ANNA UNIVERSITY (UNIVERSITY DEPARTMENTS)

M.Sc. 5 Year Integrated (Full Time) - END SEMESTER EXAMINATIONS, NOV/DEC 2021

COMPUTER SCIENCE & INFORMATION TECHNOLOGY
V Semester
XC5551 Software Engineering
(Regulation 2019)

Time: 3hrs   Max.Marks: 100

CO 1	Perform background research and a feasibility study prior to embarking on a development project.
CO 2	Collect and analyse user requirements using a formalism such as UML, including business process modeling.
CO 3	Translate end-user requirements into system and software requirements, using e.g. UML.
CO 4	Identify and apply appropriate software architectures and patterns to carry out high level design of a system
CO 5	Work in a team to implement a project plan, URD, SRD and ADD, by developing detailed designs and code.

BL – Bloom's Taxonomy Levels
(L1 - Remembering, L2 - Understanding, L3 - Applying, L4 - Analysing, L5 - Evaluating, L6 - Creating)

PART- A (10 x 2 = 20 Marks)
(Answer all Questions)

Q. No	Questions	Marks	CO	BL
1	Choose a software process model for a virtual reality game development project. Give reasons.	2	1	L1
2	Why XP is not widely adopted?	2	1	L1
3	Compare functional requirements and non-functional requirements.	2	2	L2
4	Define Model Driven Engineering.	2	2	L1
5	Illustrate the phases of RUP model.	2	2	L2
6	Outline the structure of SRS document.	2	3	L2
7	Compare data coupling and stamp coupling.	2	4	L5
8	Assign priorities to the implementation issues.	2	4	L5
9	Choose suitable input test case partitions for age input text box.	2	5	L6
10	Justify the need for configuration management.	2	5	L5

PART- B (5 x 13 = 65 Marks)

Q. No	Questions	Marks	CO	BL
11 (a) (i)	Develop a feasibility report for a university student app for CEG.	13	1	L3
OR				
11 (b) (i)	Identify a suitable software process model for a diet recommendation app. And analyze.	13	1	L4

Q. No	Questions	Marks	CO	BL
12 (a) (i)	Build a UML model for student class attendance management system for a college.	**13**	2	L3
	OR			
12 (b) (i)	Identify the functional and non-functional requirements for a student election system in a college campus via online voting.	**13**	2	L3
13 (a) (i)	Distinguish structured models and behavioral models.	**13**	3	L4
	OR			
13 (b) (i)	Analyze the significance of requirements validation.	**13**	3	L4
14 (a) (i)	List and explain the different types of cohesion.	**13**	4	L4
	OR			
14 (b) (i)	Discover the advantages of open source development.	**13**	4	L4
15 (a) (i)	Differentiate system testing and release testing.	**13**	5	L4
	OR			
15 (b) (i)	Examine the importance of process and product metrics.	**13**	5	L4

PART- C (1 x 15 = 15 Marks)
(Q.No.16 is compulsory)

Q. No	Questions	Marks	CO	BL
16. (i)	Write in detail about the design and development of the various phases of software lifecycle for "Make My Day" app which takes online journal as input and make daily recommendations. Assume your own requirements and come up with illustrations wherever necessary.	**15**	5	L6