

2008-RAJASTHAN UNIVERSITY
II B.TECH IV SEMESTER DEGREE EXAMINATION
SOFTWARE ENGINEERING
(INFORMATION TECHNOLOGY)

TIME-3HOUR
MARKS-80

ANSWER ALL QUESTIONS

1 (a) State the differences between program and software. Why have documents and documentation become very important ?

(b) Explain System Development Life Cycle (SDLC). [8]

OR

1 (a) Explain problems in System Cycle.

(b) Explain tasks performed by a system engineering/analyst. List qualification requires for a person to work as a system engineer and be successful in his or her job. Justify your list of qualification.

2 (a) Is it possible to estimate software size before coding? Justify your answer with suitable examples. [8]

(b) Compute the FP (Function point) for a payroll program that reads a file of employee and a file of information for the current month and prints cheques for all the employees. The program is capable of handling an interactive command to print an individually requested cheques immediately. [8]

OR

2 (a) What are various activities during software project planning? Explain.

(b) A proposal is made to count the size of "C" programs by number of semicolons, except those occurring with literal strings. Discuss the strengths and weaknesses to this size measure when compared with lines of codes count.

3 (a) A department of computer science has usual resource and usual users for these resources. A software is to be developed to that resources are assigned without conflict. Draw a DFD specifying the above system.

(b) An airline reservation is an association between a passenger a flight and a seat. Select a few pertinent attributes for each of these entity types and represent a reservation in an E-R Diagram.

OR

3 (a) Draw a DFD for borrowing a book in a library which is explained below: "A borrower can borrow a book if it is available else he/she can reserves for the book if he/she so wishes. He/she can borrow a maximum of three books."

(b) Draw the E-R diagram for hotel reception desk management.

4 (a) If some existing modules are to be reused in building a new system, which design strategy is used and why?

(b) Do we design software when we 'write' a program? What makes software design different from coding?

OR

4 (a) Discuss the differences between object oriented and function oriented design.

(b) What documents should be produced on completion of the design phase?

5 (a) What is modularity? List the important properties of a modular system.

(b) Explain Unified Modeling Language.

OR

5 (a) Explain Object-Oriented Analysis Modeling.

(b) Define the following terms: objects, messages, abstraction, class, inheritance and polymorphism. [8]

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