Code: CT41   **Subject: SOFTWARE ENGINEERING**

ALCCS

Time: 3 Hours   **JUNE 2017**   **Max. Marks: 100**

PLEASE WRITE YOUR ROLL NO. AT THE SPACE PROVIDED ON EACH PAGE IMMEDIATELY AFTER RECEIVING THE QUESTION PAPER.

NOTE:
- **Question 1 is compulsory and carries 28 marks. Answer any FOUR questions from the rest. Marks are indicated against each question.**
- **Parts of a question should be answered at the same place.**

Q.1.   a. How agile process is different from traditional process models?

b. List some of the standard naming conventions used in coding standard.

c. What is a data dictionary? Give the advantages of using a data dictionary.

d. Distinguish between Coupling and Cohesion.

e. Give the difference between black box testing and white box testing.

f. Explain software configuration management.

g. Discuss about the software project estimation.   **(7×4)**

Q.2.   a. Explain any four different types of coupling.   **(8)**

b. What is an architectural style? Discuss any three architectural styles.   **(10)**

Q3.   a. Briefly describe the non-functional requirements. Explain the metrics for specifying non-functional requirements?   **(10)**

b. Briefly discuss any four different techniques used in requirements elicitation.   **(8)**

Q4.   a. Draw the Use case diagrams, class diagrams, sequence diagrams and collaboration diagrams for Library Management System.   **(12)**

b. Explain software reengineering process model.   **(6)**

Q5.   a. Explain in detail the inspection process.   **(8)**

b. Compare the structured programming and object-oriented programming.   **(5)**

c. List the coding standards and guidelines.   **(5)**

Q6.   a. Compare the functional testing with structural testing.   **(8)**

b. Give any five principles of software testing.   **(5)**

c. Discuss the difference between process and project metrics.   **(5)**

Q7.   a. Discuss the different metrics used to measure the software quality.   **(10)**

b. Give the advantages and disadvantages of CPM and PERT.   **(8)**