

T.Y. Diploma : Sem. V
[CO/CM/IF]
Software Engineering
Prelim Question Paper



Time: 3 Hrs.]

[Marks : 100

- Instructions :**
- (1) All questions are compulsory.
 - (2) Illustrate your answers with neat sketches wherever necessary.
 - (3) Figures to the right indicate full marks.
 - (4) Assume suitable data if necessary.
 - (5) Preferably, write the answers in sequential order.

1. Attempt any **FIVE** of the following : [20]
 - (a) Explain changing nature of software.
 - (b) What are communication principles? Explain their meaning.
 - (c) List four objectives of testing.
 - (d) Explain RAD model with its advantages and disadvantages.
 - (e) What is alpha-beta testing?
 - (f) Describe six sigma for software engineering.
 - (g) Explain analysis modeling.

2. Attempt any **FOUR** of the following : [16]
 - (a) Explain the waterfall model.
 - (b) Explain modeling practice in software engineering with principles.
 - (c) Explain principle of scheduling.
 - (d) Describe integration testing approach.
 - (e) Explain Mccalls quality factor.
 - (f) What is an object oriented analysis?

3. Attempt any **FOUR** of the following : [16]
 - (a) Difference between prescriptive and agile process model.
 - (b) Describe any two core principles of software engineering.
 - (c) What is test plan?
 - (d) Differentiate between Black Box Testing and White Box Testing.
 - (e) Explain concept of data modeling with
 - (i) data object
 - (ii) Data Attributes
 - (iii) Cardinality
 - (iv) Modality
 - (f) What is SPM? Why is it needed?

4. Attempt any **FOUR** of the following : [16]
 - (a) Explain the concept of software requirement specification.
 - (b) Explain characteristics of software testing.
 - (c) State eight benefit of ISO standards.
 - (d) Explain DFD with example.
 - (e) Explain the concept of Gantt chart.
 - (f) For library management system draw level 0 and level 1 DFD.

5. Attempt any **TWO** of the following : [6][16]
 - (a) What is software? What are its characteristics?
 - (b) What are major task of requirement engineering?
 - (c) Explain the term debugging. Explain different debugging.

6. Attempt any **FOUR** of the following :

[16]

- (a) Explain Deployment principles.
- (b) Differentiate between validation and verification.
- (c) Explain about software quality assurance.
- (d) Describe behavioral model.
- (e) State testing principles and coding principles.
- (f) Explain SCM.

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T Y Diploma Sem-V: Paper Discussion Schedule

Branches	Date	Day	Timing	Centres
Computer Group	8 Nov. 2018	Thursday	9 a.m. to 11 a.m.	Thane
	8 Nov. 2018	Thursday	12 noon to 2 p.m.	Kalyan
	9 Nov. 2018	Friday	9 a.m. to 11 a.m.	Dadar, Borivali