Name: Enrolment No:	

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

Program Name	: B.Tech CSE	**Semester**	: 5th
Course Name	: DevOps Overview & Source Code Management	**Time**	: 3 hrs
Course Code	: CSDV 2004	**Max. Marks : 100**	
Nos. of page(s)	: 2		

Instructions: Read and follow the instructions written on the answer sheet front page

SECTION A
(5Qx4M=20Marks)

S. No.		Marks	CO
Q 1	Discuss steps of MVP process and provide at least four arguments in support of MVP.	4	CO2
Q 2	Discuss Test Driven Development approach of software development.	4	CO1
Q 3	List four responsibilities of each development team and operations team.	4	CO1
Q 4	Give at least 4 points of differentiation between CVCS and DVCS.	4	CO4
Q 5	Discuss the various steps involved in organizational learning cycle.	4	CO3

SECTION B
(4Qx10M= 40 Marks)

Q 6	Explain how automated application deployment is different from manual application deployment. Also explain the process of application release automation in detail.	10	CO3
Q 7	List and discuss at least 10 best practices of Continuous Integration.	10	CO3
Q 8	Discuss and contrast software development approaches using traditional IT system and DevOps, around following aspects: 1.Development cycles 2. Measurements and metrics 3. Task completion 4. Release event 5. Data collection to action	10	CO2
Q 9	Describe the process of Agile development. Discuss various Agile methodologies in detail. OR Discuss the limitations of the traditional IT systems that gave rise to Agile methodologies. List and discuss six agile principles with emphasis	10	CO1

	on how each principle guides an agile practitioner towards a better software development.		
	SECTION-C **(2Qx20M=40 Marks)**		
Q 10	Discuss the CAMS model explaining each of its four aspects in detail.	**20**	**CO3**

Q 11	Explain Version Control System and discuss its important operations. Also discuss Git and Mercurial in detail.
	
	OR
	
	Discuss the following terms in detail:
	   a) Local repository
	   b) Concurrent Versions System (CVS)
	   c) Subversion (SVN)
	   d) Multiple Repositories Model
		20	**CO4**