Register Number:

Date:10-03-2022



**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BANGALORE -27**

**B.C.A III SEMESTER**

**SEMESTER EXAMINATION: OCTOBER 2021**

**(Exam conducted in January –March 2022)**

**CA 3318 – Software Engineering**

**This paper contains two printed pages and three parts**

**Time – 2.5 hours Max Marks-70**

I. **Answer all the following 2\*10= 20**

1. Differentiate verification and validation. give an example.
2. Give any two Agile principles.
3. What is need for feasibility analysis?
4. What is a SRS?
5. Mention the different types of code verification techniques.
6. What are the types of maintenance?
7. What is testing and mention the different types of testing.
8. Why does the software fail after it has passed from acceptance testing?
9. State the importance of scheduling activities in project management.
10. Can a program be correct and still not exhibit good quality? Justify.

II. **Answer any Five of the following 6\*5= 30**

1. With the help of neat diagram, explain Boehm’s Spiral model.
2. Explain the working principles of Scrum.
3. The functional requirements specifications of a system should be both complete and consistent “Substantiate this statement” with relevant examples.
4. Draw a DFD for online stores that show interaction with visitor’s customers and sellers as well website information and user database.
5. Explain software Configuration Management.
6. Explain the principles of design in detail.
7. Explain the metrics of software Quality.

**III Answer any two of the following 2\*10=20**

1. A. Explain coding document [5]

B. Explain the tasks occurs in clean room Management [5]

1. A. Differentiate between coupling and cohesion . [5]

B. Explain COCOMO Model [5]

1. A. Explain incremental Process Model. Justify that is an appreciate for Business software systems but less appreciate. [5]

B. Explain Functional and Non Functional requirements [5]