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 matric with suitable examples.

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.