

**Avinashilingam Institute for Home Science and Higher Education for Women
Coimbatore-641043.**

Master's Degree Examination November 2017

I Semester

Class : I PG
Major : Business Administration

Time: 3 hours
Max. Marks: 60

17MBAC06 IT Business Modelling

Part A

10 x 1/2 = 5

Choose the correct answer

1. Which step of SDLC performs cost / benefit analysis?
a. Feasibility study b. Analysis c. Design d. Coding
2. In a college, students are asked to develop software. Which model is preferable?
a. Waterfall model b. Spiral model c. Agile model d. Code and fix model
3. In a DFD external entities are represented by a _____
a. rectangle b. ellipse c. diamond shaped box d. circle
4. Number of entity types participating in E-R diagrams is represented by _____
a. structure of relationship b. instance of relationship c. degree of relationship
d. role of relationship
5. The step-by-step instructions that solve a problem are called _____.
a. An algorithm b. A list c. A plan d. A sequential structure
6. The cyclomatic complexity metric provides the designer with information regarding the number of _____.
a. cycles in the program b. errors in the program c. independent logic paths in the program
d. statements in the program
7. Inheritance in object-oriented modelling can be used to _____.
a. generalize classes b. specialize classes c. generalize and specialize classes
d. create new classes
8. Aggregation (encapsulation) relationship is represented in UML notation by _____.
a. Line with solid diamond at one end b. Line with hollow diamond at one end
c. Line with an arrow at one end d. Line without an arrow
9. Activity diagram, use case diagram, collaboration diagram and sequence diagram are considered as types of _____.
a. non-behavioral diagrams b. non structural diagrams
c. structural diagrams d. behavioral diagrams
10. In UML diagrams, relationship between object and component parts is represented by _____.
a. ordination b. aggregation c. aggregation d. increment

Part B

5 x 4 = 20

Answer ALL questions

Each answer should not exceed 200 words or one page

11. a. What is spiral model design ? Explain briefly
(Or)
b. Explain elaborately Joint Application Design (JAD)
12. a. What are non functional requirements of a project ? Explain
(Or)
b. What is meant by the cardinality of a relationship? Explain
13. a. Define cohesion. Explain different types of cohesion
(Or)
b. What is meant by static testing? Explain briefly
14. a. Define classes in software development object model
(Or)
b. Explain various benefits of using abstract data types
15. a. Give short note on object-oriented system design
(Or)
b. Describe UML package diagrams notation with suitable example

Part C

5 x 7 = 35

Answer ALL questions

Each answer should not exceed 600 words or three pages

Question No.20 is compulsory

16. a. Describe the concept of waterfall model design and the sequential phases
(Or)
b. Describe the importance of rational unified process
17. a. Discuss ISO 12207 and related software life-cycle standards
(Or)
b. What is an entity relationship diagram? And describe with suitable example
18. a. Describe white box testing fundamentals with advantages and disadvantages
(Or)
b. Explain acceptance testing with various forms in software development?
19. a. What do you mean by polymorphism? How Polymorphism is achieved at compile time?
(Or)
b What do you mean by class diagram? To draw the class diagram for online shopping
20. Explain purpose and discuss how to draw Airline Reservation System activity diagram