

**ALCCS**

Time: 3 Hours

**JUNE 2016**

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.

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- Q.1** a. What are the drawbacks of RAD model?  
 b. Differentiate between functional and non-functional requirements.  
 c. Explain the term Modularity.  
 d. List the characteristics of code inspections.  
 e. Differentiate between black box testing and white box testing.  
 f. Compare PERT vs. CPM  
 g. List the advantages and drawback of Function Point (FP). (7×4)
- Q.2** a. Explain the Incremental Model and its various activities. (8)  
 b. How to create data dictionary in software engineering? Give example with diagram. (6)  
 c. Discuss the objectives of Throwaway Prototyping model. (4)
- Q.3** a. Discuss the needs of coupling in software design. (8)  
 b. List out the various characteristics of an SRS. (5)  
 c. Discuss the top-down and bottom-up software design approaches. (5)
- Q.4** a. What is integration testing? Explain in detail about the Top-Down Integration Testing. (10)  
 b. Distinguish between Verification and Validation. (4)  
 c. Difference between Equivalence Partitioning and Boundary value Analysis. (4)
- Q.5** a. Discuss the various coding standards and list it's guidelines. (9)  
 b. What is Software Configuration Management (SCM)? Explain the functions of SCM Repository with neat diagram. (9)
- Q.6** a. Write the Objectives of testing and Objective of a Software Tester. (5)  
 b. Discuss the basic COCOMO model in detail. (9)  
 c. Assume that the size of an organic type software product has been estimated to be 32,000 lines of source code. Assume that the average salary of software engineers be Rs. 15,000/- per month. Determine the effort required to develop the software product and the nominal development time (Use COCOMO model). (4)
- Q.7** a. Explain in detail about Goel-Okumoto (GO) time dependent model in software reliability. (8)  
 b. Briefly discuss the following project estimation techniques, (6+4)  
 (i) Expert Judgment and Problems with Expert Judgment  
 (ii) Delphi-Cost