

PRANVEER SINGH INSTITUTE OF TECHNOLOGY, KANPUR

Even Semester

Session 2023-24

CT -1

B. Tech.-6<sup>th</sup> Semester

Software Engineering (KDS-063)

CO Number	Course Outcome
CO1	Define [1. Knowledge] the concepts related to various aspects of Software Engineering.
CO2	Explain [2.Comprehension] various Software Development models, Requirement Engineering, Design paradigms and strategies used in testing and Maintenance.
CO3	Compute [3. Application] complexity based on different metrics and measure and apply the development & design concepts in DFDs, UML Diagrams etc.
CO4	Analyze [4. Analysis] various software development models, project management techniques and design paradigm.

Time: 1.5 Hrs.

M. M. 15

Section A

Q1. Attempt all questions:

(1X3 = 3 Marks)

a) Define Software Components.

CO1

b) Define Software crisis.

CO1

c) Explain the problem faced by software crisis.

CO2

Section B

Q2. Attempt all questions:

(2X4 = 8 Marks)

a i) Define the various types of feasibility study.

CO1

Or

ii) State the various phases of software development life cycle in detail.

CO1

b i) Explain the umbrella activities performed in software process framework.

CO2

Or

ii) Explain software engineering process and its characteristics in detail.

CO2

c i) Identify the significance of Data flow Diagram (DFD) in Software engineering with its components.

CO2

Or

ii) Explain an E-R diagram for Banking management system along with all components used with their function.

CO2

d i) Describe any two requirements elicitation and its process in detail.

CO2

Or

ii) Explain the characteristics of good software.

CO2

**Section C**

**(4X1 = 4 Marks)**

**Q3**

- i) Demonstrate the spiral model and explain all its stages in detail with the help of neat diagram. CO3  
Also give its advantages and disadvantages.
- Or**
- ii) Demonstrate prototype model and its phases with neat sketch. Determine the advantages CO3  
and disadvantages of prototype model.