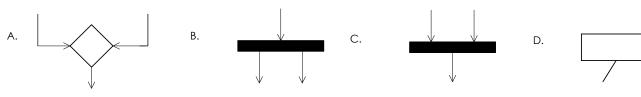
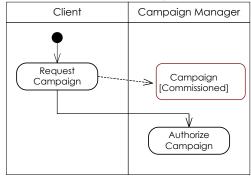
Q1. Which one is used in UML activity diagram to combine two concurrent activities and re-introduces them to a flow where only one activity occurs at a time?



Answer: C

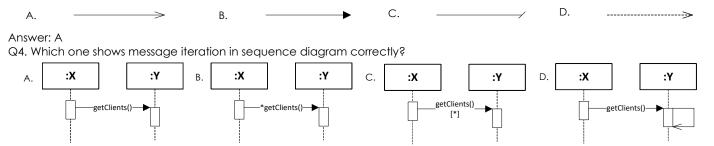
Q2. What does the dashed line with open arrow denote in activity diagram?



- A. Transition
- B. Activity
- C. Object flow
- D. Guard condition

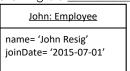
Answer: C

Q3. Which one denotes an asynchronous message?



Answer: B

Q5. The following is a _____



- A. class diagram
- B. instance diagram
- C. object lifeline
- D. actor

Answer: B

Q6. The solid line in the following diagram is _____



- A. association
- B. link
- C. dependency
- D. communication

Answer: B

[Class to class association and object to object link]

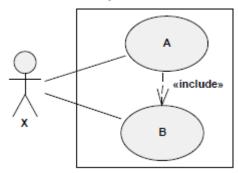
Q7. CRC stands for _

- A. Client Responsibility Collaboration
- B. Client Responsibility Class
- C. Class Responsibility Consistency

D. Class Responsibility Collaboration

Answer: D

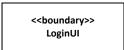
Q8. What does the following USE CASE define?



- A. the behavior of B frequently used in the behavior of A
- B. the behavior of A frequently used in the behavior of B
- C. the behavior of B might be used in the behavior of A
- D. the behavior of A might be used in the behavior of B

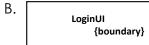
Answer: B

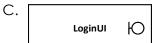
Q9. Look at class shown below



The above can alternatively be shown as ____

A. LoginUI	Ю
------------	---

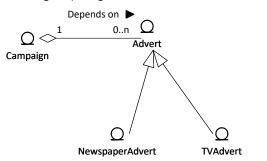






Answer: C

Q10. The following diaphragm shows _____

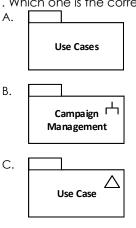


- A. generalization and aggregation
- B. generalization and composition
- C. composition and aggregation
- D. composition and specialization

Answer: A

D.

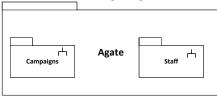
Q11. Which one is the correct UML nation for Sub-system?



Campaign H Management

Answer: B

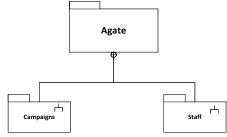
Q12. What does the following diagram show?



- A. Package dependency
- B. Sub-systems containment of a system
- C. Relationship of sub-systems of a system
- D. Sub-systems of a component

Answer: B

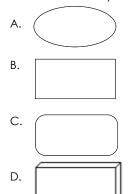
Q3. What does the following diagram show?



- A. Package dependency
- B. Sub-systems containment of a system
- C. Relationship of sub-systems of a system
- D. Sub-systems of a component

Answer: C

Q4. Which one is the symbol for a use case?

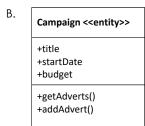


Answer: A

Q5. Which of the alternative nation of the following class?

Campaign	Ω
+title +startDate +budget	
+getAdverts() +addAdvert()	

A.	< <entity>> Campaign</entity>
	+title +startDate +budget
	+getAdverts() +addAdvert()



C. <<entity>>

Campaign

+title
+startDate
+budget

+getAdverts()
+addAdvert()

Campaign

+title
+startDate
+budget

+getAdverts()
+addAdvert()

Answer: A

Q6. The following diagram is a ____

:Campaign

title = 'DimondTraders' stratDate = 2016-11-03 estimatedCost: 300000.00

- A. Named instance of campaign class
- B. Anonymous instance of campaign class
- C. Named instance of campaign class with attribute values
- D. Anonymous instance of campaign class with attribute values

Answer: D

Q7. The following diagram is a

DimondTraders:Campaign

title = 'DimondTraders'
stratDate = 2016-11-03
estimatedCost: 300000.00

- A. Named instance of campaign class
- B. Anonymous instance of campaign class
- C. Named instance of campaign class with attribute values
- D. Anonymous instance of campaign class with attribute values

Answer: C

Q8. What does the following denotes in UML?

X:Y

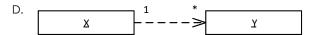
- A. X is an instance of Y class
- B. Y is an instance of X class
- C. X is an attribute of Y class
- D. Y is an attribute of X class

Answer: A

Q9. Which does the symbol indicates?



	Package			
	Object Component			
	Aggregation			
Answer: C				
Q10. Which	ch does the symb	ol indicates?		
(♂			
ΔΕ	Package			
	Component			
	Control stereotype	е		
D. E	Boundary stereoty			
Answer: (_			
Q1 to Q3	are based on th	ne diagram l	oelow?	
	Assign	n individual sta	ff to ③	
		k on a campaiç		
		_		
		4		
	2	1		
		Assign staff	to work on a	
			paign	
Staff Contact		ana ia tha aar	one inication asso	oiation?
	alagram which (1)	one is the cor	mmunication asso	Clations
	2)			
C. (3			
D. (4			
Answer: B			_	
	e diagram which o	one is the act	orś	
	<u>1)</u> 2)			
_	3)			
_	<u>(4)</u>			
Answer: A				
	diagram which	one is the use	case?	
	1)			
	<u>2</u> <u>3</u>			
D. (<u>*</u>			
Answer: C				
Q4. Which		ymous instan	ce of a control clo	assŝ
A.	0			
	:Advert			
В.	Ó			
	AnAdvert			
C.	0			
٥.	WorldTrade			
-				
D.	Ю			
Answer: A	:AdvertUI			
	n one is aggrega [.]	tion?		
Α. [1 *	.,	1
Į	Δ		У	
В. г		1 1 *		1
	X	\triangleright —	Y	
۱		J 4-		ı
C. [Χ	1 *	У	
Į	Δ	J		



Answer: B

Q6. Look at diagram



What is the text in angle brackets ([]) called?

- A. Decision
- B. Guard condition
- C. Activity
- D. Transition

Answer: B

Q7. What does the following association mean?

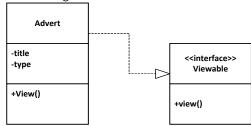


- A. Every Staff member may be allocated to one or more grades, while a grade may have zero, one or more staff allocated to it.
- B. Every Staff member must be allocated to one or more grades, while a grade may have zero, one or more staff allocated to it.
- C. Every Staff member may be allocated to one or more grades, while a grade must have zero, one or more staff allocated to it.
- D. Every Staff member must be allocated to one or more grades, while a grade must have zero, one or more staff allocated to it.

