

Roll No.									

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (CSE) (Sem-5)
SOFTWARE ENGINEERING

Subject Code : BTCS503-18

M.Code : 78322

Date of Examination : 17-06-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

SECTION-A

1. Write briefly :

- a) What are software components?
- b) What do you mean by requirement gathering?
- c) Define software engineering as defined in IEEE 610.12.1990 standard.
- d) Which SDLC model is best? Explain.
- e) What is Software prototyping and POC?
- f) What are software reliability metrics? Explain.
- g) What is SGL environment?
- h) Differentiate between white-box and black-box testing.
- i) Explain in detail about SEI CMMI.
- j) What is Domain Analysis in context of software reuse?

SECTION-B

2. Describe the Software Development process in brief.
3. Explain the concept of modularization.
4. Write a detailed note on Rayleigh-Norden results.
5. How test coverage is helpful in measuring the effectiveness of the testing?
6. What do you understand by the term Software Development Life Cycle? Why it is important to adhere to the life-cycle model while developing a large software product?

SECTION-C

7. **Explain the following Software life cycle models in detail with suitable diagrams :**
 - a) Prototyping Model
 - b) Spiral Model.
8. **Write short notes on the following :**
 - a) Architectural Design
 - b) Create a DFD on "Project Management"
 - c) Decision trees
 - d) LOC AND KLOC
9. What do you mean by project scheduling? How PERT charts are used to plan the scheduling of a project? How PERT Chart is different from GANTT Chart?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.