STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI - 600 086 (For Candidates admitted during the academic year 2019-2020 and thereafter)

B.C.A. DEGREE EXAMINATION – NOVEMBER 2023 THIRD SEMESTER

COURSE : MAJOR CORE : SOFTWARE ENGINEERING AND TESTING PAPER SUBJECT CODE: 19CS/MC/TE35 $: 1\frac{1}{2}$ HOURS TIME

MAX. MARKS: 50

SECTION – A

ANSWER ALL THE OUESTIONS:

Choose the correct answer:

- are business systems that are designed to process data in large batches. 1. b. Data collection system
- a. Entertainment system
- c. Systems of systems d. Batch processing system
- 2. ______ is not a Metrics for specifying non-functional requirements.
- a. Speed b. Size c. Reliability d. Cost 3. _____ design is concerned with understanding the organization and designing of the overall structure of that system.
- b. Class d. Architectural a. Dataflow c. Sequence
- 4. testing is a technique of software testing which examines the functionality of software without peering into its internal structure or coding.
 - a. Blackbox b. White box c. alpha d. Beta
- 5. _____ defines the business issues that often have a significant influence on the project.
 - a. Senior manager b. Practitioner c. Enduser d. Customer

Fill in the blanks:

- 6. A ______ is a set of related activities that leads to the production of a software.
- 7. diagrams are used when developing an object-oriented system model to show the classes in a system and the associations between these classes.
- 8. A system that follows ______ pattern is organized as a set of services and associated servers, and clients that access and use the services.
- 9. _____ is a software testing technique that involves testing the internal structure and workings of a software application.
- 10. is a set of activities that have been developed to manage change throughout the life cycle of computer software.

SECTION - B

ANSWER ALL THE QUESTIONS:

11. What are the four fundamental activities that are common to all software processes?

12.List out the information that should be included in the functional requirement?

13.Write about the advantages of explicitly designing and documenting software architecture 14.Define Verification and Validation.

15. What are the three categories of the output of software process?

(10 x1 = 10)

 $(5 \times 2 = 10)$

SECTION – C

ANSWER ANY SIX OF THE FOLLOWING:

16. Draw and explain Waterfall model and its phases.

17.Describe Extreme programming and its features.

18. Write in detail about functional and non-functional requirements.

19. Explain Use case modeling.

20. Discuss about Transaction processing systems with an example.

21. Summarize Architectural design and its importance.

22. Interpret Unit testing with the suitable diagram.

23. Explain Management spectrum in detail.

$(6 \times 5 = 30)$