

BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2018 COURSE)
B.C.A. Sem-III : WINTER : 2021
SUBJECT: SOFTWARE ENGINEERING

Day : Wednesday
Date : 12-01-2022

W-18768-2021

Time : 10:00 AM-01:00 PM
Max. Marks: 60

N.B.:

- 1) Q 4 from Section I is COMPULSORY.
 - 2) Answer ANY TWO questions from Q 1, 2, 3 in Section I.
 - 3) Answer ANY TWO questions from Q 5, 6, 7 in Section II.
 - 4) All question CARRY EQUAL marks.
 - 5) Answers to Both the sections should be written in SAME answer book.
 - 6) Draw a labeled diagram WHEREVER necessary.
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SECTION - I

Q.1) Answer the following: (6 Marks X 2 = 12)

- a) What is Software? Explain the different characteristics of software.
- b) What is Feasibility Study? Explain the types of feasibility study.

Q.2) Answer the following: (6 Marks X 2 = 12)

- a) What is Requirement? Explain the different modern types of requirements.
- b) What is Coupling? Explain the different types of Coupling.

Q.3) Explain the following: (6 Marks X 2 = 12)

- a) What is Black box testing? Explain any two types of Black box testing.
- b) What is Maintenance? Explain the Boehm Model, and Taute's Models of Maintenance.

Q.4) Write short notes on the following: Attempt ANY THREE (4 Marks X 3 = 12)

- a) Principles of Software Engineering
- b) Software Development Life Cycle(SDLC)
- c) Validation Techniques
- d) Unit Testing

SECTION - II

Q.5) Answer the following: (6 Marks X 2 = 12)

- a) Explain the role of each members involved in software development.
- b) Explain the working of Spiral Model in detail.

Q.6) Answer the following: (6 Marks X 2 = 12)

- a) Prepare Software Requirement Document for a 'Hotel room booking and cancellation system'.
- b) What is the purpose of Data Flow Diagram? What are the Notations used to draw DFD. Explain by constructing a Context flow diagram level-0 DFD and level-1 DFD for Library Management System.

Q.7) Explain the following: (6 Marks X 2 = 12)

- a) State the difference between Quality control and Quality assurance.
- b) Why maintenance is important in SDLC? What are the different types of maintenance?
