


Name: Enrolment No:			
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, December 2023			
Course: DevOps Overview Program: B.Tech CSE Course Code: CSDV3016P		Semester : V Time : 03 hrs. Max. Marks : 100	
Instructions: Read and follow the instructions written on the answer sheet front page			
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q 1	List four responsibilities each of development team and operations team.	4	CO1
Q 2	Define acceptance testing and smoke testing. Discuss how traditional software development is different from TDD and what benefits TDD has over the former.	4	CO1
Q 3	Define DevOps. List three DevOps tools and discuss how they help organizations implement DevOps.	4	CO2
Q 4	Discuss the various steps involved in organizational learning cycle.	4	CO4
Q 5	Discuss CAMS model in brief.	4	CO3
SECTION B (4Qx10M= 40 Marks)			
Q 6	Define MVP. Further, discuss steps of MVP process and provide at least four arguments in support of MVP.	10	CO2
Q 7	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	CO1

Q 8	Discuss any 5 challenges that occur because of lack of collaboration between the operations and development team. Further, list and discuss five benefits of adopting DevOps.	10	CO3
Q 9	Discuss the limitations of the traditional IT systems that gave rise to Agile methodologies. List and discuss all agile values with emphasis on how each value guides an agile practitioner towards a better software development. OR Describe the process of Agile development? Discuss DSDM, Scrum, Kanban and FDD Agile methodologies in detail.	10	CO1
SECTION-C (2Qx20M=40 Marks)			
Q 10	Explain Continuous Integration, continuous delivery, and continuous deployment. Further, list and discuss best practices of CI. Finally, list three benefits of each continuous integration and continuous delivery.	20	CO3
Q 11	Describe Version Control System (VCS). Further, describe and contrast two kinds of VCS, centralized and distributed. Finally, discuss how a developer contributes a newly developed unit of software in a remote repository. OR Discuss the following terms in detail: a) Local repository b) Concurrent Versions System (CVS) c) Subversion (SVN) d) Multiple Repositories Model	20	CO4