
Part A: Short Answer Concept Questions

Q1: What is an end user?

Answer: An end user is the person who will use the finished computer program, such as a teacher, parent, or student.

Q2: What is the main responsibility of an analyst?

Answer: An analyst gathers requirements of the product by interviewing end users and helps develop specific, measurable criteria for the project.

Q3: How does a UX designer make a program user-friendly?

Answer: A UX designer arranges menus, buttons, and content so users can operate the program easily without reading instructions.

Q4: What is meant by 'content' in a computer program?

Answer: Content refers to all the informational elements inside the program, such as text, images, videos, sound effects, and music.

Q5: What is the role of a software developer?

Answer: A software developer designs algorithms and writes code.

Q6: What is the role of a product tester?

Answer: A product tester tests the software extensively to identify errors and verify criteria.

Q7: Name two key tasks performed by a project manager.

Answer: A project manager sets schedules / deadlines, assigns work to team members, and ensures the finished program fulfills all success criteria.

Q7: What is the project life cycle?

Answer: The project life cycle is the five-stage process of creating software: analysis, design, development, testing, and evaluation.

Q8: What activities happen during the design stage?

Answer: During design, teams plan screen layouts, sketch user interfaces, and write step-by-step algorithms before coding.

Q9: What happens during the development stage?

Answer: Developers code the software based on algorithms, while content creators and graphic designers produce media assets.

Q10: Why must criteria be specific and measurable?

Answer: Specific and measurable criteria allow teams to evaluate the program objectively to confirm whether each requirement was truly met.

Part B: Second-Order Thinking Skills Questions

Q1 Compare Algorithm A and Algorithm B. Name two things that make Algorithm B easier to understand.

Algorithm A

INPUT X

INPUT Y

$Z = X + Y$

OUTPUT Z

Algorithm B

INPUT X

INPUT Y

$Z = X + Y$

OUTPUT Z

Answer:

1. Meaningful Variable Names: Algorithm B uses descriptive variables (Number1, Number2, Result) instead of obscure letters (X, Y, Z).

2. Inline Comments: Algorithm B contains comments (starting with //) explaining each action in clear plain language.

Q2 Explain how the testing stage connects directly back to the development stage.

Answer:

When product testers run the program and identify bugs or unmet criteria, they send detailed problem reports back to developers, who recode and resolve the issues before evaluation.