

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (Computer Engineering) (Sem.-5)

SOFTWARE ENGINEERING

Subject Code : BTCS-503-18

M.Code : 91018

Date of Examination : 20-12-22

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) For a given project was estimated with a size of 300 KLOC. Calculate the Effort, Scheduled time for development by considering the developer having high application experience and very low experience in programming.
- b) What are software reliability metrics?
- c) Explain the concept software maintenance with the help of suitable example.
- d) What is six sigma technique?
- e) Differentiate between cohesion and coupling.
- f) Define Software Engineering as per IEEE standard.
- g) What is feasibility study?
- h) What do you mean by modelling using UML?
- i) What is a Generic Process Model?
- j) Define CBSE.

SECTION-B

2. Write various Principles that Guide Practice. Explain all principles of any one module of Software Development Life Cycle.
3. Compare and contrast functional and non-functional requirements.
4. Explain briefly object modelling using UML. Explain with the help of suitable examples.
5. Compare and contrast benefits of validation and verification in a project.
6. Differentiate alpha testing from beta testing and discuss in detail about phases in which alpha and beta testing is done and how it is related to milestone and deliverable?

SECTION-C

7. Explain with the help of suitable examples and use suitable assumption if any:
 - a) PERT Chart
 - b) GANTT Chart.
8.
 - a) Differentiate between white box and black box testing.
 - b) Give various software reliability metrics.
9. **Write a short note on :**
 - a) ISO
 - b) SEI CMMI.

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.