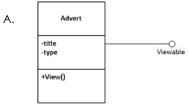
Answer: B

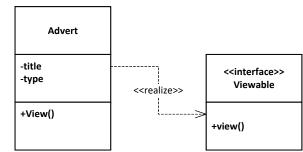
В.

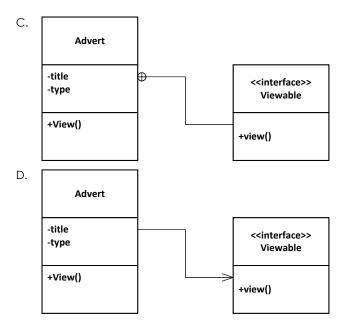
Q8. Look at the diagram below



Which of the alternative nation of the following class?

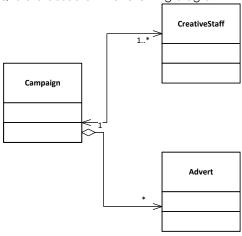






Answer: A

Q9 and Q10 are based on the following diagram



Q9. The diagram shows ______ between Campaign and Advert class and also between Campaign and Creative Staff class?

- A. links
- B. association
- C. dependency
- D. cohesion

Answer: B

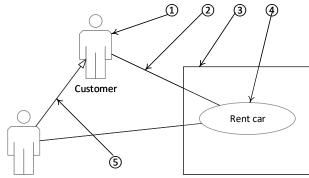
[Composition & aggregation are special type of association]

Q10. According the diagram, one-way association exits between_____

- A. Campaign and Advert class
- B. Campaign and CreativeStaff class
- C. CreativeStaff and Advert class
- D. Action

Answer: A

Look at the diagram below

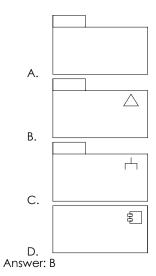


Register Customer

Q1 to Q6 are based on the figure above.	
Q1. The diagram is	
A. a USE CASE diagram B. an activity diagram	
C. a collaboration diagram	
D. a sequence diagram	
Answer: A	
Q2. What is the element labelled with ①?	
A. Actor B. User	
C. Client	
D. Interface	
Answer: A	
Q3. What is the element labelled with ②?	
A. Dependency	
B. Communication association	
C. Decision point D. Transition	
Answer: B	
Q4. What is the element labelled with ③?	
A. State	
B. System or sub-system boundary	
C. USE CASE	
D. Package	
Answer: B Q5. What is the element labelled with 4?	
A. State	
B. System or sub-system boundary	
C. USE CASE	
D. Package	
Answer: C	
Q6. What is the element labelled with (5)?	
A. Specialization B. Generalization	
C. Dependency	
D. Guard condition	
Answer: B	
Q7. What is the following diagram element?	
A. State	
B. Object	
C. Note	
D. Constraint	
Answer: C	2
Q8. Use Case B may provide additional functionality to Use Case A for a given condition. How would you model it?	?
$A \longrightarrow \ll extend \gg - B$	
A.	
B. A — -< <extend>> — B</extend>	
C. A X- «indude» - B	
$A \longrightarrow -\ll include \gg - B$	
D.	
Answer: A Q9. Use Case A always use functionality of Use Case B. How would you model it?	
A. $A \leftarrow \ll extend \gg - B$	
A	
B. A Parameterium y B	
A X- < <indude>>> - B</indude>	
C.	



Q10. Which one represents a Model?



Q1. When an object enters into Active state, it triggers getBright(), While the object remains in Active state, the activity causes a sound clip to be played, and when object exists the state triggers getMuted(). Which statechart is the correct for the scenario?

١.	Active	`
	entry / getBright	
	do / playSound	
	exit / getMuted	J

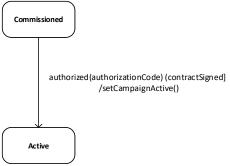
В.	Active	
	getBright	
	playSound	
	playSound getMuted	

C.	Active	
	1. getBright	
	2. playSound	
	3. getMuted	

D.	Active	
	1. getBright 2. playSound	
	3. getMuted	,

Answer: A

Look at the state transition. Q2 & Q3 are based on the state transition.



Q2. What type of event triggers the transition?

- A. Change event
- B. Time elapsed event
- C. Call event
- D. Composite event

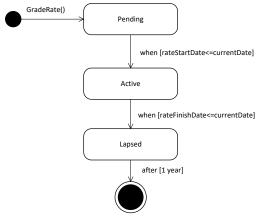
Answer: C

Q3. Which one is the event trigger?

- A. authorized(authorizationCode)
- B. [contract Signed]
- C. setCampaignActive()
- D. Active

Answer: A

Look at the following state chart.

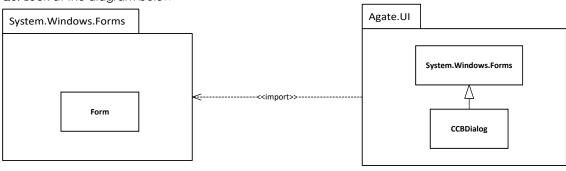


Q4. In the above state chart, which one is elapsed-time event?

- A. GradeRate()
- B. when [rateStartDate<=currentDate]
- C. when [rateFinishDate<=currentDate]
- D. after [1 year]

Answer: D

Q5. Look at the diagram below



The diagram above shows

- A. class dependency
- B. class association
- C. package dependency
- D. deployment architecture

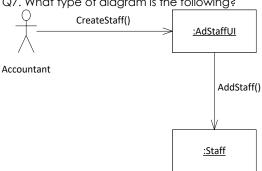
Answer: C

Q6. The Bank account class have an operation named credit that is passed to the amount being credited and the operation has a Boolean return value. Which one valid operation signature of the operation?

- Boolean credit (Money amount)
- credit (amount as Money) returns Boolean
- C. credit (amount: Money): Boolean
- D. Boolean: credit (amount: Money)

Answer: C

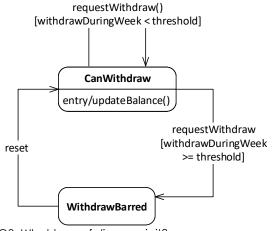
Q7. What type of diagram is the following?



- A. Activity diagram
- B. Sequence diagram
- C. Collaboration diagram
- D. State chart

Answer: C

Q8, Q9 & Q10 are based on the following diagram



Q8. What type of diagram is it?

- A. Activity diagram
- Sequence diagram
- C. Collaboration diagram
- D. State chart

Answer: D

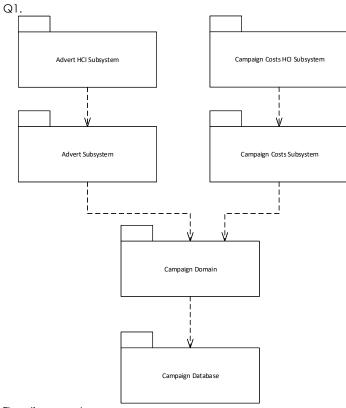
Q9. Here WithdrawBarred is a ___

- A. State
- В. Event
- C. Signal
- D. Action

Answer: A

Q10. What does 'entry/updateBalance()' mean in diagram?

