-off-the-shelf (D) Commercial-on-the-shelf 				
	e.	architectures	s are decentralized architectures where there are			

no distinguished clients and servers.

(A) Service-oriented

(C) Middleware

(B) Distributed object

(D) Peer-to-peer

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f.	Which model shows how individ events?	lual objects change their state in response to	1				
	(A) Sequence models(C) Subsystem models	(B) State machine models(D) Object interface models					
g.	s. Software is work done to enhance software functionality, correct errors and improve the performance of software.						
	(A) Design(C) Reverse engineering	(B) Maintenance(D) Corrections					
h.	h involves using programming constructs and techniques that contribute to fault avoidance and fault tolerance.						
	(A) Extreme programming(C) Exception handling	(B) Safe programming(D) Dependable programming					
i.	In which testing the test teams have access to the source code of the system?						
	(A) Integration testing(C) Beta testing	(B) Release testing(D) Functional testing					
j.	Name the metrics that are collected by measurements made of a program i execution?						
	(A) Static (C) Project	(B) Dynamic (D) Quality					
	•	ons out of EIGHT Questions. carries 16 marks.					
a.	Define software process. Expla	in the software process model.	(8)				
b.	List the different steps of manage	gement activities.	(4)				
c.	What are the advantages of incr	remental development process?	(4)				
a.	a. Give example of the type of system models that you might create during the analysis process? (4)						
b.	o. Give the structure suggested by IEEE/ANSI 830 – 1998 for requirements documents. (4)						
c.	What do you understand by techniques in detail?	requirement elicitation? Discuss any	two (8)				

Q.2

Q.3

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- Q.4 a. What are the activities involved during the process of developing a formal specification of a sub-system interface? (6)
 - b. What is Pair Programming? What are the advantages of pair programming? (5)
 - c. What do you mean by RAD? What are the tools included in RAD environment? (5)
- Q.5 a. What are the non-functional system requirements that may be chosen for an application for a particular style and structures?(6)
 - b. Write the advantages and disadvantages of broadcast model approach? (5)
 - c. Discuss the important characteristics of distributed approach to system development? (5)
- Q.6 a. What are the key factors that one should consider while planning for software reuse? (8)
 - b. Define component? How components are different from objects? (8)
- Q.7 a. What do you mean by user interaction? What are the different styles in which forms of interaction can be classified? Give one advantage, disadvantage and an example of each style. (2+4+4)
 - b. For small and medium sized systems, what is the software engineering approach to develop tool, techniques and methods that leads to the production of fault-free software? (6)
- Q.8 a. What do you mean by software inspection? Write major advantages of inspection over testing? (5)
 - b. What are Test Principles and what are the attributes of a "good" test? (7)
 - c. Describe two metrics that have been used to measure software productivity?

 (4)
- Q.9 a. Explain the different types of CASE Tools. (8)
 - b. With the help of a figure, explain the key stages of software measurement process which is a part of a quality control process? (8)