OOAD

2 marks

① Polymorphism :

Polymorphism means using same operations in different ways in different classes.

Ex: class area
method findarea()

② class model:

- It describes static structure of object in system and their relationship.
- In class model, class diagram is a graph whose nodes are states and arcs are relationship between classes.

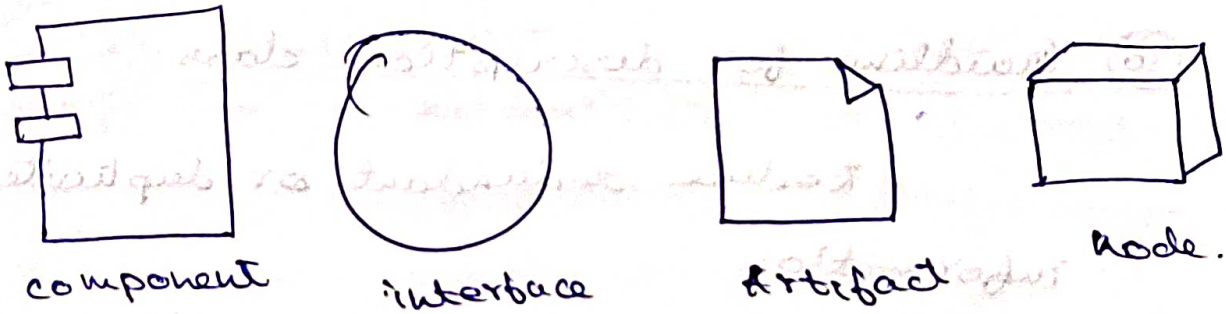
State model:

- It describes aspects of object that change over time.
- In state model, state diagram is a graph whose nodes are states and arcs are transition between states caused by events.

(5) ways to apply UML:

- UML as sketch: Informal & incomplete diagram created to explore difficult part of the proble or solution space.
- UML as blueprint: visualizing and better understanding existing code in code generation.
- UML as programming langu: Complete executable specification of a software system in UML.

(5) components of deployment diagram:



(6) naming association:

- Association name should start with capital letter
- It gives meaningful information.
- If 2 words are used, either put '-' between words and 1st letter of 2nd word in small letter or gap between two words and both starts, with capital letter.

⑦ Avoiding adding association:

In a domain model with n class nodes there can be $\frac{n(n-1)}{2}$ associations to other nodes which is large number. Ex: 20 - class 190 - association, which creates visual noise

⑧ Elaboration:

It is initial series of iteration during which the team does serious investigation, implements the core architecture, clarifies most requirements and tackles the high-risk issues.

⑩ Guidline for description class:

- Reduce redundant or duplicated information.
- There need to be description about an item or service, independent of current existing item.
- Deleting instances of thing result in loss of informa that need to be maintained but associated with deleting things.

(11) Communication diagram:

It models the interactions between objects or parts in terms of sequenced messages.

It represent combinations of information taken from (class, sequence, use case diagram) describing static structure and dynamic behaviour of system.

(13) Aspects of OO approach:

It focus on capturing the structure and behaviour of information system into small modules that combines both data & process.

- Improve quality
- " productivity
- " usability

(14) task by elaboration:

- the core, risky software architecture is programed and tested.
- major of requirement are identified and stabilized.
- the major risk are avoided.