BACHELOR OF COMPUTER APPLICATIONS (PRE - REVISED)

Term-End Examination

June, 2013

CS-70 : INTRODUCTION TO SOFTWARE ENGINEERING

Time : 3 hours   *Maximum Marks : 75*

*Note :   Question no. 1 is **compulsory**. Answer **any three** questions from the rest.*

1.   *Design the following* for a "complaint management and monitoring system" that allows recording of all the complaints pertaining to hardware, systems and software of all the systems of a University. It should allow the user to get record the complaint through online and telephone. Engineers should be assigned the jobs (complaints) for handling these complaints. Status of various complaints should be recorded and can be viewed. It should produce the daily reports regarding the receipt, scheduling, status of the various complaints.

   (a)   Design the DFD's (level-0, 1 and 2).   7

   (b)   Prepare SRS document. List assumptions,   5
          if any.

(c) Design an ER-diagram. List all the entities,   7
attributes, cardinality and key constraints
etc.

(d) Draw a scheduling chart.   5

(e) Specify a s/w development life cycle   6
paradigm through which you can develop
the whole system.

2. (a) "The best team structure depends on the   9
management style of an organization, the
no. of people who will populate the team,
their skill levels and the overall problem
difficulty". Keeping the view of this fact
explain the following team organizations :

(i) Democratic decentralized

(ii) Controlled decentralized

(iii) Controlled centralized

(b) Describe software reliability. Also, explain   6
how this has an impact on the overall
quality of the s/w product.

3. (a) Maintainability can be viewed as two   7
separate qualities (i) repairability and
(ii) evolvability. Explain both of these
qualities.

(b) Describe any four important qualities of a   8
s/w product.

4. (a) Explain the concept of Integrated structured   7
methodologies for s/w development.

(b) Explain how GGLs help to solve the   8
problems in s/w development.

5. Write short notes on :   3x5=15

(a) Software Processes

(b) Code Generators

(c) Prototype Model

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