- A. updateBlanace() event causes the transition to the CanWithdraw state
- B. updateBlanace() action is performed on entering the CanWithdraw state
- C. updateBlanace() action is performed continuously during the span of while object is in the CanWithdraw state
- D. updateBlanace() event causes the transition from CanWithdraw state to WithdrawBarred state

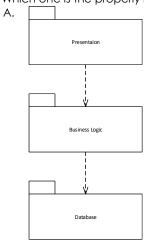


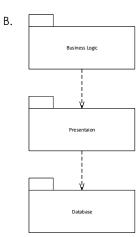
The diagram shows _ A. Partitioning

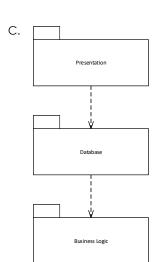
- B. Layering
- C. Partitioning and Layering
 D. None of the above

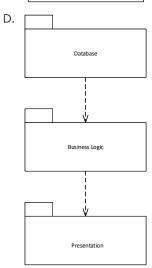
Answer: C

Q2. Which one is the properly layered three-layer architecture?



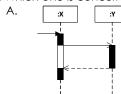


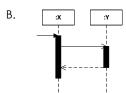


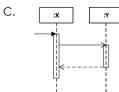


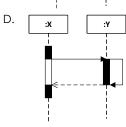
Answer: A

Q3. Which one is concurrent activity in sequence diagram?



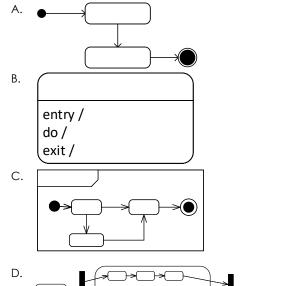






Answer: B

Q4. Which one is the concurrent state?



Answer: D

Q5. Which one is not an internal action of a state?

- A. do
- B. entry
- C. exit
- D. exclude

Answer: D

Q6. Look at the class diagram

Company
-companyIntance +companyName +companyAddress
+getInstance() +getDetails() -Company()

The class is an example of

- A. Composite pattern
- B. Singleton pattern
- C. State pattern
- D. Anti-pattern

Answer: B

Q7. Which of the following correct way of specifying an attribute?

- A. name: type-expression = initial-value {property-string}
- B. name: type-expression = initial-value [property-string]
- C. type-expression: name = initial-value {property-string}
- D. type-expression: name = initial-value [property-string]

Answer: A

Q8. Which attribute of the following class is derived one?



accountNumber : Integer accountName : String {not null} balance : Money = 0 /availableBalance : Money overdraftLimit : Money

open(accountName : String) : Boolean close() : Boolean credit(amount:Money) : Boolean debit(amount:Money) : Boolean getBalance() : Money setBalance(newBalance : Money) getAccountName() : String setAccountName(newName : String)

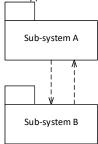
- A. accountNumber
- B. accountName
- C. balance
- D. availableBalance

Answer: D

- Q9. Which symbol denotes protected visibility?
 - A. -
 - В. -
 - C. #
 - D. ~

Answer: C

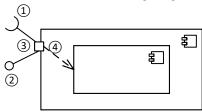
Q10. Which type of communication is the following?



- A. Peer-to-peer
- B. Client-server
- C. Open layered
- D. Closed layered

Answer: A

Q1 t0 Q4 are based on the following diagram



- Q1. Which one is the port?
 - A. 1
 - B. (2)
 - C. 3
 - D. (4

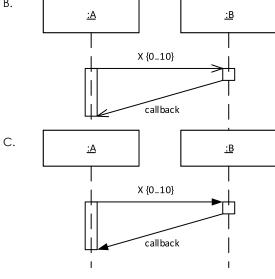
Answer: C

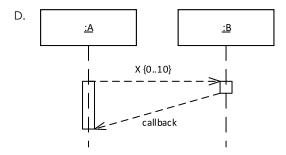
- Q2. Which one is the required interface?
 - A. 1
 - B. (2)
 - C. 3
 - D. (4)

Answer: A

- Q3. Which one is the provided/implemented dependency?
 - A. (
 - B. (2)
 - C. 3

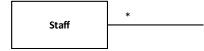
D. **4** Answer: B Q4. Which one correctly shows that component C exposes IX interface? 包 С В. IX む 0-С C. 包 <<interface>> \triangleleft С IX D. 包 С Answer: B Q5. Which one is creational message? ----> В. C. D. Answer: A Q6. Which one show asynchronous message with duration constraint? A. <u>:A</u> <u>:B</u> Х callback В. <u>:A</u> <u>:B</u>



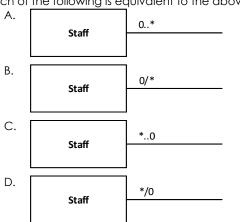


Answer: B

Q7. Look at the multiplicity in the association

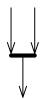


Which of the following is equivalent to the above?



Answer: A

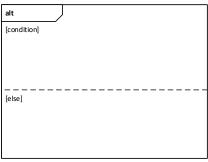
Q8. What does the following denote?



- A. Join pseudostate
- B. Fork pseudostate
- C. Self-message
- D. Decision in transition

Answer: A

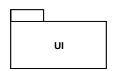
Q9. What does the following denote?



- A. Alternate fragment
- B. Optional fragment
- C. Another fragment
- D. Package

Answer: A

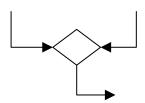
Q9. What does the following denote?



- A. Component
- B. Subsystem
- C. Package
- D. Lifeline

Answer: C

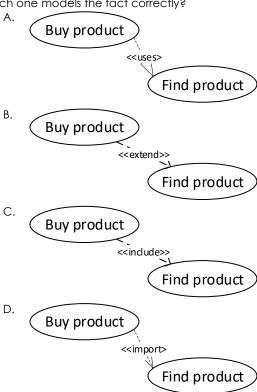
Q10. What does the following denote?



- A. Decision
- B. Merge
- C. Join
- D. Fork

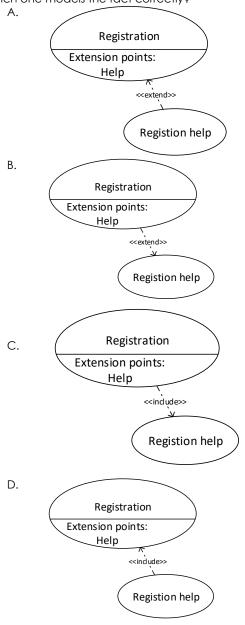
Answer: B

Q1. The "Buy product" use case often uses the "Find product" use case in order to allow an actor to select the product to buy. Which one models the fact correctly?



Answer: C

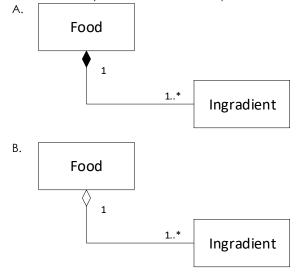
Q2. The "Registration" use is supplemented by the "Registration help" use case if an actor opts for help. Which one models the fact correctly?

