

BCA 404

B.C.A. (PART-II) EXAMINATION, 2023-24

(Fourth Semester)

Paper : IV

Software Engineering

5547



Time : Three Hours]

[Maximum Marks : 70

- Note:** (i) Answer **five** questions in all.  
(ii) Question No. **1** is **compulsory**.  
(iii) Answer remaining **four** questions, selecting **two** questions from each Section A and B.  
(iv) Simple scientific calculator and log tables allowed.  
(v) All questions carry equal marks

1. Answer all parts of the following :
- What is COCOMO model ?
  - What is the Data Dictionary ?
  - Define Software Requirement Specification.
  - What is objective of software design ?

**Section-A**

2. Explain different phases of Software Development Life Cycle (SDLC). What is the requirement of software development model ?
3. Discuss about classical water fall model of SDLC. Discuss its advantages and disadvantages.

4. What do you understand by Software Engineering?  
Explain its importance in development of computer software.
5. Clearly differentiate between top down and bottom up software development strategies.

### **Section-B**

6. Differentiate between the following :
  - (a) Physical and Logical DFD.
  - (b) White and Black Box testing.
7. (a) What is Cost Estimation of Software management ? Explain any Cost estimation model with suitable example.  
  
(b) Why we need various software testing tools? Discuss its advantages in developing standard and quality software.
8. (a) What is software project management ?  
  
(b) Discuss about four components (4P's) of Software project planning.
9. Write notes on any two of the following :
  - (a) Entity Relationship Diagram.
  - (b) Object Oriented Analysis.
  - (c) Software measurement metrics.

