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UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, May 2018

Program: B.Tech CSE DevOps	Semester	: 2nd
Subject (Course): Source Code Management	Max. Marks	: 100
Course Code : CSDV 1002	Duration	: 3 Hrs
No. of page/s:		

Section A – All questions are compulsory. (6 x 5 = 30)

- Q1. What are the important elements of successful DevOps implementation? Write briefly.
- Q2. Enlist features of Version Control Systems. Write in detail about any two.
- Q3. Elaborate on needs for maintain a repositories at a remote location?
- Q4. Branches are mandatory to be created under certain scenarios. Provide examples of the scenarios that demand branching.
- Q5. What are elements of primary version control systems. Mention their significance.
- Q6. Elucidate on need of Staging area w.r.t maintenance of repositories.

Section B – all questions are compulsory. (10 x 3 =30)

- Q7. Provide differences between SVN and Git in detail.
- Q8. What is difference between emulator and simulator. What advantages Git Client provides to the programmer by being emulator/simulator. Enlist features of Git Client.
- Q9. Provide complete workflow of committing a local repo to remote. Mention each of the steps clearly and support with figures.

Section C. All questions are compulsory. (20 x 2 = 40)

- Q10. A company wishes to create software for mathematical and scientific calculations for a client. The software shall be maintained in a repository in a version control system and Dev team of about 3-4 people shall work from different locations to create software. (Program is not needed)
- Create a folder strategy by providing attributes to the folder.
 - Create a branching strategy to simultaneously work on different modules.
 - Generate a workflow where using Git commands final software is arrived upon.
 - Demonstrate the advantages of a version control system while answering for a,b,c through Git Commands

Q11. Enumerate differences between Local VCS and Distributed VCS. Provide advantages and disadvantages of both. Support answer with diagram and tables. Answer in detail.