

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.

□ □ □ □ □ □

**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