Slot: G1+TG1

## School of Computer Science Engineering and Information Systems
### Fall Semester 2023-2024
### Continuous Assessment Test – II

**Programme Name & Branch:** M.TECH(Computer Science(Virtusa) and Data Science Engg)
**Course Name & Code:** CSI1007- Software Engineering Principles
**Class Number:** 4141
**Exam Duration:** 90 Min.
**Faculty Name(s):** Dr. K.Uma, Dr.A.Gayathri          **Maximum Marks: 50**

**General instructions:** Attempt all FIVE questions each carrying 10 marks. Please be specific and brief in your answers.

| Q.No. | Question | Max Marks |
|-------|----------|-----------|
| 1. | Consider the process of ordering a pizza over the phone. Draw the Activity diagram representing each step of the process, from the moment you pick up the phone to the point where you start eating the pizza. Include activities that others need to perform. Add exception handling to the activity diagram you developed. Consider at least two exceptions. (Ex : Delivery person wrote down wrong address, deliver person brings wrong pizza). | 10 |
| 2. | Explain how coupling & cohesion? For each type of coupling give an example of two components coupled in that way? If a module has logical cohesion, what kind of coupling is this module likely to have? | 10 |
| 3. | a. Consider that you are a developer of a concern developing Course Registration systems. Explain the Seven Steps to implementing software. b. In what way, testing principles are working during the software testing process? And explain the major principles which are followed by Super dream companies. Justify your answer. | 10 |
| 4. | Form the test cases using boundary value Analysis for the below scenario, | 10 |

4.
1. 0–18 Don't hire
2. 19–25 Can hire on a part-time basis only
3. 26–54 Can hire as full-time employees
4. 55–99 Don't hire

What about ages-6 and 101? The requirements do not specify how these values should be treated.

| 5. | Create a state table and perform state table-based Testing for the below state transition diagram. | 10 |

```
                    WaitSleepJoin
                                       t5
                                      Abort
         Thread          Thread
         Blocks          Unblocks
           t1              t4
  t0                                           Abort
  Start   Running    t2              Abort      Requested
                    Abort
                         ResetAbort
  Unstarted
                                                in
         Thread   t3     Thread                 theory
         Ends            Ends                    only!
                               t6
         Stopped                                Aborted
```