Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India

(Autonomous College Affiliated to University of Mumbai)

Mid Semester Examination

September 2018

Max. Marks: 20

Class: T.E.

Course Code: IT51

Name of the Course: Software Engineering

Duration: 1Hrs

Semester: V

Branch: IT

Instruction:

(1) All questions are compulsary.

(2) Draw neat diagrams.

(3) Assume suitable data if necessary.

Q No.		Max. Marks	CO
Q.1	What is the main idea behind an incremental development process? Illustrate your answer using, as an example, a system with 15 functional requirements (leading to 15 user services) where requirements Fr1,...Fr5 have the lowest priority (i.e. they are the least important), requirements Fr6,....Fr10 are more important, and requirements Fr11,....Fr15 are the most important to users.	4	CO1
	Give two advantages of incremental development.	1	
	OR		
	Component based systems development (CBSD) methods place a lot of emphasis on component reuse, hence they differ from 'traditional' systems development methods.		
	1) What are the consequences for component reuse in the system?	2	
	2) Give the purpose of each stage of CBSD methods	3	
Q.2	What is the relationship between the concepts of information hiding as an attribute of effective modularity?	2	CO1
	With the help of diagram discuss when modularity is considered.	3	
Q.3	Give the purpose of "include" and "extends" relationship in use case diagram.	1	CO2
	Draw a use case diagram for following case study. Consider the box office include the clerk, supervisor and kiosk. The Kiosk accepts orders from customer. The customer is not directly connected to the application. It should include buying tickets through the kiosk or clerk, buying subscription (only through the clerk) and surveying total sales (at the request of the supervisor). Buying tickets and buying subscriptions include a common fragment of making charges to the credit card services.	4	
Q.4	What is the purpose of sequence diagram?	1	CO2
	Draw a sequence diagram for the buy ticket use case from Q3.	4	