INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

COMPUTER SCIENCE AND ENGINEERING

DEFINITIONS AND TERMINOLOGY QUESTION BANK

Course Name	:	OBJECT ORIENTED ANALYSIS AND DESIGN PATTERNS
Course Code	:	ACS015
Program	:	B.Tech
Semester	:	VI
Branch	:	Computer Science and Engineering
Section	:	A, B, C, D
Academic Year	:	2018 – 2019
Course Faculty	:	Dr. Y Mohanaroopa, Professor Mr. R.M.Noorullah, Assistant Professor Mr. C Raghavendra, Assistant Professor Ms. N Shalini, Assistant Professor

OBJECTIVES:

I	To help students to consider in depth the terminology and nomenclature used in the syllabus.
II	To focus on the meaning of new words / terminology/nomenclature

DEFINITIONS AND TERMINOLOGY QUESTION BANK

S.No	QUESTION	ANSWER	Blooms Taxonomy Level	CO	CLO Code
UNIT-I				
1	What are approaches used in Modeling?	1) Traditional Approach 2) Objected-Oriented Approach	Remember	CO 1	ACS015.01
2	Expand the term OMT	Object Modeling Techniques	Remember	CO 1	ACS015.01
3	Expand the term CASE	Computer Aided Software Engineering	Remember	CO 1	ACS015.02
4	Expand the term OMG	Object Management Group	Remember	CO 1	ACS015.03
5	What are the artifacts of software System?	Workflows	Remember	CO 1	ACS015.02
6	In UML what will be performed in constructing step?	Forward and Reverse Engineering	Remember	CO 1	ACS015.02
7	Define Forward Engineering.	Building code from Model	Understand	CO 1	ACS015.02

S.No	QUESTION	ANSWER	Blooms Taxonomy Level	CO	CLO Code
8	Define Reverse Engineering.	Building Model from Code	Remember	CO 1	ACS015.02
9	Which diagrams are used for studying static aspects of the System?	Class, Object, Component and Deployment Diagrams	Remember	CO 1	ACS015.02
10	Which diagrams are used for studying dynamic aspects of the System?	Use Case, Sequence, Collaboration, Activity and State Chart Diagrams.	Remember	CO 1	ACS015.02
11	Conceptual Model of UML is made up of what?	Building Blocks, Rule Common Mechanisms	Remember	CO 1	ACS015.02
12	What are building Blocks of UML?	Things, Relationships and Diagrams	Understand	CO 1	ACS015.02
13	What is special form of Realization relationship in UML?	Composite	Understand	CO 1	ACS015.04
14	What is a physical element that exists at run time in UML?	Node	Understand	CO 1	ACS015.02
15	Which adornments are used in Association relationship?	Name, Role and multiplicity	Remember	CO 1	ACS015.02
16	Define an architecture.	Architecture refers to the different perspectives from which a complex system can be viewed	Remember	CO 1	ACS015.02
17	UML architecture is described by how many views?	Use case view , Design view, Process view Implementation view and Deployment view	Understand	CO 1	ACS015.04
18	What are phases involved in UML Mode?	Inception, Elaboration, Construction and Transition Phases	Remember	CO 1	ACS015.04
19	What are stages in UML Model?	Engineering Stage and Production Stage	Understand	CO 1	ACS015.04
20	What is the output of Inception Phase?	Overall idea of system	Understand	CO 1	ACS015.04
	UNIT-II				
1	What are common modeling techniques of Class Diagrams?	To model vocabulary of a system, to model a collaboration and to model a logical design database	Remember	CO 2	ACS015.06
2	What are common modeling techniques	To model object structures	Remember	CO 2	ACS015.06

