



**WALCHAND COLLEGE OF ENGINEERING**  
(Government Aided Autonomous Institute)  
Vishrambag, Sangli - 416415  
Second Year B.Tech. Computer Science and Engineering  
Re-Exam, EVEN SEMESTER, AY 2022-23  
Software Engineering (6CS205)



Re-Exam

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

Day & Date: Monday, 11/09/2023 Time : 02.00 pm to 05.00 pm

Max Marks: **100**

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

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

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

- |  | Marks |     |
|--|-------|-----|
| <b>Q1 A)</b> Create your own diagram for the four pillars (Process, Project, People, Product) of Software Engineering required for quality and productivity in software development.           | 6     | CO1 |
| <b>B)</b> Schematically explain the phases of Waterfall model with their advantages and disadvantages. Also briefly mention how the drawbacks of waterfall model are resolved in other models. | 6     | CO2 |
| <b>C)</b> Draw ETVX for Configuration Management Process & discuss the tasks. Also brief on how Project Management Process is related to Software Development Process.                         | 6     | CO2 |
| <b>Q2 A)</b> What are the three factors of Cost of Quality? Describe the PAF (Prevention Appraisal Failure) Model used for quality planning.   | 6     | CO1 |
| <b>B)</b> What is Risk related to project? Enlist top 10 risks associated with software development. Also discuss Risk Management used in Project planning?                                    | 6     | CO2 |
| <b>C)</b> Draw CMM (Capability Maturity Model) diagram and discuss its levels in detail. Compare CMM with ISO standard.  | 6     | CO1 |
| <b>Q3 A)</b> Explain the need of SRS (Software Requirement Specification). Also mention the characteristics of good SRS in detail.   | 6     | CO3 |
| <b>B)</b> Enlist and brief on the design principles used in Function oriented design.  | 6     | CO1 |

D) Differentiate between the Transmission control protocol and user datagram protocol.

5

CO2

E) Draw and explain the header format of TCP.

6

CO1

Q3 A) With the help of proper diagram and example, explain the connection termination process in TCP. Also, explain what is half-close in TCP connection termination?

6

CO1

B) Write detail note on all open loop congestion control and closed loop congestion control techniques with the help of proper diagrams.

8

CO3

C) Write short note on:

6

CO1

- Priority Queuing
- FIFO queuing

D) In the context of DNS, explain how recursive resolution is different from iterative resolution? Draw suitable diagrams to support your answer.

6

CO3

E) Describe the architecture & services of Electronic mail.

6

CO2

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