

Roll No.

Printed Pages : 2

8610

BT-6/M12

SOFTWARE ENGINEERING

Paper-IT-354

Time allowed : 3 hours]

[Maximum marks : 100

Note : Attempt any **five** questions. All questions carry equal marks.

1. What do you understand by the term Software Development Life Cycle (SDLC) ? Why it is important to adhere to life cycle model while developing a large software project ? Discuss the prototype model in detail giving its merits and demerits. 20
2. What is risk ? Is it economical to do risk management ? What are risk management activities ? Is it possible to prioritize the risk ? 20
3. Discuss the following in brief :
 - (a) Requirement engineering 5
 - (b) System modeling 5
 - (c) Data modeling 5
 - (d) Behavioural modeling. 5
4. Give the characteristics of a good software design. What causes increased productivity when object oriented paradigm is used ? 20

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Q-8-2,500

[Turn over

(2)

5. What do you mean by software testing ? Why software testing is an important phase in system development life cycle ? Differentiate between functional testing and structural testing. 20
6. Differentiate between software verification and validation. List various methods of verification and validation. Explain any one method of each in detail. 20
7. What is software quality ? How software quality can be measured ? Describe the maturity levels of Capability Maturity Model. 20
8. Discuss the following in detail : 10
- (a) Formal technical review 10
 - (b) CASE tools and applications. 10