INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

INFORMATION TECHNOLOGY

ASSIGNMENT QUESTIONS

Course Name	:	**Object Oriented Analysis and Design**
Course Code	:	**A60524**
Class	:	III B. Tech II Semester
Branch	:	Information Technology
Year	:	2017 – 2018
Course Faculty	:	Mr. E.Sunil Reddy, Assistant Professor, IT

OBJECTIVES:

To meet the challenge of ensuring excellence in engineering education, the issue of quality needs to be addressed, debated and taken forward in a systematic manner. Accreditation is the principal means of quality assurance in higher education. The major emphasis of accreditation process is to measure the outcomes of the program that is being accredited.

In line with this, Faculty of Institute of Aeronautical Engineering, Hyderabad has taken a lead in incorporating philosophy of outcome based education in the process of problem solving and career development. So, all students of the institute should understand the depth and approach of course to be taught through this question bank, which will enhance learner's learningprocess.

ASSIGNMENT - I

S. No	Questions	Blooms Taxonomy Level	Course Outcomes
	UNIT - I		
1	Explain Briefly overview of the UML.	Understand	1
2	Discuss The Importance of the UML.	Remember	2
3	Discuss The principles of Modeling of UML.	Understand	2
4	Explain Briefly object-oriented modeling in UML.	Understand	1
5	Explain Briefly Things in UML.	Remember	2
6	Discuss Various Relationships with UML Notation.	Understand	2
7	Explain The Structural Diagrams in UML.	Understand	1
8	Explain The Behavioral Diagrams in UML.	Understand	2
9	Explain Software architecture in the UML.	Remember	1
10	Explain Briefly on Software Development Life Cycle.	Remember	2
11	Define a model and what the aims of modeling.	Understand	1
12	Explain The Application Areas of UML.	Remember	1
13	Discuss The Rules of UML.	Understand	2
14	Discuss The Structural thing and Grouping things in UML.	Understand	2
15	Discuss The Behavioral thing and Annotational things in UML.	Understand	1
	UNIT – II		
1	Explain Briefly Names, Attributes, Operations and Responsibilities in	Understand	3

	a Class.		
2	Explain Briefly on Modeling the vocabulary of a system and Modeling the Distribution of responsibilities in a system.	Understand	4
3	Discuss Names, Role, Multiplicity and Aggregation with examples in Relationships.	Remember	5
4	Explain Briefly on Modeling simple dependencies and Modeling single inheritance	Remember	4
5	Explain Briefly Common Mechanisms in Basic Structural modeling.	Remember	5
6	Explain Briefly on Modeling comments and Modeling new building blocks	Remember	4
7	Explain Briefly Diagrams in UML.	Understand	5
8	Explain Briefly on Modeling different views of a system and Modeling Different levels of abstraction.	Remember	5
9	Discuss Classifiers, Visibility, Abstract, Root, Leaf with examples.	Understand	5
10	Describe Multiplicity, Attribute, Operations, Template class and Standard Elements.	Understand	4
11	Explain on Modeling the semantics of a class .	Understand	4
12	Discuss the stereotypes which are applicable to dependency in Advanced Relation Ships.	Remember	5
13	Discuss the constraints which are applicable to Generalization Relationship.	Understand	4
14	Explain Briefly Navigation, Visibility and Qualification Association Relationship.	Understand	5
15	Explain Briefly composition, Association class and Constraints.	Remember	4
16	Explain Briefly on Modeling webs of relationships.	Remember	4
17	Explain Briefly Interfaces, Types and Roles.	Remember	5
18	Explain Briefly Modeling the seams in a systems and modeling static And dynamic types.	Understand	3
19	Define Package and Explain Terms and concepts of packages.	Understand	5
20	Explain Briefly Modeling groups of elements and Modeling Architectural views.	Remember	2
21	Explain Briefly Classes, Interfaces, Collaborations and Relationships.	Understand	4
22	Explain Briefly Modeling simple collaborations and modeling Logical Database Schema.	Remember	5
UNIT – III			
1	Explain context, Links, Messages and Sequencing in interactions.	Understand	5
2	Explain Modeling a flow of control in interactions.	Remember	4
3	Discuss Common properties, Contents, Sequence diagram and Collaboration Diagrams	Remember	3
4	Discuss the Semantic equivalence between interaction diagrams and Differences between sequence and collaboration diagrams.	Understand	7
5	Explain Modeling flows of control by time ordering and Modeling flow of control by organization.	Understand	7

