



VISHAKH COLLEGE OF ENGINEERING  
(Government Aided Autonomous Institute)  
Vishakhapatnam, Sargli - 416415  
Second Year B.Tech. (Computer Science and Engineering)  
ESE, ODD SEMESTER, AY 2022-23  
Software Engineering (6CS205)



ESE

Day & Date: Friday, 23/12/2022

PRN: \_\_\_\_\_

Time : 3.00 pm to 5 pm

Max Marks: 50

**IMP:** Verify that you have received question papers with correct course code, branch etc.

**Instructions**

- All questions are compulsory.
- Writing question number on answer book is compulsory otherwise answers may not be assessed.
- Assume suitable data wherever necessary.
- Figures to the right of question text indicate full marks.
- Mobile phones, smart gadgets and programmable calculators are strictly prohibited.
- Except PRN anything else writing on question paper is not allowed.
- Exchange/Sharing of stationery, calculator etc. not allowed.

Text on the right of marks indicates course outcomes (Only for faculty use)

Marks

- |    |    |  |   |     |
|----|----|--|---|-----|
| Q1 | A) | What is <b>PAF</b> (Prevention Appraisal Failure) Model which is used for software quality planning? Enlist major <b>risks</b> focused in project planning Risk Management activity.   | 5 | CO1 |
|    | B) | Describe the purpose and working of <b>Configuration Management Process</b> . Also enlist <b>Characteristics</b> of good SRS( Software Requirement Specification) artifact.  | 5 | CO1 |
| Q2 | A) | Briefly note on <b>Coupling</b> and <b>Cohesion</b> concepts of Function Oriented Design. Also enlist the steps followed in <b>SDM</b> (Structured Design Methodology).  | 5 | CO3 |
|    | B) | What are UML diagrams? Draw <b>Use-Case Diagram</b> for "BoI Bank ATM System" and brief about it.  | 5 | CO3 |
| Q3 | A) | Draw <b>Class Diagram</b> for "Online Shopping System" with Customer, Account, Shopping Cart, Product, Order, Payment details. Each customer could have some web user identity. Web user could be in one of several states and could be linked to a shopping cart. | 5 | CO3 |
|    | B) | In User Interface Design which elements (controls) are commonly used? Enlist and brief on the design <b>heuristics</b> suggested for better usability aspect.  | 5 | CO2 |
| Q4 | A) | Draw <b>Incremental Coding</b> Process flowchart and compare it with <b>TDD</b> (Test Driven Development) coding process.  | 5 | CO2 |
|    | B) | Write note on following any two Code Verification Techniques.  | 5 | CO4 |
|    |    | Code Inspections                      Unit Testing                      Static Analysis  |   |     |
| Q5 | A) | With diagram explain <b>Levels of Testing</b> (testing types) in detail mentioning compliance to SDLC phases. Also mention who and when prepares the respective test cases during SDLC.  | 5 | CO4 |

- B) What do you mean by Test Cases? Discuss any 2 methods of Test Case Design either of Black-box or White-box testing method.

.....End of question paper .....