CS-70

BACHELOR OF COMPUTER APPLICATIONS (BCA) (Pre-Revised)
Term-End Examination
December, 2015   00874

CS-70 : INTRODUCTION TO SOFTWARE ENGINEERING

Time : 3 hours   *Maximum Marks : 75*

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

1. A library of a University maintains various types of books, journals, newspapers, etc. It has two sections, namely, readers' section and general section. In readers' section, any member can read any kind of text item. However, in general section, a member can read the books and also request for issue of the book/other item for reference. Different kinds of members have different schemes for issuance of books. For example, a student can take a maximum of 6 books in a year and has to pay ₹ 1 per day as late fee. A teacher can take a maximum of 12 books in a year and late fee is 50 paisa per day. A centralised database is maintained for all the

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reading items along with their status and availability in the library.

(a) Design an ER diagram. List all the entities, their attributes, cardinality, key constraints, etc. *10*

(b) Design the DFDs upto second level. *10*

(c) Prepare SRS document. List assumptions, if any. *10*

2. (a) What is a data dictionary ? Explain its use with the help of an example. *8*

(b) Explain the risks associated at each of the phases of any one SDLC model of your choice. *7*

3. (a) Write a short note on CASE tools. *8*

(b) What is meant by "Software Quality Assurance" ? *7*

4. (a) What is meant by Integration Testing ? How does it differ from Unit Testing. *5*

(b) Explain how flow charts are used, with the help of an example. *5*

(c) Differentiate between process and product. *5*

5. Write short notes on the following : *3×5=15*

(a) Project Management

(b) Test Case Design

(c) Software Reliability