

Total No. of printed pages = 3

Co-603/SE/6th Sem/2016/N

## SOFTWARE ENGINEERING

Full Marks – 70

Pass Marks – 28

Time – Three hours

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

Answer any *five* questions.

1. (a) What is feasibility study ? What are the different feasibility studies that need to be conducted ? 2+3=5
- (b) Explain the spiral model emphasising each of the four quadrants. 5
- (c) Define software crisis and explain how software engineering can contribute to reduce this crisis. 4
2. (a) Why SRS document is important ? Explain and also mention the basic contents to be present in SRS document. 2+4=6

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- (b) Mention the different types of cohesion and coupling and also point out the hierarchy i.e their order from high to low or low to high. 6
- (c) Define Software Reliability. 2
3. (a) Write short notes on :  $3 \times 3 = 9$
- (i) Black box and White box testing
  - (ii) Validation and Verification
  - (iii) Unit testing and System testing.
- (b) Define Software Quality. 2
- (c) State the activities incorporated in a SQA plan. 3
4. (a) Give a brief note on the various reliability metrics. 6
- (b) What does Level O DFD represent ? 2
- (c) "Software documents form an integral part of software engineering." What are the different types of software documents and what are the characteristics of a good software document ?  $4+2=6$



5. (a) State the objective of Project Planning and mention the various phases of project planning stating the activities in each phase.  $2+5=7$
- (b) Briefly explain the three different stages of COCOMO — basic, intermediate and complete. 7
6. (a) Answer the following related to Project Scheduling :
- (i) Difference between PERT and CPM
- (ii) Function of GANTT chart.  $6+3=9$
- (b) Define risk and state the steps to be performed to manage a risk.  $2+3=5$