

UG Department of Computer Applications

18 UBC 415 - Software Engineering

UNIT-1

- 1) The term “system” is derived from the Greek word _____.
a) Systema b) Systemic
c) Systematic d) Systemation
- 2) The main memory holds _____ and _____ that the arithmetic units uses for computation.
a) Programs, files b) Programs, data
c) System, program d) System, files
- 3) A semantic model is a _____ dimensional chart.
a) Five b) Six c) seven d) two
- 4) MIS stands for _____.
a) Marketing Intelligent Software b) Managing Interface System c) Management Information System d) Marketing Information System
- 5) Which of the following is the element of the system?
a) Control b) Interaction
c) Program d) Data
- 6) The environment is the _____ with _____ in a organization operates.
a) Super system b) Supera system
c) Software system d) Subordinate system
- 7) _____ is the operation component of a system.
a) Control b) Processors c) Environment d) Feedback
- 8) Business organization are _____ system model.
a) Static b) Flow c) Dynamic d) Semantic
- 9) _____ is the collection of computer Programs, Procedures and Data.

a) Hardware b) Software c) Network d) Engineering

10) Control in dynamic system is achieved by _____ .

a) Outputs & Inputs b) Control c) Feedback d) Boundaries.

KEY ANSWERS:

1) a 2) b 3) d 4) c 5) a 6) b 7) b 8) b 9) b 10) c

UNIT-2

1) Which model is also known as classic life cycle or the water fall model _____

- a) Iterative Development b) Linear Sequential Development
- c) RAD model d) Incremental Development

2) SDLC stands for _____

- a) Software Development Life cycle b) System Development Life cycle
- c) Software Design Life cycle d) System Design Life cycle

3) The spiral model was originally proposed by _____

- a) IBM b) Barry Boehm c) Pressman d) Royce

4) The incremental model is a combination of which 2 models _____

- a) Linear model & Water fall model
- b) Linear model & RAD model
- c) Linear model & Prototyping model
- d) Water fall model & RAD model

5) Which one of the following is not a phase of prototyping model _____

- a) Quick design b) Coding c) Prototype refinement
- d) Engineer product

6) The Spiral model has two dimensions namely _____

- a) Diagonal , Angular b) Radial , perpendicular c) Radial , Angular
- d) Diagonal , Perpendicular

- 7) RAD stands for_____
- a)Relative Application Development b)Rapid Application Development
c)Rapid Application Document d) None of the mentioned
- 8) RAD model has _____
- a) 2phases b) 3phases c) 5phases d) 6phases
- 9) which is not a software Lifecycle model_____
- a) spiral model b) prototype model c) capability maturity model
d) water fall model
- 10) Which system model is being depicted by the ATM operations _____
- a) Behavioral model b) Context model c) Spiral model
d) structural model

KEY ANSWERS:

1) B 2) a 3) b 4) c 5) b 6) c 7) b 8) c 9) c 10) b

UNIT-3

- 1) Agile Software Development is Based On_____
- a) Incremental Development b) Iterative Development
c) Linear Development d)Both Incremental & Iterative Development
- 2)Which Model in System Modelling Despects the behavior of the system_____
- a) Context b) Behavioural model c) Data model d)Water fall model
- 3) Which level of entity relationship diagram(ERD)models all entities and relationships_____
- a) Level1 b) Level2 c)Level3 d)Level4
- 4) _____ phases are there in Scrum
- a) Two b)Three c) Four d) Does not have phases

- 5) The XP design follow as _____ principle
a) Design principle b) Keep it simple c) Agility principle
b) None of the mentioned
- 6) FAST stands for _____
a) Functional application specification technique b) FAST application specification technique
c) Facilitated application specification technique
d) None of the mentioned
- 7) QFD stands for _____
a) Quality function design b) Quality function development
c) Quality function deployment d) None of the mentioned
- 8) In DFD external entities are represented by _____
a) Rectangle b) Elipes c) Diamond shape d) Circle
- 9) Which of the following gives a logical structure of the database graphically _____
a) Entity-relationship diagram b) Entity diagram
b) Data flow diagram d) Architectural Diagram
- 10) The Rectangles divided into two parts represents _____
a) Entity set b) Relationship set c) Weak entity set d) Primary key

KEY ANSWER:

1) d 2) b 3) b 4) b 5) b 6) c 7) c 8) a 9) a 10) a

UNIT-4

- 1) _____ Is the first step in the development phase for any engineered product or system.

