

BACHELOR IN COMPUTER APPLICATIONS

Term-End Examination
June, 2008

CS-70 : INTRODUCTION TO SOFTWARE ENGINEERING

Time : 3 hours

Maximum Marks : 75

Note : Question number 1 is **compulsory**. Attempt
any **three** questions from the rest.

1. (a) A news magazine is published monthly and is sent by post to its subscribers. Two months before the expiry of subscription, a reminder is sent to the subscribers. If subscription is not received within a month, another reminder is sent. If renewal subscription is not received upto two weeks before the expiry of the subscription, the subscriber's name is removed from the mailing list and the subscriber is accordingly informed.
- Design the DFDs (till level 2) and also prepare the SRS document for the same. List all assumptions, if any. 15
- (b) Design an ER diagram for Q. 1(a). List all the entities, the attributes used in it and describe how they are related. Also show the cardinality on the ER diagram. 10
- (c) Draw the PERT chart for the problem outlined in Q. 1(a). Also, show the critical path. 5

2. Explain the following terms, with appropriate examples : 15
- (a) Data Abstraction
 - (b) Cohesion and Coupling
 - (c) Test Case
 - (d) Class-diagram
 - (e) Project Scheduling
3. Identify and elaborate all the risk factors in software project. Also, explain the techniques that can be used to manage them. 15
4. (a) What are the different categories of CASE tools ? What are its benefits ? Also, write the limitations of CASE tools. 7
- (b) Explain the following software phase of waterfall model : 8
- (i) Design and specification
 - (ii) Delivery and maintenance
5. (a) Discuss the concept of modularity with appropriate examples. 7
- (b) Elaborate on the various steps required for successful project implementation. 8