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	of Object Diagrams?				
3	Which diagram emphasize on time ordering?	Sequence diagram	Understand	CO 2	ACS015.08
4	What are common modeling techniques of Interaction Diagrams?	To model flow control of time orderiong and To model flows of control of organization	Remember	CO 2	ACS015.07
5	Define action state	Action states are atomic and cannot be decomposed	Remember	CO 2	ACS015.07
6	Define activity state.	Activity states can be further decomposed	Remember	CO 2	ACS015.08
7	Define synchronization bar.	A synchronization bar is rendered as a thick horizontal or vertical line	Remember	CO 2	ACS015.08
8	Define swim lane	In the UML, each group is called a swimlane because, visually, each group is divided from its neighbor by a vertical solid line	Remember	CO 2	ACS015.06
9	What is spoecified by Swimlane ?	A locus of activities.	Understand	CO 2	ACS015.06
10	What are common modeling techniques of activity diagrams?	To model a workflow and to model an operation	Remember	CO 2	ACS015.06
11	UML can model which types of actions?	Call, return, send, create and destoy	Remember	CO 2	ACS015.06
12	What are different levels of vidsibilty in UML?	Public, Private and Protected	Remember	CO 2	ACS015.06
13	What are two kinds of owner scope in UML?	Instance and classifier	Remember	CO 2	ACS015.07
14	What are UML's extensibility mechanisms apply to packages ?	Fascade, frame work and stub	Remember	CO 2	ACS015.07
15	Define Facade	Specifies a package that is only a view on some other package	Remember	CO 2	ACS015.07
16	Define Framework	Specifies a package consisting mainly of patterns	Remember	CO 2	ACS015.07
17	Define stub	Specifies a package that serves as a proxy for the public contents of another package	Remember	CO 2	ACS015.08
18	Define system	Specifies a package representing the entire system being modeled	Remember	CO 2	ACS015.07

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19	Define sub system	Specifies a package representing an independent part of the entire system being modeled	Remember	CO 2	ACS015.07
20	What are common modeling techniques of packages?	To model grouping of elements and to model architectural view.	Remember	CO 2	ACS015.07
UNIT-III					
1	How signals are modeled?	As stereo typed classes	Remember	CO 3	ACS015.12
2	Which event is asynchronous event?	Signal event	Remember	CO 3	ACS015.11
3	Which event is synchronous event?	Call event	Remember	CO 3	ACS015.11
4	What are common modeling techniques of signals and events?	Modeling a family of signals and modeling exceptions	Remember	CO 3	ACS015.11
5	Define state machine.	A *state machine* is a behavior that specifies the sequences of states an object goes through during its lifetime in response to events, together with its responses to those events.	Remember	CO 3	ACS015.11
6	What are common modeling techniques of state machines?	Modeling multiple flows of controls and Modeling inter process communication.	Remember	CO 3	ACS015.09
7	Define time expression.	A *time expression* is an expression that evaluates to an absolute or relative value of time	Remember	CO 3	ACS015.09
8	Define timing constraint.	A timing constraint is a semantic statement about the relative or absolute value of time.	Remember	CO 3	ACS015.09
9	What are common modeling techniques of time and space?	Modeling timing constraints, Modeling distribution objects and Modeling objects that migrates	Remember	CO 3	ACS015.11
10	What are contents of statechart diagram?	statechart diagrams contain branches, forks, joins, action states, activity states, objects, initial states, final states, history states	Remember	CO 3	ACS015.11
11	What are common modeling techniques of state chart diagrams?	To model a reactive object.	Remember	CO 3	ACS015.10
12	Define Component.	A *component* is a physical and replaceable part of a system that conforms to and provides the realization of a set of interfaces.	Remember	CO 3	ACS015.11
13	What are imported and exported by a component?	Interfaces	Remember	CO 3	ACS015.11
14	What are different	Deployment, work product and executable components	Remember	CO 3	ACS015.12

