

**BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)**  
**B. Tech. Sem - III COMPUTER SCIENCE & BUSINESS SYSTEMS : SUMMER : 2024**  
**SUBJECT: ITC-I: SOFTWARE ENGINEERING**

Day : Thursday  
Date : 16/05/2024

S-24146-2024

Time : 02:30 PM-05:30 PM  
Max. Marks : 60

**N.B.**

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate **FULL** marks.
- 3) Assume suitable data **WHEREVER** necessary.
- 4) Draw neat diagrams **WHEREVER** necessary.

**Q.1** Identify the debunk the myth of perfect software, Discuss strategies and approaches used to improve software quality and reduce defect. (10)

**OR**

**Q.1** Explain the concept of self organizing teams in Agile Development. Discuss the benefits of empowering teams to make decision and collaborate effectively in achieving the project goals. (10)

**Q.2** Define analysis model in software engineering and explain its purpose in understanding and refining system requirements. Discuss common element of an analysis model and their relationships. (10)

**OR**

**Q.2** Define Object-Oriented Analysis (OOA) in software Engineering. Explain its principles, concepts (classes, objects, inheritance and polymorphism) and benefits in designing object-oriented systems. (10)

**Q.3** What are the steps in Software Project management? Explain its importance in the context of software development projects. (10)

**OR**

**Q.3** Define Computer Aided Software engineering (CASE) tools and their role and features of Software development and project managements. (10)

**Q.4** Define Component level design in software engineering. Discuss how components represent modular units of functionality and encapsulate related behaviors and data. (10)

**OR**

**Q.4** Define the design process in Software Engineering. Explain its importance in transforming requirements into a structured software solution. (10)

**Q.5** What is the difference between Verification and Validation? Explain Software Testing Principles. (10)

**OR**

**Q.5** Define error, bug and defect in context of software development. Define coding standards and discuss their role in promoting consistency in software development projects. (10)

**Q.6** Write Note on: a) Risk Management b) Reengineering c) Economics of Reengineering. (10)

**OR**

**Q.6** Explain the concept of Business Process Reengineering (BPR) and its relationship with software reengineering. (10)

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