

GOVERNMENT POLYTECHNIC MUMBAI
TERM END EXAMINATION

Programme : Information Technology (Sandwich Pattern)
Course Title : Software Engineering

2:30 Hours / 60 marks

Enrolment No.

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Instructions:

1. Attempt all the questions.
2. Illustrate your answers with neat sketches wherever necessary.
3. Use of Mathematical Tables, Steam Table and Pocket Calculator (non-programmable) is permissible.
4. Marks on Right Hand Side indicate full marks for the question.
5. Assume suitable additional data, if necessary
6. CO=COURSE OUTCOMES, L=LEVELS

Q.1 Attempt any SIX**12 Marks**

- a. Differentiate between personal software process and team software process. [CO-2, L-U]
- b. Define software engineering practices. [CO-4, L-R]
- c. Give importance of Agile methodology. [CO-3, L-A]
- d. State prototyping. [CO-2, L-R]
- e. List core principles of software engineering practices. [CO-4, L-R]
- f. State agility principles. [CO-3, L-R]
- g. Define software. [CO-1, L-R]
- h. Enlist devops testing method. [CO-6, L-R]
- i. Enlist types of testing. [CO-5, L-R]

Q.2 Attempt any THREE**12 Marks**

- a. Explain DFD level 0, level 1 with the help of example. [CO-5, L-U]
- b. Give selection criteria for software process model. [CO-2, L-R]
- c. Explain software engineering-A layered approach. [CO-1, L-U]
- d. Describe dynamic system development method. [CO-3, L-A]

Q.3 Attempt any THREE**12 Marks**

- a. Explain Agile process model-scrum process flow. [CO-3, L-U]
- b. Describe test case template with neat diagram. [CO-5, L-R]
- c. Explain water fall model with diagram. [CO-2, L-A]
- d. State requirement gathering and analysis. [CO-4, L-R]

Q.4 Attempt any FOUR**12 Marks**

- a. Sketch V model. Enlist its benefits. [CO-2, L-U]
- b. Explain "Identifying a task set". [CO-1, L-R]
- c. Enlist types of requirement. Explain any two. [CO-4, L-U]
- d. Define devops. States its feature. [CO-3, L-R]
- e. Give application of cocomo model. [CO-6, L-A]

Q. 5 Attempt any TWO

- a. Explain four p's of management spectrum. [CO-6, L-R]
- b. Compare black-box and white-box testing (minimum six point each). [CO-5, L-U]
- c. Describe the following i) Need of SRS ii) Format iii) characteristics. [CO-4, L-A]

****End****