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Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam – 603 110

(An Autonomous Institution, Affiliated to Anna University, Chennai)

Department of Computer Science and Engineering

Continuous Assessment Test – III

Question Paper

Degree & Branch	B.E. Computer Science and Engineering				**Semester**	IV
Subject Code & Name	UCS1405 – Software Engineering				**Regulation: 2018**	
Academic Year	2020-2021	**Batch**	2019-2023	**Date**	**27.04.2021**	**10.30 am – 12.00 noon**
Time: 90 Minutes	**Answer All Questions**				**Maximum: 50 Marks**	

Part – C Answer any one question (10 Marks)

K3	3. a) Consider the following interactive application of an interior design system Assume that a small software company wants to build a computer-aided design system explicitly for interior designers. To get a better understanding of how they do their work, actual interior designers are asked to describe a specific design function. When asked: "How do you decide where to put furniture in a room?" an interior designer writes the following informal use case: I begin by sketching the floor plan of the room, the dimensions and the location of windows and doors. I'm very concerned about light as it enters the room, about the view out of the windows (if it's beautiful, I want to draw attention to it), about the running length of an unobstructed wall, about the flow of movement through the room. I then look at the list of furniture my customer and I have chosen—tables, chairs, sofa, cabinets, the list of accents—lamps, rugs, paintings, sculpture, plants, smaller pieces, and my notes on any desires my customer has for placement. I then draw each item from my lists using a template that is scaled to the floor plan. I label each item I draw and use pencil because I always move things. I consider a number of alternative placements and decide on the one I like best. Then, I draw a rendering (a 3-D picture) of the room to give my customer a feel for what it'll look like. In addition, other features of the system that would please the interior designer might also be conceived. For example, a digital photo could be taken looking out each window in a room. When the room is rendered, the actual outside view could be represented through each window. Develop a user model, design model, and mental model of the user interface for the above system. **(OR)**	CO4 CO5

	b) A program finds the kth greatest of the given numbers. Develop a set of test cases that you feel will adequately test this program using basis path testing method. a. Draw the control flow chart (2 Marks) b. Represent it as a flow graph (2 Marks) c. Find the number of independent paths (2 Marks) d. Develop the test cases (4 Marks)	
