Name:

Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, July 2020

Course: Object-Oriented A & D Using UML

CourseCode: CSEG1007

Programme: BCA (IOT+BFSI)

Semester: II

Time: 2hours

Max. Marks:

MCAn eventis an occurrence at a point in timeIncorrecthappensinstantaneously with regard to the time scaleIncorrectmay trigger a state to change toanother stateIncorrectall of the above Correct

- MC "To examine changes to the objects and their relationships over time, we use" state diagram Correct class diagram Incorrect object diagram Incorrect activity diagram Incorrect
- MC A thread ensures resource sharing Incorrect concurrency Incorrect cost effectivity Incorrect all of the above Correct

MC An object has state Incorrect state and behavior Incorrect "state, behavior and identity" Correct "state and identity, but no behavior" Incorrect

MCUML is restricted to object oriented languages onlyIncorrectrestricted to anycomputer languageIncorrectnot restrictricted to computer systemsCorrect none of theaboveIncorrect

MC OOAD process starts with gathering the systems requirements Incorrect ends with deploying a working system Incorrect both (a) and (b) Correct none of the above Incorrect

- MCClasses provide the metadata for atributesIncorrectthe signature for methodsIncorrectthe implementation of the methodsIncorrectall of the above Correct
- MCUse case diagramsenables one to identify high-level functional requirementsIncorrectprovides client side stakeholders with big picture view of the systemIncorrectare the basis from which detailed functional requirements are developedIncorrectall of the above Correct
- MCThe similarity between deployment diagram and component diagram lies in the fact that
both are implementation diagramsCorrect both are sameIncorrectboth are UMLdiagramsIncorrectnone of the aboveIncorrect

MC An object is a capsule that holds the object's internal state within its boundary the statement is true Correct the statement is false Incorrect the statement is partially false Incorrect the statement is partially true Incorrect

MCAn actorcan only be a human beingIncorrect"can be a human, device,another system or time"Correct "can be a human, device or time"Incorrectcan bea human or another systemIncorrect

MC Which of the following statement(s) is true? use case describes an interaction between an actor and the system Incorrect use cases are functionalities in the system Incorrect both (a) and (b) Correct either (a) or (b) Incorrect

MC A process includes heap Incorrect data section Incorrect stack Incorrect all of the above Correct

MCA guard condition isa Boolean expression that must be true in order for a transition to occurIncorrectis checked only onceIncorrectboth a and bCorrect none of theaboveIncorrect

 MC
 Inheritance is exhibited in
 class diagrams only
 Incorrect
 use case diagrams only

 Incorrect
 both class and use case diagrams
 Correct "class, use case and activity

 diagrams"
 Incorrect

MCThe fork() system callcreates new processCorrect replaces process' memory space with anew programIncorrectkills a processIncorrectnone of the aboveIncorrect

MCWhich of these is not related to activity diagram guard condition IncorrectsynchronizationbarIncorrectstop nodeIncorrectparticipantCorrectCorrectCorrectCorrect

MC _____ are light weight processes objects Incorrect threads Correct classes Incorrect components Incorrect

MC Fork and join bars indicate concurrent flow of control Correct unorganized flow of control Incorrect linear flow of control Incorrect non-linear flow of control Incorrect

MCA swim lane diagram is an improvisation of
diagramobject diagram IncorrectsequencediagramIncorrectstate diagram Incorrectnone of the aboveCorrect

MCClass modelcaptures the static structure of the systemIncorrectprovides agraphical representation of the systemIncorrectare used for communicating with the customerIncorrectall of the above Correct

MCThe benefit(s) of having threads is/arebetter responsivenessIncorrectresourcesharing IncorrectscalabilityIncorrectall of the above Correct

MCWhich statement/(s) is/(are) true?a value is to an attribute as a link is to an associationCorrect association classes can not have attributesIncorrectqualified associationsgive rise to ambiguityIncorrectall of the above Incorrect

MCGeneralization refers to
abstractiondata hidingIncorrectinheritanceCorrectCorrectencapsulationIncorrectIncorrectIncorrectIncorrectIncorrect

MCA constituent part in compositioncan only belong to atmost one assemblyCorrect canbelong to as many assembliesIncorrectdonot have a coincident lifetime with the assemblyIncorrectis not part of any assemblyIncorrect

MCAn interface is
Incorrecta collection of operations used to specify the service of a class or componentIncorrecta stereotyped class with operations in appropriate compartmentIncorrectsimilar to an abstract classIncorrectall of the above Correct

MC "Semantic relationship between two classifiers in which one specifies a contract and other guarantees to carry it out without dictating its implementation, is known as

" generalization Incorrect abstraction Incorrect realization Correct encapsulation Incorrect

MCWhich statement(s) is/are true about links?a link is a physical or conceptual connectionamong objectsIncorrecta link is an instant of an associationIncorrectboth (a) and (b)Correct none of the aboveIncorrect

MC Which of the following is not an event type signal Incorrect change Incorrect time Incorrect trigger Correct

MCA guard conditioncan be a boolean expressionIncorrecthas to be a booleanexpressionCorrect is boolean only under specific conditionsIncorrectnothing can besaid conclusivelyIncorrect