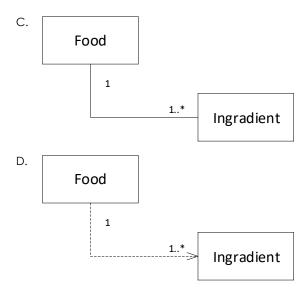


Answer: A

Q3. A food is made up from many ingredients. Ingredient is in only one meal at a time. If you discard the meal you will lose ingredients too.

Which one correctly models the relationship?





Answer: A

Q4. _____represent the possibility of a logical relationship or connection between objects of one class and objects

of another.

- A. Links
- B. Associations
- C. Composition
- D. Aggregation

Answer: B

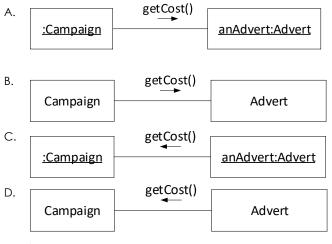
Q5. Which part of an association is the range of permitted cardinalities of an association?

- A. Name
- B. Direction
- C. Multiplicity
- D. Role

Answer: C

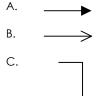
Q6. A Campaign object sends message to an Advert object is described as advertCost = anAdvert.getCost()

Which one correctly shows the communication?

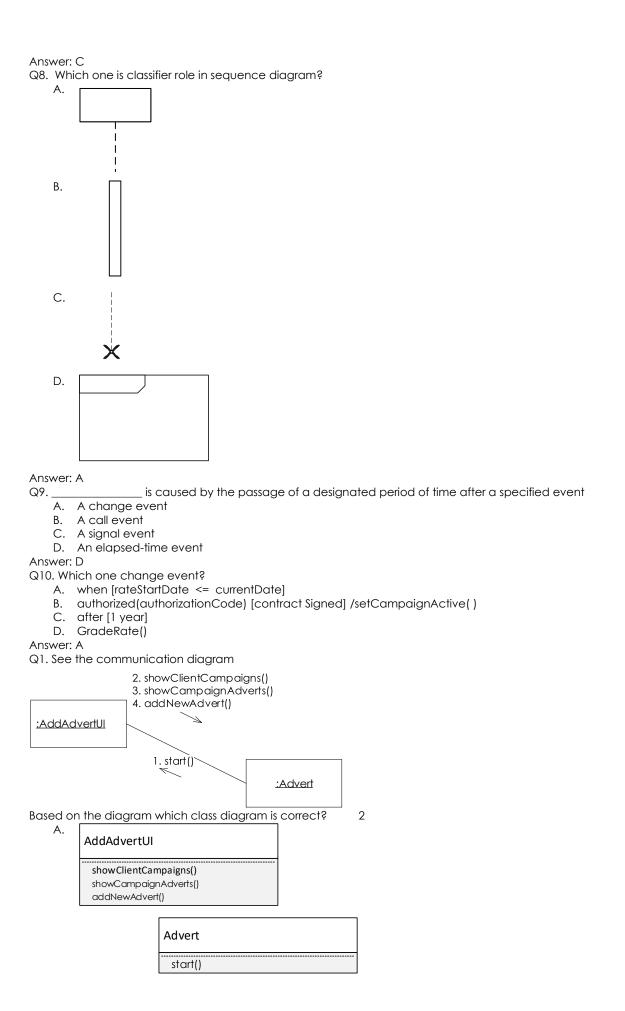


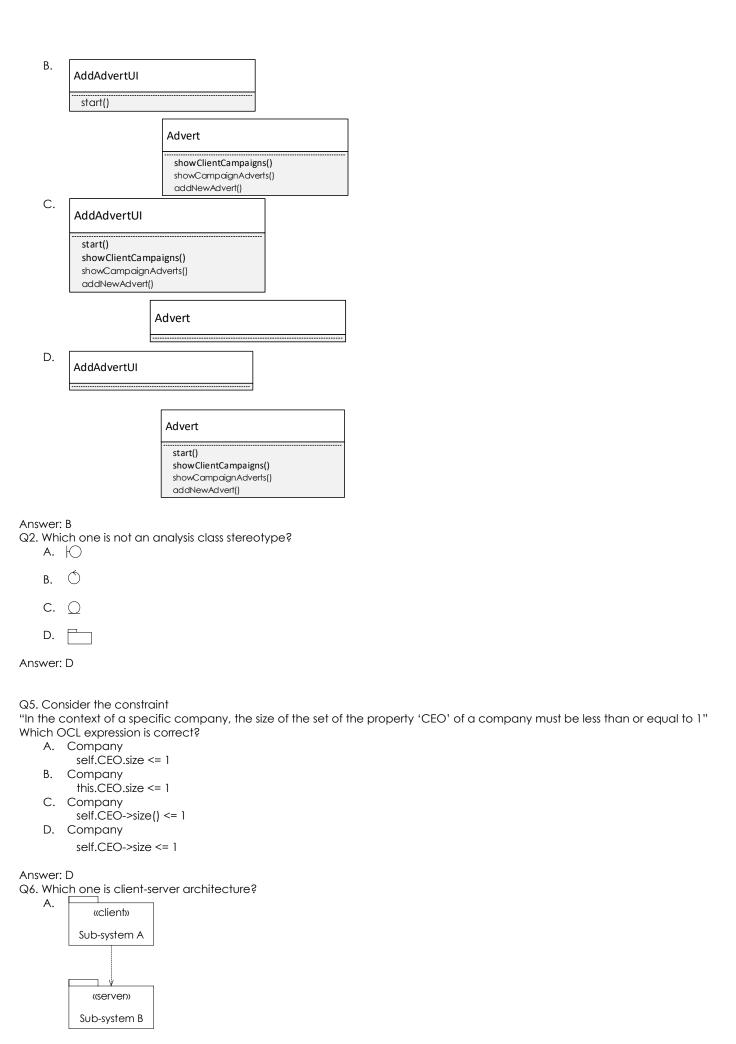
Answer: A

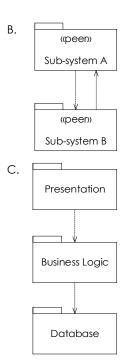
Q7. Which one is self-reflexive message?









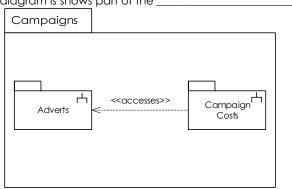


D. None of the above

Answer: A

Q7. Look at the state chart

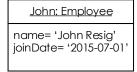
Q9. The diagram is shows part of the _____



- A. Physical design
- B. Detailed design
- C. System architecture
- D. Deployment architecture

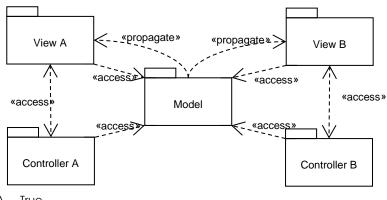
Answer: C

Q10. The following is a _____



- A. class diagram
- B. instance diagram
- C. object lifeline
- D. actor

Answer: B



- A. True
- B. False

Answer: A Q2.

