

Total number of printed pages-3

53 (CS 602) SWEN

2018

SOFTWARE ENGINEERING

Paper : CS 602

Full Marks : 100

Time : Three hours

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

Answer any five questions.

1. (a) What is 'Software Process' ? With the help of suitable diagram, describe a software process framework. 2+8=10
- (b) What is CMMI ? What are the various capability levels ? Describe. 2+8=10

2. (a) What do you understand by 'Process Model' ? Describe 'Spiral Model'.
2+8=10

Contd.

- (b) What is an SRS document ? Describe Functional and Non-functional requirements. $2+8=10$
3. (a) Why 'Feasibility Study' is needed ? How requirements engineering process is achieved through execution of various distinct functions ? $3+7=10$
- (b) Describe 'context model' and 'behavioral model' with the help of suitable examples. $5+5=10$
4. (a) What is provided by fundamental software design concept ? Describe fundamental software design concepts. $1+9=10$
- (b) Why 'software architecture' is needed ? Describe data-centered architecture and dataflow architecture. $2+4+4=10$
5. (a) Describe different types of views and diagrams supported in UML. 10
- (b) Describe *three* golden rules for User interface design. Enlist user interface design steps. $6+4=10$

6. (a) Write the uses of unit testing, black box testing, white box testing, integration testing and system testing.
 $2 \times 5 = 10$

(b) What are the shortcomings of LOC (Lines of Code) as a metric for estimation of project size ? Explain. How Function Point Metric is used ?
 $5 + 5 = 10$

7. Write short notes on : $10 + 10 = 20$

(a) Software Risks

(b) Software Reliability.

