

Roll No



**PRESIDENCY UNIVERSITY  
BENGALURU**

**SET - A**

**SCHOOL OF ENGINEERING  
END TERM EXAMINATION - JUN 2023**

**Semester :** Semester II - 2022

**Course Code :** CSE2014

**Course Name :** Sem II - CSE2014 - Software Engineering

**Program :** CAI,CBC,CBD,CCS,CDS,CDV,CIT,CSD,COM,CSG,ISE&CSE

**Date :** 19-JUN-2023

**Time :** 1.00PM - 4.00PM

**Max Marks :** 100

**Weightage :** 50%

**Instructions:**

- (i) Read all questions carefully and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Scientific and non-programmable calculator are permitted.
- (iv) Do not write any information on the question paper other than Roll Number.

**PART A**

**ANSWER ALL THE QUESTIONS**

**(10 X 2 = 20M)**

1. Define cohesion and coupling. (CO2) [Knowledge]
2. What is a software Engineering? (CO1) [Knowledge]
3. Describe why the functional requirements are important to software development projects? (CO1) [Knowledge]
4. What is Software Quality Assurance? (CO4) [Knowledge]
5. List the requirement gathering activities. (CO2) [Knowledge]
6. List out the techniques in White Box Testing for test case design. (CO4) [Knowledge]
7. Why do we need DevOps in software development? (CO3) [Knowledge]
8. List any four of Eight Golden Rules for Interface Design. (CO2) [Knowledge]
9. What are the steps involved in SCM? (CO4) [Knowledge]
10. Define Scrum and Sprint. (CO3) [Knowledge]

## PART B

### ANSWER ALL THE QUESTIONS

(5 X 10 = 50M)

11. A telephone company uses the following rate structure for long-distance calls
- Call duration  $\leq$  20 min, \$0.05 per minute
  - Call duration  $>$  20 min, \$0.10 per minute
  - Call duration  $>$  120 min, \$0.20 per minute.
- Using the Equivalence Partitioning Technique, find the partitions and test cases for valid and invalid.  
(CO4) [Comprehension]
12. Define software process model. Explain waterfall model with advantages and limitations.  
(CO1) [Comprehension]
13. What are the differences between DevOps and Agile? Also describe the various stakeholders.  
(CO3) [Comprehension]
14. Define SRS. Explain the characteristics of a good SRS.  
(CO2) [Comprehension]
15. Discuss the format of an SRS. Take a hypothetical project as a case study and explain all the sections of SRS.  
(CO2) [Comprehension]

## PART C

### ANSWER ALL THE QUESTIONS

(2 X 15 = 30M)

16. A lightweight framework that helps people, teams and organizations generate value through adaptive solutions for complex problems. It is commonly used in software development, although it is also used in other fields including research, sales, marketing, education and advanced technologies. Describe their roles and activities with an example.  
(CO4,CO3) [Application]
17. Sketch an Activity Diagram for an Online Shopping System considering the following scenario:
- i. The customer shall login to the system successfully after entering ID and password. If either one is incorrect, then the customer should enter them again until they are correct to move to step 2.
  - ii. The customer shall search for required item. If not found, the customer shall browse for other items and if his preference is not found, the process will end here.
  - iii. If the item needed by the customer is found either after search or after browse, the customer shall add the item to the shopping cart then fill the online shipping address, enter his card information and confirm the purchase.
  - iv. Then the system receives the customer's request for purchase and if payment succeeded, the system sends confirmation email to customer and the process ends else the system will notify the customer by email and disapprove the purchase and the process will end here.
- (CO2,CO1) [Application]