Amrita Vishwa Vidyapeetham
School of Engineering, Bengaluru Campus
B.Tech. Degree End-Term Examination – May 2021
Computer Science and Engineering
Sixth Semester
15CSE313 Software Engineering

Time: 45 mins Maximum marks: 20

CO	Course Outcomes
CO 1	Understand the principles of software engineering
CO 2	Exposure to various software process models
CO 3	Select the appropriate design methodology for a real-world application
CO 4	Design, develop and deploy a solution for a real-world application and evaluate
CO 5	Exposure to industry standards

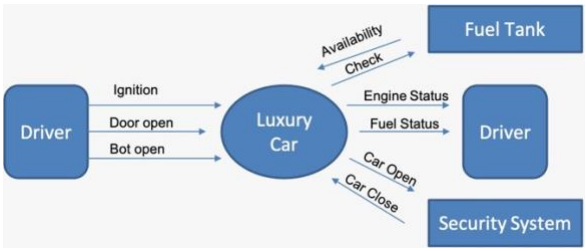
Answer all the questions:
(5 x 4 = 20 marks)

1. Differentiate between White-Box and Black-Box testing strategies. **[CO4]**

2. Suppose you're building a phone application that lets you play tic-tac-toe against a simple computer opponent. It will display high scores stored on the phone, not in an external database. Which architecture would be most appropriate and why? **[CO3]**

3. What problems may be encountered when top-down integration testing is chosen? **[CO4]**

4. Derive the FP measure for the provided system below. Find the value step by step and justify the result. **[CO3]**



5. A=10, B=5, C=7
   IF B! = C THEN
   A = B+10
   ELSE
   A = C-10
   END IF
   Print A
   Print B
   Print C
   For the above code segment, draw the Control Flow Graph. Find the Cyclomatic Complexity and verify using all the three formulae. **[CO5]**