

Total No. of printed pages = 3

Co-603/SE/6th Sem/2013/M

SOFTWARE ENGINEERING

Full Marks - 70

Pass Marks - 28

Time - Three hours

The figures in the margin indicate full marks for the questions.

Answer question No. 1 and any *five* from the rest.

1. Answer in brief : 3×5 = 15

- (a) Different software engineering paradigms.
- (b) Decision tree and decision table.
- (c) SQA plan.
- (d) Differences in the function oriented design and object oriented design.
- (e) PERT chart.

2. (i) How software crisis can be explained ? 3

[Turn over

- (ii) Why spiral model is known as the meta model? Illustrate the spiral model. $2+6 = 8$
3. (i) List the different aspects to be considered when we go for requirement analysis. What are the points that need to be decided during this activity? $3+5 = 8$
- (ii) What are the different means for requirement collection? 3
4. (i) Explain the concepts of cohesion and coupling mentioning their different types. 6
- (ii) Illustrate with an example the state activity diagram in UML. 5
5. (i) Briefly define the terms : 8
- (a) Quality
 - (b) Quality control
 - (c) Quality cost
 - (d) Quality assurance.

- (ii) What are the different metrics for measuring reliability? 3
6. (i) Explain briefly the different software testing strategies. 6
- (ii) Illustrate the boundary value analysis technique in testing. 4
- (iii) What is cyclomatic complexity? 1
7. (i) Mention the steps in managing a software project. 4
- (ii) Explain the software cost estimation model (COCOMO) and its different variations. 7