SOFTWARE ENGINEERING (FOUNDATIONS + PRACTICES) MID SEM - 1 | NATO CONFERENCE 1969 (PP. 40-45)

Q1. Which one of the following was not identified as a major objective of the CLEAR (Controlled Library Environment and Resources) system?

- A. Specification
- B. Flowchart
- C. Development
- D. Time Accounting

Q2. Which of the following allowed programmers to avoid changing the actual source text but instead to an increment to the source text so that anything released previously is unchanged?

- A. Common Inter-Center Environment
- B. Delta concept
- C. Disaster Recovery Capability
- D. Positive Level Control

Q3. What was the CLEAR system? Expand the term and briefly explain in 2-3 sentences.

A3. CLEAR (Controlled Library Environment and Resources) was a programming development support system designed to help IBM development programmers manufacture large systems. It was developed with an aim to assist the administration and the accomplishment of the program development cycle.

Q4. What was the CASTER system? How was it different from the CLEAR system? Expand the term and briefly explain in 2-3 sentences.

A4. The CASTER (Computer Assisted System for Total Effort Reduction) system was a newer, extended version of the CLEAR system. It provided online access to the information which the CLEAR system maintains using simple graphic display terminals. It also served as a communication centre for exchanging messages between people.

Q5. What were the facilities provided by CLEAR-CASTER system to the programmers to facilitate the development of new-age softwares?

A5. The CLEAR-CASTER system provided a lot of facilities to the programmers. These included:

- Correlation among the various module specifications, flowchart, and source code and further integration of all the three components.
- Syntax analysis of individual program statements.

- Standards and Convention Checking, which could be achieved using a set of standards for the source code in a library and commands could be used to check that the source code adhered to these standards.
- Conversational debugging, which was designed to help in the early development of a module rather than during later stages of system development.
- "Library for Integration" which aimed to facilitate the integration of source code modules developed in various different programming centres around the world into a single system.