Name:

**Enrolment No:** 



## UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, December 2022

Course: Open-Source Open Standards Program: B. Tech. CSE+LLB/IPR Course Code: CSOS 1001 Semester: IX Time: 03 hrs. Max. Marks: 100

**Instructions:** Attempt all questions.

SECTION A (5Qx4M=20Marks)				
S. No.		Ma rks	СО	
Q 1	Can Open-Source software be used for commercial purposes, and Can developers restrict how people use an Open-Source licensed program?	4	CO1	
Q2	List the different licenses used for open-source software.	4	CO2	
Q3	Write the use of following git commands a) git clone b) git help	4	CO4	
Q4	Differentiate: a) Permissive and semi-permissive licenses b) Free and open-source software	4	CO3+ CO1	
Q5	Write steps to create a repository in GitHub and add a file to it.	4	CO4	
	SECTION B (4Qx10M= 40 Marks)			
Q 6	Describe LINUX architecture.	10	CO4	
Q 7	Briefly write about the Apache web server including its history and advantages.	10	CO1	
Q8	Elaborate on GitHub working and models for collaboration development (Shared repository, Fork, and Pull).	10	CO2	
Q 9	Discuss what motivates developers to contribute to open-source software.	10	CO3	
	SECTION-C (2Qx20M=40 Marks)			
Q 10	Explain the open-source development model clearly stating its benefits.	20	CO3	
Q 11	<ul> <li>Simulation of Project Delay</li> <li>Project Starts: Planned to Complete in 12 months</li> </ul>	20	CO2	

	- Month 10: The project manager proposed to add two new resources to the existing project for targeting to complete this project in 12 Months Whereas the Engineers have said that they have already completed 70% of the Project and 30% of the Project will be completed in the next two months.	
	- Month 11: Team has informed us that it can't be completed in month 12 as per the commitment. Discussion started on Brook's law and the Project manager added two new resources and postponed completing this project for 13 months.	
	- Month 13: The project is not yet ready, and the Engineers have been recalled to the Project Manager for violating Brook's law of adding new people.	
	Month 14: The project is ready and released late by 2 months.	
	a) Mention the reasons why the simulated project was delayed. How Brook's law applies in this scenario.	
	OR	
Q 11'	Discuss the ways by which developers can contribute to open-source software.	