

INTRODUCTION TO SOFTWARE ENGINEERING

1. Match the following words with their definition

1. Code	d	a. The process of revising and modifying the code or design due to errors or changes in requirements.
2. Software Engineering	f	b. The practice of regularly testing the software throughout its development and maintenance phases.
3. Quantifiable	g	c. In the context of software, triggers can refer to events or conditions that initiate specific actions in the software.
4. Rework	a	d. Refers to the lines of programming instructions that make up software
5. Maintenance	h	e. The phase where the software is put into use and maintained.
6. Continuous Testing	b	f. it's the systematic and disciplined approach to developing, operating, and maintaining software.
7. Triggers	c	g. Measurable and able to be expressed in numerical terms.
8. Operation	e	h. Ongoing tasks to ensure the software remains functional and up-to-date.

2. Make Noun and/or Adjectives from the given Verbs

Verb	Noun	Adjective
Develop	_____	Developmental
Operate	_____	_____
Maintain	_____	Maintenance-related
Request	_____	Requested
Create	Creation	_____
Break down	_____	-
Ensure	_____	Assured
Collect	_____	_____
Investigate	_____	Investigative
Build	Build	_____
Notice	Notice	_____
Test	Testing	_____

3. Choose the correct Answer

1. What is software engineering according to the IEEE?

- A) The development of software products
- B) The creation of code and documents
- C) The application of best practices to software
- D) The operation and maintenance of software
- E) The systematic, disciplined approach to software development

2. What is the primary goal of software engineering?

- A) Developing software with the lowest cost
- B) Creating software as quickly as possible
- C) Building software that is reliable, efficient, and effective
- D) Maximizing the number of software developers on a project
- E) Outsourcing software development to vendors

3. What is the role of the Chief Information Officer (CIO) in software engineering?

- A) Writing code for the software
- B) Creating a roadmap for software development
- C) Requesting the development of software
- D) Collecting information about software needs
- E) Managing IT strategies within the organization

4. What is the purpose of breaking down a software project into requirements and steps?

- A) To minimize the number of software developers required
- B) To save time and money in the development process
- C) To ensure all work is congruent with best practices
- D) To outsource the project to independent contractors
- E) To avoid the need for software engineering tools

5. What is the most critical stage in software engineering, where most of the "work" is completed?

- A) Code writing
- B) Requirements gathering
- C) Testing and monitoring
- D) Maintenance
- E) Rework

6. When should code be tested during the software development life cycle?

- A) Only after the software is fully developed
- B) At the beginning and end of the development process
- C) Continuously as it is written and upon completion
- D) Only during the maintenance phase
- E) Only if problems are suspected

7. What is the purpose of software engineering tools in the development process?

- A) To write code for the software
- B) To eliminate the need for requirements gathering
- C) To ensure all work is outsourced to vendors
- D) To facilitate and enhance software development, testing, and monitoring
- E) To reduce the reliance on IT leaders

8. Who is typically responsible for the initial request for software development in an organization?

- A) Independent contractors
- B) Vendors
- C) IT leaders
- D) Maintenance teams
- E) The Chief Information Officer (CIO)

9. What does the term "rework" in software engineering refer to?

- A) The process of breaking down a software project into requirements
- B) The development of a roadmap for software development
- C) Revising and modifying the code or design due to errors or changes
- D) The continuous testing of software
- E) The creation of code and documents

10. What is the primary focus of software engineering according to the text?

- A) Speeding up the development process
- B) Reducing the cost of software development
- C) Building reliable, efficient, and effective software
- D) Eliminating the need for software developers
- E) Outsourcing software development to freelancers