ASSIGNMENT – II

S. No	Questions	Blooms Taxonomy Level	Course Outcomes
UNIT – III			
1	Define Use case. Explain Names, use cases and actors.	Understand	5
2	Explain Use case and flow of events, Use cases and scenarios and use cases and collaborations	Remember	8
3	Explain Briefly How to organizing use cases.	Remember	5

4	Explain Modeling the behavior of an element.	Understand	3
5	Define use case Diagrams. Explain Common properties, contents and Common uses.	Remember	7
6	Explain Modeling the context of a system and modeling the requirements of A system.	Understand	4
7	Define Activity Diagrams. Explain Action states and activity states.	Remember	8
8	Describe Transition, Branching, Forking and Joining.	Remember	6
9	Describe Swim lanes, Object flow.	Understand	5
10	Explain Modeling a workflow and Modeling an operation.	Understand	4
UNIT – IV			
1	Explain Signals, Call Events, Time Events, Change Events and Sending/ Receiving Events.	Understand	5
2	Explain Modeling a family of Signals and Modeling Exceptions.	Remember	8
3	Define State Machines. Explain States, Initial and Final states.	Remember	8
4	Explain Transitions and Advanced States and Transitions and Substrates.	Understand	9
5	Explain Modeling the lifetime of an object.	Understand	9
6	Define Process and Threads. Explain Flow of Control, Classes and Events.	Remember	5
7	Explain Standard elements, communication and Synchronization.	Understand	3
8	Explain Modeling Multiple flows of Control and Modeling Inter-process Communication.	Understand	3
9	Define Time and Space. Explain Location.	Remember	5
10	Explain Modeling Timing Constraints and Modeling the Distribution of Objects.	Understand	3
11	Define State chart diagrams. Explain contents and common Uses in State chart diagrams.	Remember	4
12	Explain Modeling Reactive objects and Forward and Reverse Engineering.	Understand	4
13	Define Components. Explain Names, Components and Classes, Components and interfaces.	Remember	5
14	Explain Kinds of components, Organizing components and properties in Components.	Understand	2
15	Explain Modeling Executables and Libraries, Modeling an API.	Understand	4
16	Explain Modeling Tables, Files and Documents, Modeling Source code.	Understand	4
17	Define Deployment. Explain Names, Nodes and Components.	Remember	5
18	Explain Modeling Processors and Devices, Modeling the Distribution of Components.	Understand	5
19	Define Component Diagrams. Explain Common Properties, contents and Common Uses.	Remember	4
20	Explain Modeling Source code and Modeling an Executable release.	Understand	5
21	Explain Modeling a Physical Database and Modeling Adaptable Systems.	Understand	6
22	Define Deployment diagrams. Explain Contents and Common uses.	Remember	3
23	Explain Briefly on Modeling an Embedded system and Modeling a Client/Server system.	Understand	4
UNIT – V			
1	Enumerate the steps to model design patterns. Illustrate with a UML diagram	Understand	5
2	Enumerate the steps to model architectural patterns. Illustrate with a UML diagram	Understand	5
3	Define Framework. Illustrate framework with a UML diagram.	Remember	4
4	Explain Patterns and Architecture.	Remember	10
5	Design class diagram for library Application.	Understand	4
6	Design object diagram for library Application.	Remember	5
7	Design use cases diagram for library Application.	Understand	5
8	Design sequence diagram for library Application.	Remember	4
9	Design collaboration diagram for library Application.	Understand	4
10	Design activity diagram for library Application.	Understand	10

11	Design component diagram for library Application.	Remember	10
12	Design deployment diagram for library Application.	Understand	5
13	Design Class diagram with common mechanisms for	Remember	5
14	Design a sequence diagram for the use case lend item.	Understand	4
15	Draw a class diagram of business objects in the design model.	Remember	4

Prepared by: Mr. E.Sunil Reddy, Assistant Professor., IT

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