Avinashilingam Institute for Home Science and Higher Education for Women

(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)
Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

Continuous Internal Assessment Test - I Feb 2025

Semester III

Class : II UG **Time : 2 Hours**
Major/Branch : B.Sc. Computer Science **Max. Marks: 60**

23BCSC08 Software Engineering

Course outcomes:

1. Acquire strong fundamental knowledge in software engineering.
2. Ability to design the software projects in objects oriented models.
3. Effectively demonstrate competence in Problem-Solving Approaches.
4. Adapt to new emerging technologies and methodologies.
5. Assuring software quality standards based on various testing strategies.

Part A **6x1 = 6**

Choose the Correct Answer

1. Which of the following is *not* considered one of the key characteristics of software? CO1_K2
A) Maintainability
B) Reliability
C) Efficiency
D) Performance of hardware components

2. Which of the following best describes the evolving role of software in modern industries? CO1_K3
A) Software is primarily used for basic data storage and processing tasks.
B) Software is mainly responsible for automating routine tasks with minimal human intervention.
C) Software is integral to enhancing business strategies, customer experience, and operational efficiency.
D) Software has little impact on industries outside of the technology sector.

3. Which of the following design strategies focuses on breaking down a system into smaller, manageable components that can be developed and tested independently? CO2_K1
A) Top-down design
B) Bottom-up design
C) Modularity
D) Iterative design

4. Which of the following is *not* typically considered a key aspect of design quality? CO2_K2
A) Usability
B) Maintainability
C) Scalability
D) Budget constraints

5. Which of the following best describes the key difference between a process and a project? CO3_K2
A) A project is a one-time, specific endeavor with a defined start and end, while a process is a continuous, repetitive set of activities.
B) A process is focused on achieving a specific goal, while a project is focused on day-to-day operations.
C) A project is shorter in duration than a process.
D) A project can be managed without a defined methodology, while a process requires one.

6. What is the primary purpose of assessing a process in software development? CO3_K3
A) To evaluate the technical performance of the development tools used
B) To identify the strengths and weaknesses of the development process and ensure continuous improvement
C) To reduce the number of team members involved in the development
D) To finalize the project budget and timeline

Part B **3x6 = 18**

Answer all the questions

Each answer should not exceed 400 words or two pages

7.a) Write notes on Linear Sequential Development Model. CO1_K3

(Or)

b) Explain the various Software Applications. CO1_K2

8.a) Discuss the concept of Data Dictionaries. CO2_K2

(Or)

b) Explain the Object Oriented Design with an example. CO2_K5

9. a) Explain Architectural Design. CO2_K3

(Or)

b) Discuss the overview of the assessment process. CO3_K4

Part C **3x12 = 36**

Answer all the questions

Each answer should not exceed 800 words or four pages

10. a) Discuss on the concept of Iterative Development Model and Incremental Development Model in detail. CO1_K3

(Or)

b) Explain the Various Software Development Approaches. CO1_K4

11. a) Elaborate the various Software Design Principles. CO2_K4

(Or)

b) Explain the various Data Flow Models with examples. CO2_K5

12. a) Write Short notes on semantic data model and object data model. CO2_K4

(Or)

b) What is the Need for a Business Model and the Dimension of Time in Software Engineering. CO3_K5

****

Staff in-charge

Dr. G. Sudhamathy, Dr. M. Thilagu

No. of Copies: **60 Copies - Campus I; 60 Copies - Campus II - Total = 120 Copies**