B.E. / B.Tech. Computer Science & Engineering (Model Curriculum) Semester-V
TEE1062CS / SOFT1 - Software Engineering

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Notes : 1.   All questions carry equal marks.
         2.   Illustrate your answers wherever necessary with the help of neat sketches.
         3.   All questions are compulsory.

1. a) What is Software? Explain each characteristic of Software in detail. **8**

        b) Explain Software Engineering- A Layered technology. **8**

OR

2. a) Explain the Waterfall model with its advantages and disadvantages in detail. **8**

        b) Discuss the software myths and their impact on software development projects **8**

3. a) Given the following values, compute function point when all complexity adjustment factor (CAF) and weighting factors are average. **8**
            User Input=50, User Output=40, User Inquiries=35, User Files=6, External Interface=4.

        b) Explain the W5HH principle and its application in project management. **8**

OR

4. a) Explain the COCOMO model in detail. **8**

        b) Discuss the different techniques for software project estimation, including decomposition techniques and empirical models. **8**

5. a) Explain the use of system modeling techniques, such as Hatley-Pirbhai modeling and UML, in software engineering. **8**

        b) Discuss communication practices with respect to software engineering. **8**

OR

6. a) Discuss different planning principles in detail. **8**

        b) Explain the core principles of software engineering practice. **8**

7. a) Explain following terms with respect to requirement engineering, **8**
            i)   Requirement development
            ii) Requirement management

        b) Discuss the design concepts and principles used in software design. **8**

OR

8.	a)	Describe the use of pattern-based software design in improving software quality and maintainability.	**8**
	b)	Explain various types of cohesion and coupling in detail.	**8**
9.	a)	Explain in detail white box testing and Black -box testing.	**8**
	b)	Explain with example, how the cyclomatic complexity is calculated.	**8**

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OR

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10.	a)	Explain the strategic approach to software testing and its importance.	**8**
	b)	Discuss the control structure testing methods used in software testing.	**8**

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