

**B.C.A. DEGREE EXAMINATION – NOVEMBER 2022**

**THIRD SEMESTER**

**COURSE : MAJOR CORE**  
**PAPER : SOFTWARE ENGINEERING AND TESTING**  
**TIME : 1 ½ HOURS**

**MAX. MARKS: 50**

**SECTION – A**

**ANSWER ALL THE QUESTIONS:**

**(10 x1 =10)**

**Choose the correct answer:**

1. In Extreme Programming, requirements are expressed as \_\_\_\_\_.  
a. scenarios                      b. objects                      c. events                      d. classes
2. The process to gather the software requirements from client, analyze and document them is known as \_\_\_\_\_.  
a. feasibility Study                      b. requirement gathering  
c. requirement engineering                      d. system requirements specification
3. In size oriented metrics, metrics are developed based on the \_\_\_\_\_.  
a. number of functions                      b. number of user inputs  
c. number of lines of code                      d. all the mentioned
4. Boundary value analysis belongs to \_\_\_\_\_ type of testing.  
a. White Box Testing                      b. Black Box Testing  
c. White Box & Black Box Testing                      d. None of the mentioned
5. The software configuration management concept that helps us to control change without seriously impeding justifiable change is  
a. version control                      b. change control                      c. base line                      d. all the mentioned

**Fill in the blanks:**

6. \_\_\_\_\_ activity checks the requirements for realism, consistency and completeness.
7. \_\_\_\_\_ are system models that show a functional perspective where each transformation represents a single function or process.
8. \_\_\_\_\_ models describe the static structure of the system using object classes and their relationships.
9. In \_\_\_\_\_, a selected group of software users work closely with the development team to test early releases of the software.
10. The \_\_\_\_\_ software engineering team has a defined leader who coordinates specific tasks and secondary leaders who takes care of subtasks.

**SECTION - B****ANSWER ALL THE QUESTIONS:****(5 x 2 = 10)**

11. List the four fundamental activities of software process.
12. Differentiate functional and non-functional requirements.
13. State the four essential elements of design patterns.
14. What are various testing objectives?
15. Write about the three P's (People, Process and Project ) of the management spectrum.

**SECTION – C****ANSWER ANY SIX OF THE FOLLOWING:****(6 x 5 = 30)**

16. Discuss on incremental development model.
17. Explain about use cases and draw the use case diagram for online shopping
18. Write about Behavioral Models in modelling systems.
19. Write about the client server architecture with a suitable example.
20. Explain about integration testing.
21. Elaborate about various empirical estimation models.
22. Explain about legacy system management in software evolution.
23. Discuss on plan driven agile software development.

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