Application

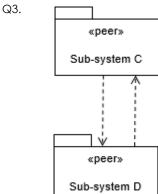
Data formatting

Data management library classes

The diagram is a -

- A. Layered architecture
- B. Partitioned sub-systems
- C. System
- D. Package

Answer: A

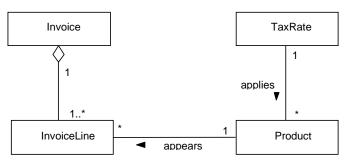


The diagram shows

- A. interaction between sub-systems
- B. links between sub-systems
- C. communication between sub-systems
- D. dependencies between sub-systems

Answer: C

Q4.



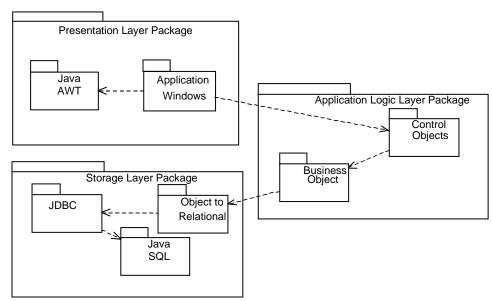
The diagram shows

- A. Assigning responsibilities
- B. Assigning dependencies

- C. Assigning links
- D. Assigning associations

Answer: A

Q5.

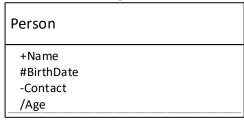


This is the diagram of -

- A. Elaborating classes in sub-systems
- B. Elaborating classes in packages
- C. Elaborating classes in system
- D. Elaborating sub-systems in system

Answer P

Q1. Which one of the following class is a derived attribute?

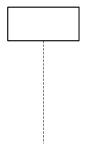


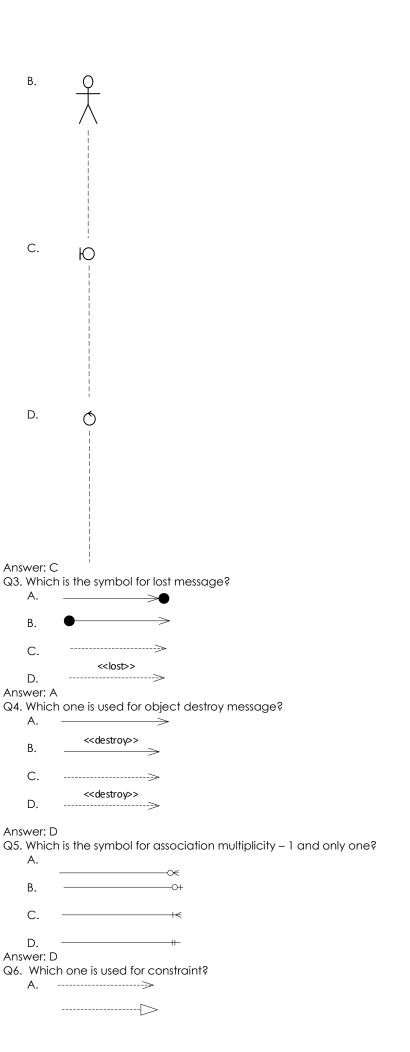
- A. Name
- B. BirthDate
- C. Contact
- D. Age

Answer: D

Q2. Which one is Boundary Object Lifeline?

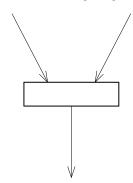
Α.





В.	
C.	
D.	{or}
Answer: [D .
Q7. Which	ch one is used for interaction diagram?
В.	ref
C.	
D.	
Answer: I	
Q8. Which	th one is used for combined fragment?
В.	ref
C.	
D.	

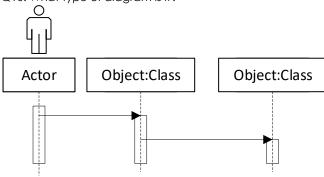
Q9. What is the following diagram element called?



- A. Join
- B. Fork
- C. Concurrency
- D. Frame

Answer: A

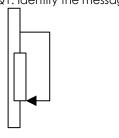
Q10. What type of diagram is it?

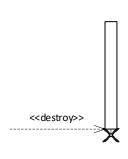


- A. Activity
- B. Collaboration
- C. Sequence
- D. State machine

Answer: B

Q1. Identify the messages







Q2. Identify symbols



__Send signal___

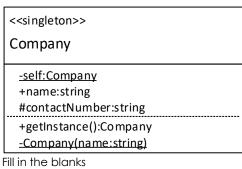


__Accept Signal____



_Time Signal

Q3. Look at the class diagram



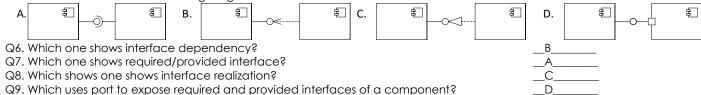
A. Class-scope attribute is

B. contactNumber attribute visibility is

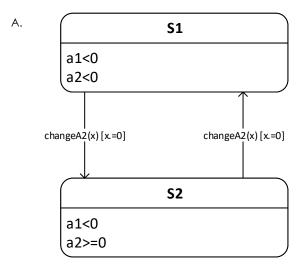
C. Company(name: string) is

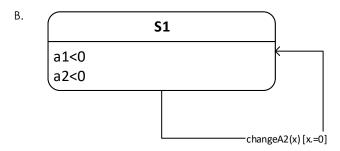
_Company__ __Protected_____ ___Constructor (method)_

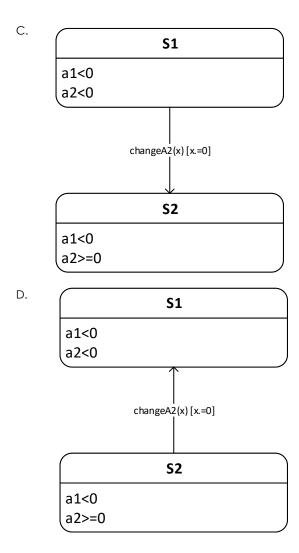
Q6 to Q9 are based on the following diagram



Q10. Which one shows a recursive event?

