

Roll No.

DD-2876 (SE)

B. C. A. (Part III) EXAMINATION, 2020

Paper Sixth

SOFTWARE ENGINEERING

Time : Three Hours

Maximum Marks : 100

Minimum Pass Marks : 40

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

Unit—I

1. (a) What is software process ? Discuss the components and characteristics of software process.
- (b) What are the major phases in the Waterfall model and Spiral model ? Where is Spiral model beneficial ?
- (c) Define Software Engineering. What are goals and approaches of Software Engineering ?

Unit—II

2. (a) Explain size oriented metrics in context to Project Management.
- (b) How phase management is implemented in project during software development ?

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- (c) Define software metric. Explain the function oriented metric with an example.

Unit—III

3. (a) What is SRS ? Explain the need of SRS and list the desirable characteristics of good SRS document.
- (b) Draw data flow diagram for library/banking management system. Clearly describe the working of the system.
- (c) How context diagram and DFD are related to each other ? Explain with an example.

Unit—IV

4. (a) Explain the role of coupling and cohesion in module designing.
- (b) Define structure chart with different types of modulers.
- (c) Differentiate between top-down and bottom-up design strategies.

Unit—V

5. (a) What is integration testing ? Discuss about the various approaches of integration testing.
- (b) What is system testing ? Discuss various types of system tests.
- (c) Explain about the software testing strategies. What are the different types of testing ? Explain any *one* in detail.

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