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(FOR THE CANDIDATES ADMITTED

24PCS1E2

DURING THE ACADEMIC YEAR 2023 ONLY)

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI  
END-OF-SEMESTER EXAMINATIONS : NOVEMBER 2024

M.sc C.S

MAXIMUM MARKS: 75

SEMESTER: I

TIME : 3 HOURS

**24PCS1E2 -SOFTWARE ENGINEERING AND TESTING**

**SECTION - A**

**(10 X 1 = 10 MARKS)**

**ANSWER THE FOLLOWING QUESTIONS.  
MULTIPLE CHOICE QUESTIONS.**

- 1) \_\_\_\_\_ is a software development activity that is not a part of software processes. **(K1)**  
a) Validation                      b) Specification                      c) Development                      d) Dependence
- 2) Quality planning is the process of developing a quality plan for \_\_\_\_\_. **(K1)**  
a) team                                  b) project                                  c) customers                                  d) project manager
- 3) Which one of the following is not a software process quality? **(K1)**  
a) Visibility                                  b) Timeliness                                  c) Productivity                                  d) Portability
- 4) The importance of software design can be summarized in a single word which is \_\_\_\_\_. **(K1)**  
a) Efficiency                                  b) Accuracy                                  c) Quality                                  d) Complexity
- 5) What is Cyclomatic complexity? **(K1)**  
a) Black box testing    b) White box testing    c) Yellow box testing    d) Green box testing

**ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES**

- 6) Define: "Software". **(K2)**
- 7) Explain the evolution of software design. **(K2)**
- 8) What are the tasks in Software Quality Assurance? **(K2)**
- 9) Relate the advantages of regression testing. **(K2)**
- 10) Write a note on metrics in testing. **(K2)**

**SECTION – B**

**(5 X 5 = 25 MARKS)**

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.**

- 11) a) Discover the steps to define a framework activity. **(K3)**  
(or)  
b) Examine the process of creating a data flow model. **(K3)**
- 12) a) Determine the basic concept of information hiding. **(K3)**  
(or)  
b) Evaluate the various elements of data design. **(K3)**

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- 13) a) Summarize the formal approaches to Software Quality Assurance. (K3)  
(or)  
b) Estimate the need of software project estimation. (K3)
- 14) a) Show the major challenges in performance testing. (K3)  
(or)  
b) Distinguish between the white box testing and black box testing. (K3)
- 15) a) Illustrate the design and architecture for automation. (K3)  
(or)  
b) Describe the different types of metrics used in testing. (K3)

**SECTION-C**

**(5 X 8 = 40 MARKS)**

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.**

- 16) a) Elaborate the strategies of requirement modeling. (K4)  
(or)  
b) Analyze the steps to create a control flow model. (K5)
- 17) a) Demonstrate the functional independence in software design. (K4)  
(or)  
b) Assess the basic elements of deployment level design. (K5)
- 18) a) Identify the method of statistical software quality assurance. (K4)  
(or)  
b) Elucidate the empirical estimation models for software projects. (K5)
- 19) a) Examine the different phases of software project. (K5)  
(or)  
b) Compare the functional system testing and non functional system testing. (K4)
- 20) a) Integrate the generic requirements for test tools framework. (K5)  
(or)  
b) Estimate the testing an application using WinRunner tool. (K4)

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