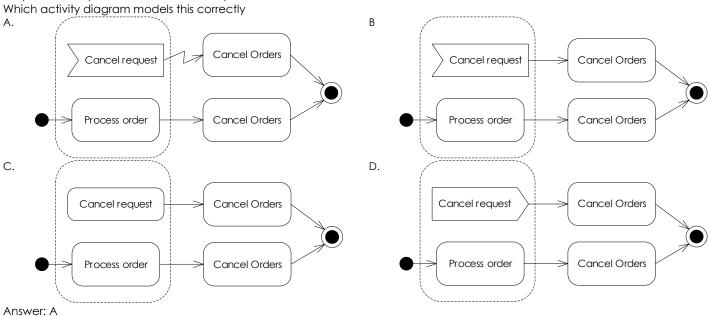




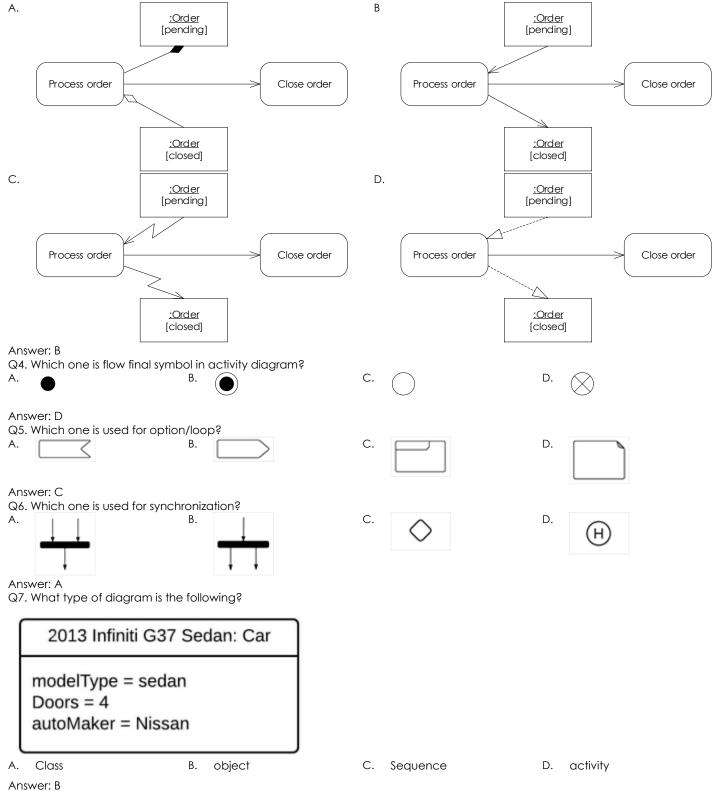


Answer: B

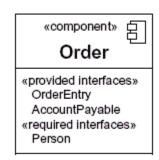
Q2. The "Process Order" action will execute until completion, when it will pass control to the "Close Order" action, unless a "Cancel Request" interrupt is received, which will pass control to the "Cancel Order" action.

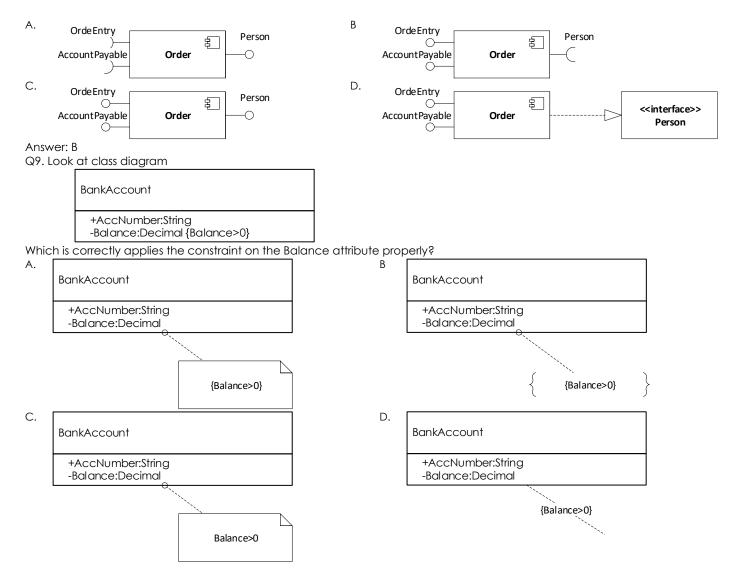


Q3. Which one shows object follow in activity correctly?

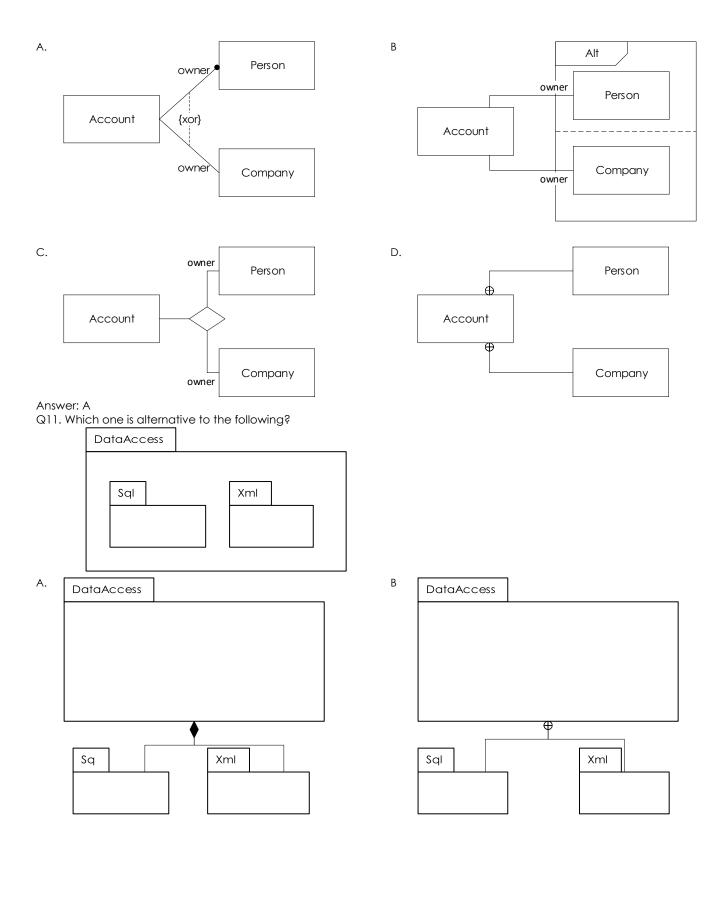


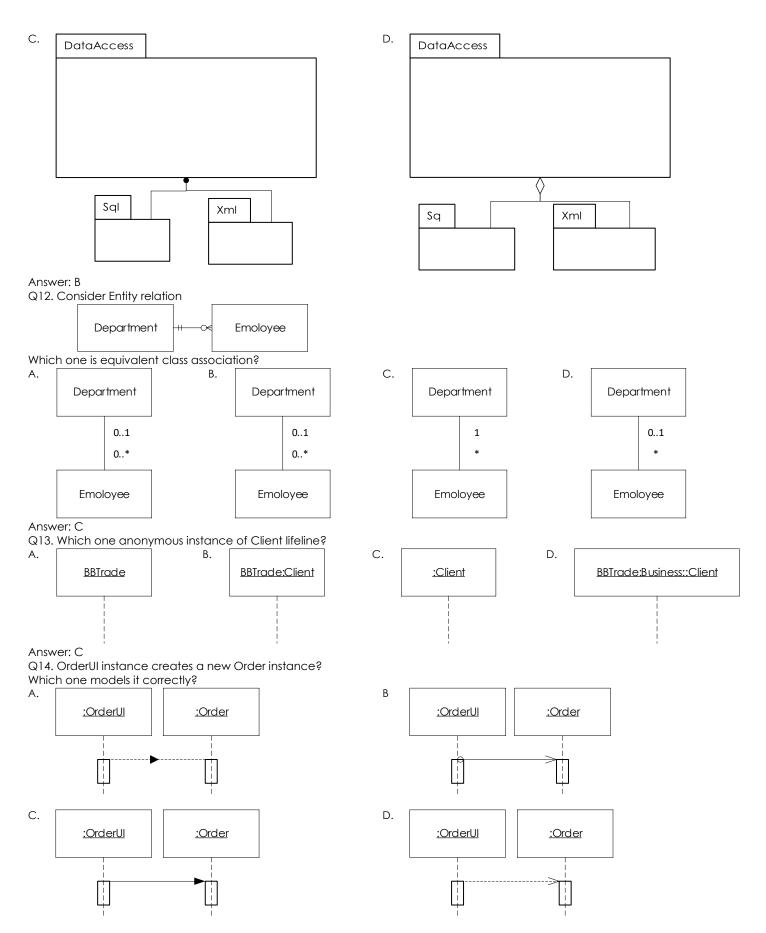
Q8. Which of the following correctly models the component below?



