Name: **Enrolment No:**	

UPES

End Semester Examination, May 2025

Course: Construction Safety & Management — **Semester: II**

Program: M Tech- HSE — **Time : 03 hrs.**

Course Code: HSFS7033 — **Max. Marks: 100**

Instructions: Attempt all the questions.

SECTION A
(5Qx4M=20Marks)

S. No.	Questions	Marks	CO
Q 1	Explain the importance of registering construction establishments under Chapter III of the BOCW Act.	4	CO1
Q 2	List the safety provisions required for working adjacent to water bodies.	4	CO1
Q 3	Discuss the term "scaffold" and list its different types.	4	CO1
Q 4	Identify the critical parameters to be considered when selecting lifting equipment for handling heavy objects at the workplace.	4	CO2
Q 5	Explain the statutory powers granted to dock inspectors under workplace safety legislation.	4	CO2
	SECTION B **(4Qx10M= 40 Marks)**		
Q 6	Analyze the key factors contributing to hazards and risks during excavation operations. OR Justify the need for deploying a qualified safety officer at a construction site and outline their key responsibilities.	10	CO3
Q 7	Differentiate between various types of Public-Private Partnership (PPP) projects, assessing their implications for construction safety management.	10	CO4
Q 8	Create an inspection checklist to ensure the safety of casting a roof slab (20 m × 30 m) on the third floor.t	10	CO5
Q 9	Explain in detail the Confined Space Entry Program and list its essential prerequisites.	10	CO2
	SECTION-C **(2Qx20M=40 Marks)**		
Q 10	Develop a Standard Operating Procedure (SOP) for the safe erection and dismantling of scaffolding for a multi-storey building (50 m × 100 m, of -3 to +5 floors), in accordance with BOCW related IS standards. OR Propose an integrated safety plan for a construction site involving steep roofs maintenance.	20	CO5
Q 11	Create a Standard Operating Procedure (SOP) for a tunnel (confined space operations) involving more than 100 workers and working 20 meters below the surface.	20	CO5