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	types of components?				
15	What are different standard stereo types applied to components?	Executable, library, table, file and document.	Remember	CO 3	ACS015.12
UNIT IV					
1	Define Concrete Prototype	implements an operation for cloning itself	Remember	CO 4	ACS015.13
2	Define Adaptee	defines an existing interface that needs adapting	Remember	CO 4	ACS015.13
3	Define Implementor	defines the interface for implementation classes	Understand	CO 4	ACS015.14
4	Define Concrete Implementor	Implements the Implementor interface and defines its concrete implementation.	Remember	CO 4	ACS015.14
5	Define Concrete Flyweight	implements the Flyweight interface and adds storage for intrinsic state	Understand	CO 4	ACS015.14
6	Define Flyweight Factory	creates and manages flyweight objects	Remember	CO 4	ACS015.15
7	Define Handler	defines an interface for handling requests	Understand	CO 4	ACS015.15
8	Define Concrete Handler	handles requests it is responsible for	Remember	CO 4	ACS015.14
9	Define Concrete Command	defines a binding between a Receiver object and an action	Remember	CO 4	ACS015.14
10	Define Invoker	asks the command to carry out the request	Understand	CO 4	ACS015.15
11	Define Abstract Expression	declares an abstract Interpret operation that is common to all nodes in the abstract syntax tree	Remember	CO 4	ACS015.15
12	Define Terminal Expression	implements an Interpret operation associated with terminal symbols in the grammar	Remember	CO 4	ACS015.14
13	Define Concrete Iterator	implements the Iterator interface	Remember	CO 4	ACS015.13
14	Define Concrete Aggregate	implements the Iterator creation interface to return an instance of the proper Concrete Iterator	Remember	CO 4	ACS015.14
15	Define Concrete Mediator	implements cooperative behavior by coordinating Colleague objects	Remember	CO 4	ACS015.14
16	Define Concrete Subject	stores state of interest to Concrete Observer objects	Remember	CO 4	ACS015.15
17	Define Concrete Observer	maintains a reference to a Concrete Subject object	Remember	CO 4	ACS015.15
18	Define State	defines an interface for encapsulating the behavior associated with a particular state of the Context	Remember	CO 4	ACS015.15
19	Define Concrete Strategy	implements the algorithm using the Strategy interface	Remember	CO 4	ACS015.16
20	Define Concrete Visitor	implements each operation declared by Visitor	Remember	CO 4	ACS015.16
UNIT V					
1	What are the layers of Logical architecture of UML?	UI layer , Domain Layer and Technical Services	Remember	CO 5	ACS015.17

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2	Define Layer	Layer is a coarse-grained grouping of classes, packages, or subsystems that has cohesive (strongly related) responsibilities for a major aspect of the system	Remember	CO 5	ACS015.17
3	What are Domain Objects?	Software objects representing domain concepts	Remember	CO 5	ACS015.17
4	What is POS system?	A POS system is a computerized application used (in part) to record sales and handle payments; it is typically used in a retail store	Remember	CO 5	ACS015.17
5	What hardware are used in POS?	Computer and Barcode Scanner	Remember	CO 5	ACS015.17
6	What are service applications in POS?	Third Party Ytax calculator and Inventory Control	Remember	CO 5	ACS015.17
7	What are the goals of cashier in POS?	process sales, handle returns, cash in, cash out	Remember	CO 5	ACS015.18
8	What are the goals of system administrator in POS?	manage users, manage security, manage system tables	Remember	CO 5	ACS015.18
9	What are the goals of manager in POS?	start up, shut down	Remember	CO 5	ACS015.17
10	What are the goals of sales activity system in POS?	analyze sales data	Remember	CO 5	ACS015.17
11	What is inception?	The inception means specifying the beginning of the software project	Remember	CO 5	ACS015.17
12	Define stakeholders.	Stakeholders means an entity that takes active participation in project development.	Remember	CO 5	ACS015.17
13	What are goals of stakeholders in software project development?	Stakeholders are responsible for defining the ideas are business managers, marketing people, and product managers.	Remember	CO 5	ACS015.18
14	What is the purpose of inception?	Purpose of inception is to establish common goals and objectives for the project.	Remember	CO 5	ACS015.18
15	How Domain model can be refined?	By adding the attributes to the class and showing the associations among these classes.	Remember	CO 5	ACS015.18

Signature of the Faculty

Signature of HOD