


Name: Enrolment No:		
<b>UNIVERSITY OF PETROLEUM AND ENERGY STUDIES</b> <b>Online End Semester Examination, May 2021</b>		
Course Name: Safety in Construction Programme: M Tech- HSE/ DM Course Code: HSFS 7010		Semester: II Time: 03 Hours Max. Marks: 100
<b>SECTION A</b>		
1. Each Question will carry 5 Marks 2. Write only the short answers.		
<b>Sr. No.</b>	<b>Question</b>	<b>CO</b>
Q 1	List the various safety challenges included for carrying out underwater works.	CO1
Q 2	Appraise your concern over the need of general provision required in BOCW.	CO2
Q 3	Explain the employee safety concerns for the demolition activities.	CO1
Q 4	Comment in favour of “the need of penalty system against non-compliances of legal provisions”.	CO4
Q 5	Name the various classification of scaffolding system	CO1
Q 6	Distinguish direct and indirect cost.	CO3
<b>SECTION B</b> Each question will carry 10 marks		
Q 7	A work at height activities are planned for a viaduct casting activity. Develop a safe system of work for executing viaduct casting activities with following details: Activity Name: Formwork for cast in Setu slab Height: 10 Mtr	CO5
Q 8	Highlight the major reasons for workers migration in construction sectors and their impact on construction safety.	CO2
Q 9	Discuss the challenges while working with construction equipment/ machinery. List out the general safety measures while using construction equipment/ machinery at worksite.	CO1
Q 10	Being an expert, write the recommendation for improving site safety condition of batching plant based on legal and other requirements towards preparation of proposed OHS audit.	CO3
Q 11	Defend with an example, how the OHS legal provision requirements are most essential for maintaining good safety culture.	CO4
<b>SECTION C</b>		
1. Each Question carries 20 Marks. 2. Instruction: Write long answer.		
Q 12	Develop a lifting plan for the following activity: Work: Loading U Shape Pre-Cast Concrete Material (Loading of U shape structure on trailer) Load to be lifted: 20 MT Location: Near to the live road and also adjacent to OHE Lines. Other information: The site condition is such a way that, crane is to be placed almost on the maximum radius and has to sway near to the OHE lines. OR Create a group risk assessment for the following activities/ details: Activity: Reinforcement work; (It includes the handling of rebars, cutting and finally binding of rebars at the height of 10m)	CO5