

Code No. 6084N

Reg. No:.....

Sub. Code: BCAM12

M.CA(CBCS) DEGREE EXAMINATION, NOVEMBER 2020

First Semester

COMPUTER APPLICATIONS

OBJECT ORIENTED ANALYSIS AND DESIGN USING UML

(For those who joined in July 2020 onwards)

Time Three hours

Maximum: 75 marks

PART A – (10x1=10 marks)

Answer ALL the Questions, Choose the Correct answer

1. A subclass inherits all of the properties and methods defined in its
a) main class b) inner class c) child class d) super class
2. _____ inheritance allows objects to change and evolve over time.
a) Static b) Dynamic c) Multiple d) Multilevel
3. Which of the following diagram is time oriented?
a) Collaboration b) Sequence c) Activity d) Implementation
4. Which of the following views represents the interaction of the user with the software but tells nothing about the internal working of the software?
a) Use case diagram b) Activity diagram c) Class diagram d) Object diagram
5. Which of the following diagrams is used to model business workflows?
a) Deployment diagram b) Activity diagram
c) Use Case diagram d) Interaction diagram
6. Superclass-subclass relationships also known as
a) specialization hierarchy b) disjoint hierarchy
b) jointness hierarchy d) generalization hierarchy
7. _____ is a measure of the degree of interdependence between modules.
a) Cohesion b) Coupling c) Modularity d) Process
8. Cohesion is a qualitative indication of the degree to which a module.
a) can be written more compactly
b) focuses on just one thing
c) is able to complete its function in a timely manner
d) is connected to other modules and the outside world
9. What is Cyclomatic complexity?
a) Black box testing b) White box testing c) Yellow box testing d) Green box testing
10. Boundary value analysis belong to
a) White Box Testing b) Bottom-Up Testing
c) Top-Down Testing d) Black Box Testing

Part – B (5X5=25 marks)
Answer ALL questions, Choosing either (a) or (b), Each answer should not exceed 250 words.

11. a) Write a note on encapsulation and information hiding.
Or
b) Explain the four quality measures for software evaluation.
12. a) Discuss about the Booch methodology.
Or
b) Give an overview about patterns.
13. a) List down the steps for object-oriented analysis process.
Or
b) Write down the guidelines for identifying Super-Sub relationship a generalization.
14. a) Explain about object-oriented design axioms.
Or
b) Describe about class visibility.
15. a) Write not on Quality Assurance.
Or
b) Explain about Usability testing.

Part – B (5X8=40 marks)
Answer ALL questions, Choosing either (a) or (b), Each answer should not exceed 600 words.

16. a) Discuss about the object-oriented software development life cycle.
Or
b) Outline super class/subclass hierarchy.
17. a) Explain about the Jacobson methodologies.
Or
b) Summarize UML Dynamic modeling.
18. a) Describe about Use cases under the microscope.
Or
b) Explain about a part of relationships aggregation.
19. a) Explain in detail about coupling and cohesion.
Or
b) Explain about micro-level process.
20. a) Briefly explain about the guidelines for developing test plans.
Or
b) Describe about the impact of Object Orientation on testing.