E - 3916

B. C. A. (Part III) EXAMINATION, 2021

(New Course)

Paper Fourth

SOFTWARE ENGINEERING

(304)

Time: Three Hours [Maximum Marks: 80

Note: Attempt any *two* parts from each question. All questions carry equal marks.

Unit—I

- (a) Define software and software engineering. Explain software development paradigm.
 - (b) Explain software requirements specification (SRS).
 - (c) Write short notes on the following:
 - (i) Partitioning and Projection
 - (ii) Object Oriented Analysis

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Unit—II

- 2. (a) What are the concepts of the following:
 - (i) Cohension
 - (ii) Coupling

What is their impact on the software design process?

- (b) Explain object oriented design Booch approach.
- (c) Explain the design metrics and design documentation standards in brief.

Unit—III

- 3. (a) What is case tools? Discuss their importance in software development.
 - (b) Describe various symbols used in DFD. What is described in first and second level of DFD?
 - (c) Explain the re-engineering legancy systems and coding standards.

Unit—IV

- 4. (a) How is cost of software estimated? Discuss.
 - (b) Why is software testing required ? Differentiate between white box and black box testing.
 - (c) Write short note on the following:
 - (i) Debugging and reliability analysis
 - (ii) COCOMO model

Unit—V

- 5. (a) What is the need of planning for a software project?

 Write the major issues of the planning of project.
 - (b) Explain the project monitoring and controls.
 - (c) Write short notes on the following:
 - (i) Integrating software
 - (ii) Software project teams