**Birla Institute of Technology & Science, Pilani**

**Work Integrated Learning Programmes Division**

**Second Semester 2023-2024**

**Mid-Semester Test**

**(EC-2 Regular)**

Course No. : SE ZG501

Course Title : Software Quality Assurance and Testing

Nature of Exam : Closed Book

Weightage : 30%

No. of Pages = 1

# No. of Questions = 5

Duration : 2 Hours

Date of Exam : 15/03/2024 (AN)

Note to Students:

1. Please follow all the *Instructions to Candidates* given on the cover page of the answer book.
2. All parts of a question should be answered consecutively. Each answer should start from a fresh page.
3. Assumptions made if any, should be stated clearly at the beginning of your answer.
4. Question – Explain what you understand by Quality Assurance and the term Software Testing. Give five differences between quality assurance and S/W Testing. **Marks - 6**
5. Give the five levels of CMMI-Dev and explain key characteristics of each level. Give two process areas for each level. **Marks - 6**
6. What are the sub characteristics of Security quality requirement in ISO 25010. List them all and explain each in 2-3 lines. Marks - 6
7. What do you understand by Verification and Validation in S/W Testing. Give differences and examples. Marks - 6
8. Given a function that takes input – Month, Day and Year. Also, test designer has formed equivalence classes for the three inputs as

Month – {1,2,3,4,5,6} and {7,8,9,10,11,12)

Day – {1-15], {16-31}

Year – {2001-2024}

Give a set of Weak Normal and Strong Normal Test cases using Equivalence Class Testing methodology. Give reason for your answer. **Marks 6**

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