## B. Tech. IV Semester in Information Technology Internal Examination (TEST 2), 27th April 2021 IT 19-204-0404 SOFTWARE ENGINEERING (1 Hour; 25 Marks)

## Instructions:

- This is a test to check your understanding of SE Design concepts; not your ability to copy answers.
- Write your answers legibly in an A4 sheet (preferably 2 pages only), scan it neatly and save the file with your name followed by SE\_Test2 (Eg. Renu\_SE\_Test2)
- Schedule your writing time properly so that you can upload the file within time.
  Late submission may lead to reduction in marks.
- Design your answer content proportional to the given marks.
- Write what you know precisely and concisely.

## **Questions:**

- 1. List and define any 3 software design principles. (3 marks)
- 2. What are the various activities and outcomes of the software design process? (5 marks)
- 3. It is proposed to develop a software that would be used by individuals to manage their personal collection of books. Identify the functional and non-functional requirements for the software. Perform structured analysis for the personal library software and draw the Level 0 and Level 1 DFDs. (5 marks)
- 4. List and define any 6 user interface design principles (6 marks).
- 5. Why are high cohesion and low coupling desirable in design solutions? (1 mark)
- 6. What are the various architectural styles? Draw the diagram for each one. (5 marks)