

Roll No.

DD-2876

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) Explain the principle of software engineering and also describe the problems associated with software engineering.
- (b) Explain various phases of development process.
- (c) What is spiral process model ? Write its advantages also.

Unit—II

2. (a) Describe project management process in brief.
- (b) What is function point and explain function oriented matrices.
- (c) Describe size oriented matrix with suitable examples.

(A-16) P. T. O.

Unit—III

3. (a) What is SRS ? What are the various needs of SRS ?
- (b) Draw data flow diagram for Hospital Management System.
- (c) What are the various roles of data-dictionary for any project ?

Unit—IV

4. (a) Explain the principle of software design.
- (b) Differentiate between cohesion and coupling.
- (c) Write short notes on the following :
 - (i) Code-verification
 - (ii) Abstraction

Unit—V

5. (a) Define error, fault and failure with *one* suitable example in each.
- (b) What is testing ? Explain white box testing with their types.
- (c) Explain the role of software maintenance for any software.