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**PRESIDENCY UNIVERSITY  
BENGALURU**

**SCHOOL OF ENGINEERING  
MID TERM EXAMINATION - MAY 2023**

**Semester :** Semester VI - 2020

**Course Code :** CSE2014

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

**Program :** CSE

**Date :** 18-MAY-2023

**Time :** 10.30AM - 12.00PM

**Max Marks :** 60

**Weightage :** 25%

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**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.*
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**PART A**

**ANSWER ALL THE QUESTIONS**

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

1. Justify the statement "Software doesn't wear out"  
(CO1) [Knowledge]
2. Mention the need for Software Engineering.  
(CO1) [Knowledge]
3. Justify why prototyping model is an evolutionary model.  
(CO1) [Knowledge]
4. Draw the architecture of CASE environment  
(CO2) [Knowledge]
5. When should you use waterfall model?  
(CO1) [Knowledge]
6. Define system software. Give few examples of system softwares  
(CO1) [Knowledge]
7. Define rapid throwaway prototyping.  
(CO1) [Knowledge]
8. What is the essence of software engineering practice?  
(CO1) [Knowledge]
9. Differentiate unit testing from integration testing.  
(CO1) [Knowledge]

10. Identify which type of requirement are the following
- (i) If an alarm is received from a sensor, the system will report the alarm and halt until the alarm is acknowledged and cleared.
  - (ii) The system must send a confirmation email whenever an order is placed
  - (iii) The system must allow users to verify their accounts using their phone number.
  - (iv) A program running on Windows 10 must be able to run on Windows 11 without any change in its behavior and performance.

(CO2) [Knowledge]

## PART B

### ANSWER ALL THE QUESTIONS

(4 X 5 = 20M)

11. Explain the characteristics of CASE tools. (CO2) [Comprehension]
12. What is the goal of maintenance phase in software development model. Explain various types of maintenance that could be carried out during the lifetime of a software. (CO1) [Comprehension]
13. Explain the various types of softwares. (CO1) [Comprehension]
14. Draw activity diagram for Online order management system. (CO2) [Comprehension]

## PART C

### ANSWER ALL THE QUESTIONS

(2 X 10 = 20M)

15. What is the general idea behind evolutionary models? Companies manufacturing products spend large amounts of money designing and developing their ideas. It makes sense for them to build models/prototypes of a product before it goes into production. It saves money. How can you justify the above statement about prototyping? Explain the advantages and disadvantages of prototyping. (CO1) [Application]
16. Describe the format of a SRS document. Presidency University Startup team has decided to develop a LMS that enables student and teacher to teach and learn in virtual mode. List the functional requirements of this project. (CO2) [Application]