- a) Requirements b)Analyze c) Design d) Execution
- 2) The _____ design transforms structural elements of the program Architecture into procedural description of software components.
a) Procedural b) software c) Data d)Architectural
- 3) A Design should be_____.
a) Simpler b)Larger c)Modular d)Both a & b
- 4) A design should be structured to _____ change.
a) Commemorate change b) conceptual change
b) Accommodate change d) Conditional change
- 5) A_____is a named collection of data that describes a data object.
a) Data object b)Data structure c)Data Abstraction d) Data design
- 6) Stepwise refinement is proposed by _____.
a) Niklaus wirth b)Roger pressman c)Thomas d)Nichols.K.M
- 7)_____Is the Single attribute of software that allows a program to intellectually Manageable.
a) Refinement b) Modularity c) Abstraction d) Architecture
- 8) A set of architectural patterns enables a software engineer to reuse _____ concepts.
a) Data-level b)Design-level c)Abstraction-level d)Architecture-level
- 9)_____ Indicates how many modules directly control a given module.
a) Fan-out b)Fan-in c)Subordinate d)super ordinate
- 10)The scale for cohesion is _____.
a) Linear b)Non-Linear c)Graphic d)Non-Graphic

KEY ANSWER:

1) C 2) a 3) c 4) c 5) c 6) a 7) b 8) b 9) b 10) b

UG Department of Computer Applications

18 UBC 415 - Software Engineering

K3 Level Questions

Unit 1

1. Classify the various Characteristics of System.
2. Inspect Feasibility Study in the Software Development life cycle.
3. Compare the Analysis and Implementation phases of SDLC.
4. Examine the Characteristics of a system.
5. List out the various Software Applications.

Unit 2

6. Inspect the Software Process.
7. Compare Linear Sequential Model with Incremental Model.
8. Analyze the RAD Model in detail.
9. Contrast Concurrent Development model and Component Assembly Model.
10. Examine Dynamic System Development Method.

Unit 3

11. Write a Survey on SCRUM in the Agile modeling.
12. Examine Feature Driven Development.
13. Write a note on functions of Requirements Analysis.
14. Analyse the Software Prototype models with diagram.

15. Examine the software specification and its Principles.

16. Discuss in detail about Behavioral Modeling.

Unit 5

17. Write a survey on Facilitated Application Specification Techniques.

18. Examine the Software Requirements Specification.

19. Distinguish the Data Objects, Attributes, and Relationships.

20. Inspect the Ward and Mellor Extensions with the normal Data Flow Diagram.

K4 Level Questions

1. List out the various Types of Systems.

2. Inspect Consideration factors for a new Candidate System.

3. Examine the Recognition of Need of a SDLC.

4. Classify the various Software Components.

5. Explain the Phases of Linear Sequential Model.

6. List out the various stages of Evolutionary Software Process Models.

7. Categorize Agility Process with examples.

8. List the various Agility Process Models.

9. Classify the different types of Agile modeling.

10. Write a survey on coordination and communication techniques used in the software project management.

11. Classify the various steps in the Analysis Principles.

12. Inspect the data modeling and its types in detail.
13. Analysis Functional Modeling and Information Flow.
14. Discover the various design issues of interface design process.
15. Examine the human factor that affects the agility of a software.
16. Compare the Incremental model and spiral model of software process models.
17. List out various types of partitioning in software design.
18. Distinguish the Entity Relationship diagram with the Data flow diagram.
19. Analyse the program design language in detail.
20. Distinguish the transform mapping and transaction mapping in the architectural design process.

K5 Level Questions

1. Create an Entity/Relationship Diagram for Student Database Management software.
2. Invent what are all the details have to be collected in the Software Requirements Specification stage of the life cycle.
3. Discuss the Design Process and principles in detail.
4. Propose how the Cohesion and Coupling of software modules make changes to the software.
5. Develop a Design Documentation for software in the design process.
6. Elaborate various Agile models in detail.
7. Discuss about Interface Design Models in the user interface design.
8. Develop a Program Design Language code for safehome security system.
9. Propose a Tabular Design Notation for a software module.
10. Create Graphical Design Notation for sample software.
11. Construct the step by step Evolution of Software Design.
12. Discuss in detail about software design principles and concepts.

13. Elaborate the functional Modeling and Information Flow.
14. Formulate an Entity/Relationship Diagram for an application and test it.
15. Design a Data flow diagram for an example software application.
16. Test different Software Process Models with examples.
17. Compile the RAD Model with a specific development cycle.
18. Discuss the four types of Evolutionary Software Process Models
19. Elaborate the different types of systems.
20. Compose a System development life cycle for common software.
21. Discuss Characteristics and elements of a system in detail.
22. Construct the Components and applications of software.
23. Estimate a software project with the Linear Sequential Model and the Prototyping Model.
24. Elaborate the dynamic system development method in the Agile process model.
25. Discuss in detail about Structured Partitioning of software design.