Total number of printed pages-3

53 (CS 602) SWEN

RALLIBRAG

## 2021

## 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) Differentiate between Function point (FP) and Lines of Code (LoC) based cost estimation techniques.
  - (b) Explain how Gantt Chart can be used for planning and controlling small projects with example.
- 2. (a) Explain various steps involved in SRS with suitable example. Write five characteristics of a good SRS document.

Contd.

(b)	What	is feasibil	ity study? Explai			its
78	types,	contents	and p	urpo	se.	10
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- 3. (a) Compare and contrast Coupling and Cohesion with various types. 10
  - (b) What is CMM? Explain different levels and areas of CMMI.
- 4. (a) Explain Iterative Waterfall model with the help of diagram.
  - (b) Discuss the benefits of using Prototyping model. 5
  - (c) "Spiral model is a meta model." Explain. 5
- 5. Discuss various types of views and diagrams in UML in details.
- 6. (a) Assume the size of an organic type software product has been estimated to be 12,000 LOC. Assume that the average salary of software developers is Rs. 15,000 per month.

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Determine the effort required to develop the software product, the approximate development time and the cost to develop the product. (b) What do you mean by Organic, Semi-detached and Embedded software type in COCOMO model? Give examples.

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- 7. Write short notes on the following: (any four) 5×4=20
  - (a) Black-box testing and White-box testing
  - (b) Unit testing and System testing
  - (c) Software myth
  - (d) RAD model and Spiral model
  - (e) Data flow diagram (DFD) and Data dictionary
  - (f) Software Risk Management.