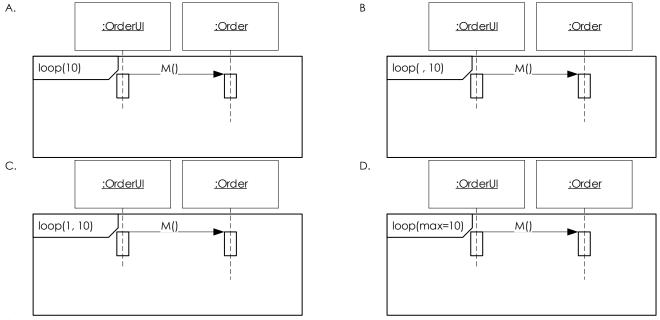


Answer: A [Some tool shows as B] Q10. An Account can be owned by a Person or Company. Which one correctly models the fact?





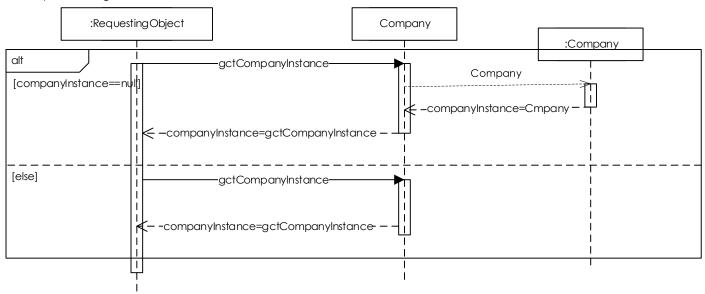
Answer: D
Q15. Which one shows that loop will execute exactly 10-times?



Answer: A

Q16.Instance creation of Company is done using following operation invocation companyIntance = Company.getCompanyInstance()

The sequence diagram of instance creation is shown below



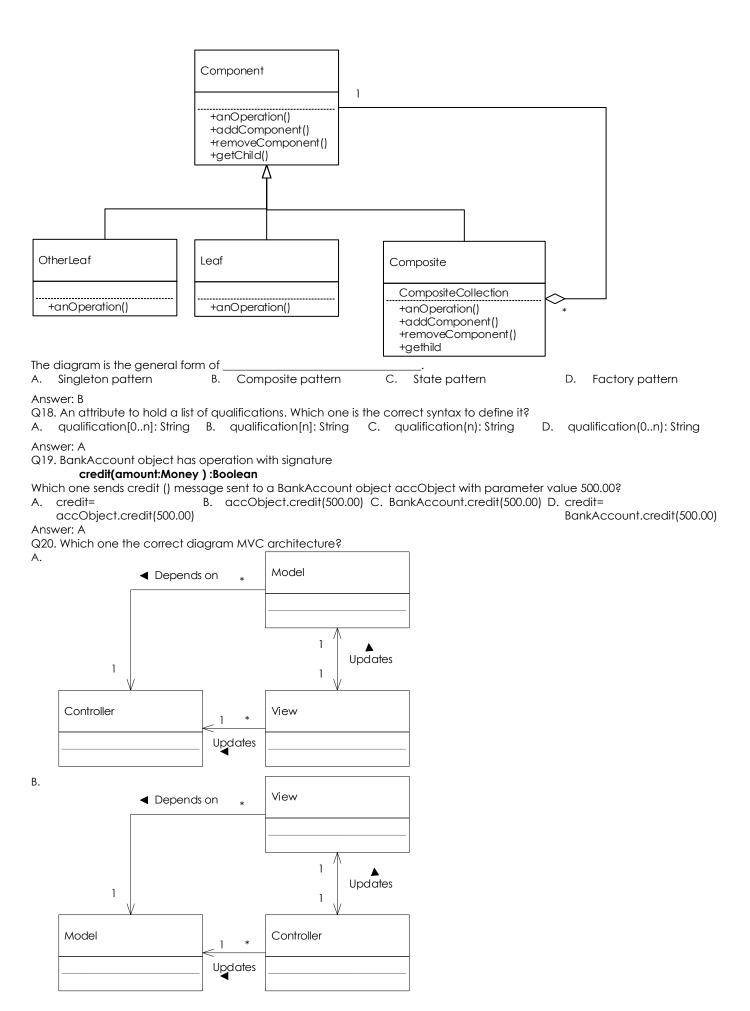
Which patter is applied here?

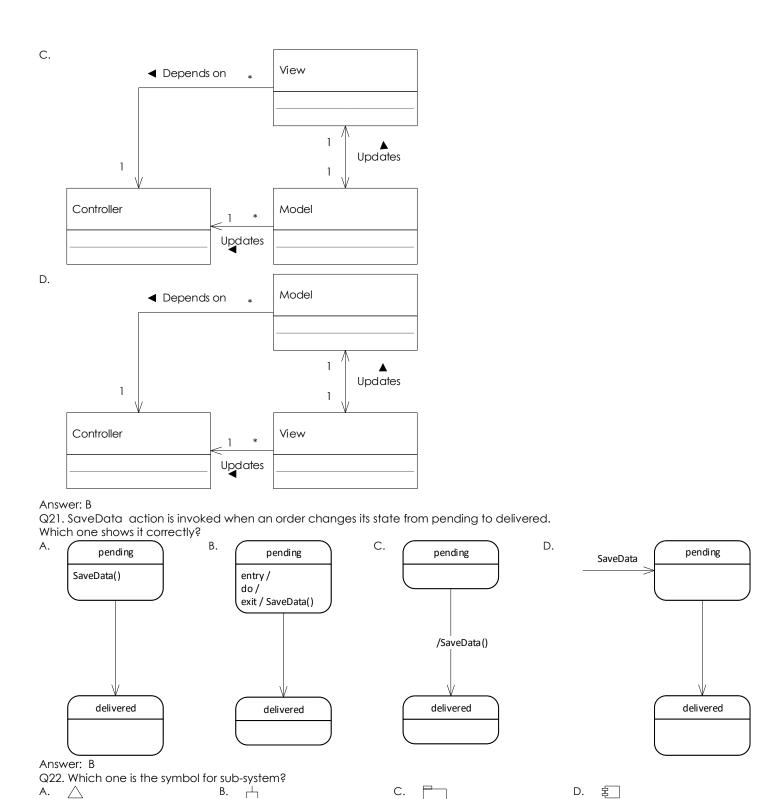
A. MVC B. Composite

MVC B. Composi

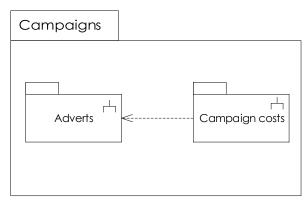
C. State D. Singleton

Answer: D Q17. Look at the diagram below





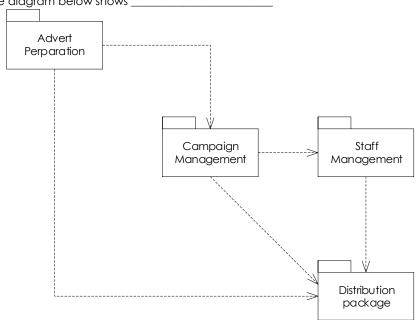
Answer: B
Q23. The diagram below shows _____



