

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, May 2022

Course: Development Automation and Linux

Program: B. Tech CSE DevOps

Course Code: CSDV 2006

Semester: IV

Time : 03 hrs.

Max. Marks: 100

Instructions: Please draw diagrams and write code wherever applicable.

**SECTION A
(5Qx4M=20Marks)**

S. No.		Marks	CO
Q 1	In which of the following phases is the prototype generated in RAD? a. Business Modeling phase b. Application generation c. Testing and turnover d. Data Modelling	4	CO1
Q 2	Which of the following commands reads the user input and assigns it to a variable? a. get b. set c. read d. declare	4	CO3
Q 3	What is Linux? List out different type of Linux.	4	CO3
Q 4	Explain the basic Linux commands listed below in one line each. a. du b. find c. awk d. sed	4	CO5
Q 5	Describe about GRUB and MBR.	4	CO2

**SECTION B
(4Qx10M= 40 Marks)**

Q 6	Explain the concept of Code Generation along with different categories of Code Generation tools. Also, name few commonly used code generation tools.	10	CO4
Q 7	Illustrate the syntax of 'for' loop and 'ladder-if' conditional statement through shell script example. <p align="center">OR</p> Illustrate the syntax of 'while' loop and 'switch' conditional statement through shell script example.	10	CO3
Q 8	Describe Linux Package management and detail out different package managers.	10	CO2
Q 9	Illustrate the difference between 'Make' and 'Makefile' in Linux. Describe the structure of Rule in Makefile.	10	CO5

**SECTION-C
(2Qx20M=40 Marks)**

Q 10	Describe the Fully Automated Software Delivery Process. Explain the below different phases: <ol style="list-style-type: none">1. Automated Build2. Automated Test3. Automated Deployment4. Automated Provisioning <p style="text-align: center;">OR</p> Describe the Automated Test phase of Delivery pipeline in detail. Explain different type of Automated Testing in detail. Analyze the difference between TDD and BDD.	20	CO4
Q 11	Analyze about User Groups and Permissions, File Permissions with examples in detail.	20	CO1