No. of Printed Pages : **1**

Sl. No.

B1.3-R5 : SOFTWARE ENGINEERING

NOTE :

1. Answer question 1 and any FOUR questions from 2 to 7.

2. Parts of the same question should be answered together and in the same sequence.

Total Time : 3 Hours **Total Marks : 100**

1. (a) Differentiate between software process and software product.
(b) Mention the steps to follow to write an effective SRS document.
(c) Write short notes on the following :
(i) Modularity.
(ii) Information hiding.
(d) Mention the approaches adopted in implementation of SQA.
(e) Differentiate between a Test Plan and Test Strategy.
(f) Which are the building blocks of CASE ?
(g) With a neat sketch, explain MVC architecture. **(7x4)**

2. (a) Draw DFD of library management system.
(b) Differentiate between software re-engineering and reverse engineering.
(c) What is the role of Change control in successful completion of the project ? **(6+6+6)**

3. (a) Enlist various software development lifecycle models. Compare all the models.
(b) Write short notes on the following :
(i) Design Thinking
(ii) Functional Design
(iii) Prototype Design **(9+9)**

4. (a) Which are the various Behavioural diagrams in software engineering ? Explain any two with an example.
(b) With a neat sketch, explain the various architectural styles.
(c) State the difference between Black-box testing and White-box testing. **(6+6+6)**

5. (a) Explain Component-based Software engineering process.
(b) Mention the activities of User Interface Design process. Elaborate each of these techniques. **(10+8)**

6. (a) Explain CMM levels with a neat sketch.
(b) What do you mean by the term Data Dictionary ? Explain the importance of using it.
(c) What are different coding standards ? Where these standards are used ? **(6+6+6)**

7. (a) What do you understand by SIX sigma ? Is it necessary ? Justify your answer with suitable comments.
(b) Describe Software Reliability. Why is software reliability difficult to measure ? **(9+9)**

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