MCUse case diagrams are part ofinteraction modelingCorrect structural modelingIncorrectbehavioral modelingIncorrectarchitectural modeling

 MC
 The ______ specifies how many of the parallel activities must have been processed state

 Incorrect
 number of events
 Incorrect
 multiplicity indicator
 Correct number

 of threads
 Incorrect
 Incorrect
 State
 State
 State

- MCA _____ is a connection point of an action for object input or outputobject pointIncorrectpinCorrect action pointIncorrectnone of the aboveIncorrect
- MCExample of interaction diagram is/areactivity diagram Incorrectsequence diagramIncorrectcollaboration diagramIncorrectboth b and cCorrect
- MC "Transformation from sequence diagram to collaboration diagram is a
- " unidirectional function Incorrect bi-directional function Correct indefinite function Incorrect both a and b Incorrect

MCWhich of the following statement/s is/are trueCollaboration diagrams emphasize upon thestructure than the sequence of interactionsIncorrectIn sequence diagrams the order ofinteractions is established by vertical positioningIncorrectin collaboration diagrams thesequence is given by numbering the interactionsIncorrectall of the above Correct

MCInteraction diagrams should be usedfor describing the behavior of several objects within asingle use caseIncorrectfor showing collaboration among objectsIncorrectand bCorrect none of the aboveIncorrect

MC For precise definition of a single class behaivior we should use class diagram Incorrect collaboration diagram Incorrect state diagram Correct deployment diagram Incorrect

MC"For describing behaivior across many use cases, we should use"activity diagramCorrectsequence diagramIncorrectcollaboration diagramIncorrectdiagramIncorrect

MC_______ and ______ are examples of implementation diagramsuse case and class diagramsIncorrectuse case and componenet diagramsIncorrectdeployment and statediagramsIncorrectcomponenet and deployment diagramsCorrect

MC "_____ models the high-level software components, and their interfaces

" component diagram Correct deployment diagram Incorrect activity diagram Incorrect collaboration diagram. Incorrect

MC "Source code, database tables and library files are examples of" components Correct nodes Incorrect actions Incorrect activities Incorrect

MC Which of the following statement(s) is/are true?well defined interfaces are not required to access a component's operations Incorrect components are reusable and replacable Correct swim lane diagram describes the physical resources of the system Incorrect all of the above Incorrect

MCWhich diagram shows the physical arrangement of run-time computational resources
collaboration diagram Incorrectcomponent diagram Incorrectstate diagramIncorrectdeployment diagramCorrect

- MC "A_____ is one, which has its own computational resources" component Incorrect terminal Incorrect node Correct dll file Incorrect
- MCA CRC card is used to represent a class of objectsIncorrectbehavior of objectsIncorrectinteraction between objectsIncorrectall of the above Correct

MCCRC cards that collaborate with one another should be merged into a single cardIncorrectplaced close togetherCorrect placed one upon otherIncorrectplacedfar from one anotherIncorrectIncorrectplaced

MCCRC cards are anthromorphic in the sense thatthey are portableIncorrectnocomputer program can catch the essence of the interactions forced by passing cardsCorrect itincreases the level of involvement among team membersIncorrectnone of the aboveIncorrect

- MC _____models a type of role that is external to the system and interacts with that system use case Incorrect activity Incorrect actor Correct participant Incorrect
- MCAn actorhas to be a humanIncorrectmay be a humanIncorrect"may be a human a device, another system, or time"Correct has to be a systemIncorrect
- MC A ______ actor initiates and controls the whole use case primaryCorrect secondary Incorrect tertiary Incorrect human Incorrect
- MC _____ determines how many objects might participate in the relationship cardinality Incorrect multiplicity Correct associatin Incorrect dependency Incorrect

MCThe ______ is concerned with the time and sequencing of the operations of the objectclassmodelIncorrectstate modelCorrect interaction modelIncorrectnone of theaboveIncorrect

- MC A/An _____ disambiguates the objects for a "many" association end qualified association Correct association end name Incorrect association class Incorrect association Incorrect
- MC
 With the help of _____ we can reduce the multiplicity from "many" to "one" association

 Incorrect
 association end name
 Incorrect
 qualifier
 Correct none of the

 above
 Incorrect
 association
 Correct none of the
 Correct none of the
- MCA/An _____element is used to model complex relationships between three or more classes
associationassociationIncorrectbinary associationIncorrectunary associationCorrect

MC _____ It is used to represent whole-part relationship aggregation Incorrect association Incorrect composition Incorrect both a and c Correct

MCWhich of the following constraints hold good for aggregation?A constituent part can belongto at most one assemblyIncorrect"Once a constituent part has been assigned anassembly, it has a coincident lifetime with theassembly"IncorrectIncorrectnone of the aboveCorrect

MCWhich of the following statements is true?Part can be shared by several wholes inaggregationCorrect Parts can live independently in compositionIncorrectresponsible for creating and destroying objects in aggregationIncorrectall of the aboveIncorrectIncorrect

MC "Signal, change and time are examples of types of" events Correct states Incorrect messages Incorrect participants Incorrect