

## MID TERM

Q1: What is software program?

Ans: A software program is commonly defined as a set of instructions, or a set of modules or procedures, that allow for a certain type of computer operation. The term is also often used interchangeably with terms like “software application” and software product.

Q2: Differentiate between Compiled and Interpreted language?

Ans: A compiled language is a programming language whose implementations are typically compilers and not interpreters. An interpreted language is a programming language whose implementations execute instructions directly and freely, without previously compiling a program into machine-language instructions.

Q3: Differentiate between Pseudocode and algorithm?

Ans: The main difference between algorithm and pseudocode is that an algorithm is a step by step procedure to solve a given problem while a pseudocode is a method of writing an algorithm. An algorithm is a procedure for solving a problem. In other words, it is a sequence of steps to solve a given problem.

Q4: What the mathematical operator used in a programming language?

Ans: 5 Types of Math Used in Computer Programming

1.Binary Mathematics. Binary mathematics is among the most essential math fields for computer programming and lies at the heart of the programming field.

2.College Algebra.

3.Statistics.

4.Calculus.

5.Discrete Mathematics.

Q5: Mention any 5 relational operator?

Ans: Java has six relational operators that compare two numbers and return a boolean value. The relational operators are `<` , `>` , `<=` , `>=` , `==` , and `!=` . True if x is less than y, otherwise false

Q6: What are the loops?

Ans: In computer programming, a loop is a sequence of instructions that is continually repeated until a certain condition is reached. A loop is a fundamental programming idea that is commonly used in writing programs. An infinite loop is one that lacks a functioning exit routine .

Q7: Write the syntax of while loop in Javascript?

Ans: JavaScript while Loop

1. `while (expression) { // statement } ...`
2. `let count = 1; while (count < 10) { console.log(count); count +=2; }`

Q8: Write the syntax of for loop in Javascript?

Ans: JavaScript while Loop

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Q9: What is the software development life cycle?

Ans: Software Development Life Cycle (SDLC) is a process used by the software industry to design, develop and test high quality softwares. It is also called as Software Development Process. SDLC is a framework defining tasks performed at each step in the software development process.

Q10: Explain the waterfall software development life cycle model?

Ans: The waterfall model is a classical model used in system development life cycle to create a system with a linear and sequential approach. It is termed as waterfall because the model develops systematically from one phase to another in a downward fashion.

Q11: Explain the v-shaped software development life cycle model?

Ans: The V-model is an SDLC model where execution of processes happens in a sequential manner in a V-shape. It is also known as Verification and Validation model. The V-Model is an extension of the waterfall model and is based on the association of a testing phase for each corresponding development stage.

Q12: Explain the Agile software development life cycle model?

Ans: The Agile software development life cycle is the structured series of stages that a product goes through as it moves from beginning to end. It contains six phases: concept, inception, iteration, release, maintenance, and retirement.