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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ANNA UNIVERSITY, CHENNAI-25.

<u>MID SEMESTER EXAMINATION</u>

B.E(CSE) - Fifth Semester – Common to P,Q,R
(Regulation 2018)
CS6110 – Object Oriented Analysis and Design

Date: 23/11/2021
Time: 1 hr 30 mins　　　　　　**Answer ALL Questions**　　　　　　**Max.Marks:50**

Instructions:
- **Write your Register Number at the top of each page of the answer sheets.**
- **Put your signature at the bottom of each page of the answer sheets.**

<u>PART-A (5 x 2 = 10 Marks)</u>

Q.No	Question	Max marks	CO Mapping
1.	Differentiate between Analysis and Design.	2	CO1
2.	List out the ways to find requirements.	2	CO1
3.	Define aggregation and composition with examples.	2	CO2
4.	What is the use of qualified association and description class in class diagram?	2	CO2
5.	Mention the benefits of sequence diagram over collaboration diagram.	2	CO2

<u>Part – B (40 marks)</u>

Q.No	Question	Max marks	CO Mapping
6 a.	Identify the actors and use cases? Draw the use case diagram for the given scenario: **Main Success Scenario** 1. Writer drafts a short story. 2. Proofreader reviews short story. 3. Editor suggest changes to the story. 4. Writer incorporates edits. 5. Agent contacts publishing houses and sells short story. 6. Distributor packages story. 7. Bookseller delivers story to consumers. **Extensions** 1a. Writer does not meet deadline. 　　1a1. Editor extends the deadline, or cancels the project. 3a. Editor does not like the direction of the story. 　　3a1. Writer incorporates major revisions to story. 3a2. Writer starts from scratch. 5a. Agent not successful in selling story. 　　5a1. Agent or writer tries alternate publishing channel. 7a. Bookseller does not sell enough copies of the story. 　　7a1. Bookseller discounts inventory. 　　7a2. Bookseller sends copies back to publishing house.	(15)	CO2
	(OR)		
6 b.	i) Discuss the guidelines for creating Domain Model and finding conceptual classes for a Weather Monitoring System. Fix the requirements on your own.	(8)	CO2
	ii) Elaborate on the inception artifacts.	(7)	CO1

Q.No	Question	Max marks	CO Mapping
7 a.	**i)** How use case and system sequence diagram are related? List out the UML notations used in sequence diagram. Draw the sequence diagram for the given scenario. **Main Scenario:** The Customer specifies an author on the Search Page and then presses the Search button. The system validates the Customer's search criteria. If author is entered, the system searches the Catalog for books associated with the specified author. When the search is complete, the system displays the search results on the search Result page. **Alternate Path:** If the Customer did not enter the name of an author before pressing the search button, the system displays an error message.	(15)	CO2
(OR)		
7 b.	i) With an example discuss how polymorphism is handled in sequence diagram	(8)	CO2
	ii) Depict and explain the various phases of Unified Process.	(7)	CO1
8.	A bank has many branches. In each zone, one branch is designated as the zonal head office that supervises the other branches in that zone. Each branch can have multiple accounts and loans. An account may be either a savings account or a current account. A customer may open both a savings account and a current account. However, a customer must not have more than one savings account or current account. A customer may also procure loans from the bank. Draw the corresponding class diagram.	(10)	CO2