

**PARUL UNIVERSITY**  
**FACULTY OF ENGINEERING & TECHNOLOGY**  
**B.Tech. winter 2021 – 22 Examination**

**Semester: 5****Subject Code: 203105303****Subject Name: Software Engineering****Date: 20/10/2021****Time: 10:30am to 01:00pm****Total Marks: 60****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

**Q.1 Objective Type Questions****(15)**

1. From below which model is known as classic life cycle model?
  - a) Incremental model
  - b) Prototyping model
  - c) Waterfall model
  - d) Spiral model
2. From below which concept of design is provide data about data
  - a) COCOCMO model
  - b) Cyclomatic complexity
  - c) Data dictionary
  - d) ER-diagram
3. For testing external view of software which type of testing is used by tester?
  - a) Black box testing
  - b) White box testing
  - c) Gray box testing
  - d) a and b both
4. How many value adjustment factor is introduced by Boehm for calculating function point
  - a) 13
  - b) 14
  - c) 12
  - d) 10
5. What is the full form of MTBF?
  - a) Mean Time To Failure
  - b) Mean Time Between Failure
  - c) Mean Time Based Failure
  - d) None of above
6. Software is set of \_\_\_\_\_ that when executed provide desired function and features
7. The definition phase of s/w engineering is include task such as project planning and \_\_\_\_\_.
8. The functional independence is measured using two qualitative criteria named as cohesion and \_\_\_\_\_.
9. \_\_\_\_\_ is known as functional testing.
10. \_\_\_\_\_ is software measure that provide quantitative measure of logical complexity of program.
11. What do you mean by Process?
12. Define: Software Reliability
13. Define: Stack holder
14. What do you mean by Agile?
15. What do you mean by KLOC?

**Q.2 Answer the following questions. (Attempt any three)****(15)**

- A) Why software engineering is known as layered technology?
- B) Write short note on: Effort and cost estimation

- C) Explain in brief :Requirement engineering task  
D) Explain risk management in detail
- Q.3** A) Elaborate types of cohesion and coupling (07)  
B) Explain Use case and DFD diagram with example (08)
- OR**
- B) Explain White box testing with types (08)
- Q.4** A) Explain SCRUM model in detail (07)
- OR**
- A) Write short note on : Quality Control (07)  
B) Explain Unit testing in detail (08)