NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA
(An Autonomous Institute)

Affiliated to Dr. A.P. J. Abdul Kalam Technical University, Uttar Pradesh, Lucknow

Course :B.TECH   Branch:CSBS

Semester: IV   Sessional Examination :Second   Year- (2021 - 2022)

Subject Name: Software Design With UML

Time: 1.15 Hours   [SET- B]   Max. Marks:30

General Instructions:

➤ This Question paper consists of 2 pages & 13 questions. It comprises of three Sections, A, B, and C
➤ Section A -Question No- 1 is objective type questions carrying 1 mark each, Question No- 2 is very short answer type carrying 2 mark each. You are expected to answer them as directed.
➤ Section B - Question No-3 is Short answer type questions carrying 5 marks each. Attempt any two out of three questions given.
➤ Section C - Question No. 4 & 5are Long answer type questions carrying 6 marks each. Attempt any one part _a or b._

		SECTION – A	[08Marks]	
1.		All questions are compulsory	(4×1=4)	
	a.	Why is Modelling one of the best way to carry out analysis? a) During analysis, It serves as a good test for understanding b) Provides further documentation for input to design resolution c) All of the mentioned d) None of the mentioned.	(1)	CO3
	b.	In Unified Modeling Language, diagrams which captures systematic structure and provide foundation for other models is called a)deployment diagrams b)class diagrams c)component diagrams d)object diagrams	(1)	CO3
	c.	Use cases are? a)Describe workflow b)Identify system goals c)Identify business processes d)Prioritize system procedures	(1)	CO2
	d.	Which model in system modelling depicts the dynamic behaviour of the system ? a) Context Model b) Behavioral Model c) Data Model d) Object Model	(1)	CO2
2.		All questions are compulsory	(2×2=4)	
	a.	Describe Interaction Diagrams.	(2)	CO3
	b.	What is Use Case Diagram.Explain its basic notation	(2)	CO3

		SECTION – B	[10Marks]	
3.		Answer any two of the following-	(2×5=10)	
	a.	Write short notes on adapter, factory method, State pattern ,observer pattern and Command pattern	(5)	CO2
	b.	What are Design Patterns . Why they are important	(5)	CO2
	c.	What are various steps in requirement analysis?	(5)	CO3
		SECTION – C	[12Marks]	
4		Answer any one of the following-	(1×6=6)	
	a.	What is GRASP? Explain any 6 Grasp Principle.	(6)	CO2
	b.	Explain Sequence Diagram with its notations in details	(6)	CO3
5.		Answer any one of the following-	(1×6=6)	
	a.	What is Object Oriented Analysis and Design? Describe the process for object oriented software development	(6)	CO2
	b.	Design a use case diagram for login page module. State c;early its description ,Use cases and Actors	(6)	CO3