- A. a detailed system design B. an initial system
 - an initial system architecture
- $\ensuremath{\mathsf{C}}.$ a component dependency $\ensuremath{\mathsf{D}}.$ a deployment model

Answer: B

Q24. The diagram below shows _____

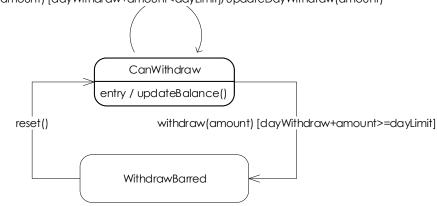


- A. initial package architechture
- B. initial system architecture C. a component dependency D. a deployment model

Answer: A

Look at the diagram below. Q25 to Q29 are based on the diagram.

withdraw(amount) [dayWithdraw+amount<dayLimit]/updateDayWithdraw(amount)



Q25. This is a _

A. activity diagram

- B. sequence diagram
- C. collaboration diagram
- D. State chart

Answer: D

Q26. _____is a state with internal activity.

A. CanWithdraw	B. U	pdateBalance()	C. withdraw(amount)	D. reset()
Answer: B				
Q27. reset() is A. an event	В. а	n action	C. a state	D. a guard condition
Answer: A Q29. dayWithdraw+amount>				
A. an event	B. a	n action	C. A state	D. a guard condition
Answer: D Q30. The diagram below shov	ws			
Campaign Management				
Campa	(ign Cl	ient		
Staff Management				
	VQ	V		
	StaffMe	mber		

C. initial system architecture

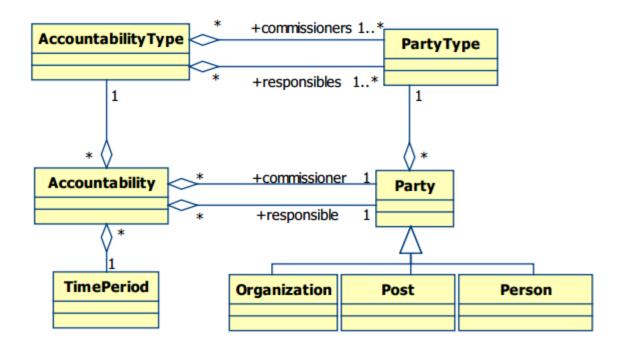
D. Class dependency

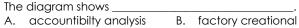
B. dependency among packages and among objects within packages

Answer: B

Q31. Look at the diagram

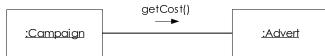
A. dependency among packages





- accountibilty analysis B. factory cre pattern pattern
- C. composite structural pattern
- D. state behavioral pattern

Answer: A Q32. The diagram below shows _



- A. object colloboration in time sequence
- B. object messaging
- C. sub-system communication $\,$ D. class interaction in sequence

Answer: B

Q33. The following diagram shows ______.

Initial analysis

Define objectives

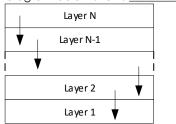
Specify

Completed Evaluate Construct

- A. Prototyping lifecycle
- B. USDP lifecycle
- C. traditional lifecycle
- D. incremental iterative lifecycle

Answer: A

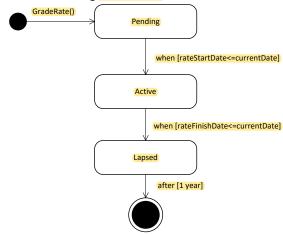
Q34. The diagram below shows __



- A. Partitioned architecture
- B. open layered architecture
- C. closed layered architecture
- D. partitioned and layered architecture

Answer: C

Q9. Look at the following state chart.



In the above state chart, which one is change event?

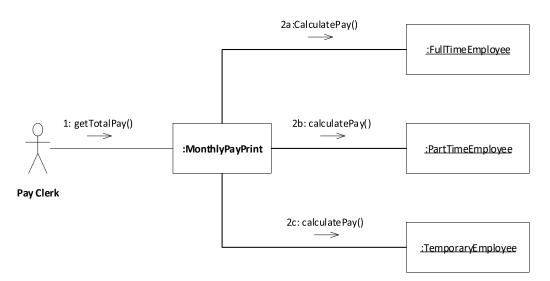
A. GradeRate()

B. when[rateStartDate<=currentDate] C. after [1 year]

D. Active

Answer: B

Q1. The communication diagram below shows the same message on object of different type cause objects to objects to behave in class-specific manner.

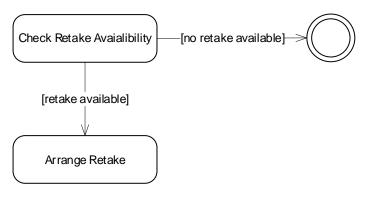


This feature in Object-Orientation is

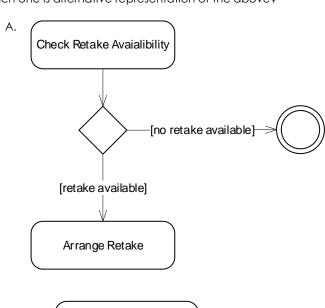
- A. Inheritance
- B. Polymorphism
- C. Encapsulation
- D. Data hiding

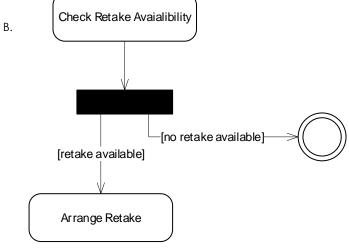
Answer: B

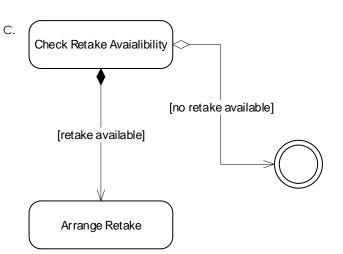
Q2. Look at the following activity

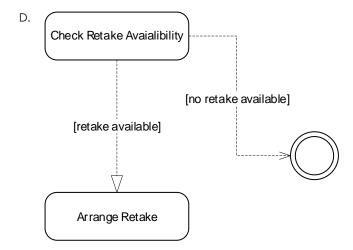


Which one is alternative representation of the above?

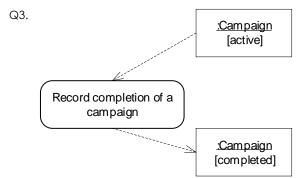








Answer: A



- The diagram above is

 A. Activity diagram with object flows

 B. Activity diagram with object split

 C. Activity diagram with decision node
 - D. Activity diagram with transition

Answer: A