UCUPES
UNIVERSITY OF TOMORROW

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2023

Course: Software Engineering & Project Mgmt. **Semester: III**
Program: B.Tech CSE **Time: 03 hrs.**
Course Code: CSEG2008 **Max. Marks: 100**

Instructions: Explain in short. (60-70 words)

SECTION A
(5Qx4M=20Marks)

S. No.		Marks	CO
Q 1	Elaborate the difference between ER Diagram and Data Flow Diagram.	4	CO1
Q 2	Describe the term Software Engineering with an appropriate example Also, specify the factors influencing the SE.	4	CO2
Q 3	Explain the meaning of SDLC. Also define the term SRS.	4	CO4
Q 4	Discuss the challenges faced by Software Engineering domain.	4	CO1
Q 5	Briefly discuss the types of Software Testing.	4	CO4

SECTION B
(4Qx10M= 40 Marks)
Instruction: Write brief notes. (100-150 words)

Q 6	Explain the concept of the requirement gathering phase.	10	CO2
Q 7	Define Software Design Phase. Elaborate the Use case diagrams and DFD used in software engineering domain.	10	CO3
Q 8	Elaborate all the characteristics of a good SRS. Also, explain the characteristics of SE.	10	CO1
Q 9	Write all the steps followed by the Spiral Model. Also Define Software project planning **OR** Explain the advantages and disadvantages of Waterfall model. Also specify the different prototypes employed in SE domain.	10	CO2

SECTION-C
(2Qx20M=40 Marks)
Instruction: Write long answer. (Up to 350 words while explaining)
There is no choice for question no.11.

Q 10	Explain the term, importance and steps for the Risk Management in SE. Also, Specify Role and responsibilities of Project manager. **OR** Explain the idea of Software testing and elaborate all the types. Also mention the difference between Verification and Validation.	**20**	**CO3**
Q 11	Elaborate the COCOMO Model with an appropriate diagram. Also, write the difference between black box testing and white box testing. (10+10)	**20**	**CO4**