


<b>Name:</b>	 <b>UPES</b> <small>UNIVERSITY WITH A PURPOSE</small>
<b>Enrolment No:</b>	

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**End Semester Examination, December 2019**

<b>Programme Name: B.Tech-DevOps</b>	<b>Semester : III</b>
<b>Course Name : Development Automation</b>	<b>Time : 03 hrs.</b>
<b>Course Code : CSDV 2001</b>	<b>Max. Marks: 100</b>

**Instructions:** All Sections are compulsory to attempt.

**SECTION A**

S. No.		Marks	CO
Q 1	Describe briefly about common system directories?	4M	CO1
Q 2	Critically analyze the concepts of kernel, bash and shell with neat diagrams	4M	CO2
Q 3	Analyze briefly about User Groups and Permissions, File Permissions with examples	4M	CO3
Q 4	Describe any 3 Shell Features and its drawbacks	4M	CO2
Q 5	Illustrate the concept of Automated Deployment with sample case study	4M	CO3

**SECTION B**

Q 6	Analyze the following concepts in a case study manner A. Waterfall Vs DevOps (3M) B. V-Model Vs DevOps (3M) C. Agile Vs DevOps (4M)	10M	CO4 CO5
Q 7	Examine the following concepts in a case study manner (2.5M each) A. Fully Automated Software Delivery Process B. Need of QA C. Environment Test need D. Automated Tests	10M	CO3
Q 8	Critically analyze the following concepts with the help of diagrams (5M each) A. Development Delivery Pipeline B. Code Generation. Or A. MDA/MDD (Model-Driven Architecture/Development). B. Task variability in DevOps Automation	10M	CO1
Q 9	Classify DevOps tools and explain their uses in real software development with neat diagrams  OR Differentiate the concept of Make and Make files with shell script program	10M	CO5

**SECTION-C**

Q 10	A. Analyze the concept of CM with real time example B. What are the success factors for Continuous Integration?	10M + 10M + 10M +	CO1 CO3 CO4
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	<p>Or</p> <p>A. What are the benefits of Automation Testing?</p> <p>B. Explain the difference between at, crontab, and anacron with example?</p>	<b>10M</b>	
Q 11	<p>A. Write a shell script on standard input, standard output and standard error?</p> <p>B. Write a shell script on How to Delete archive files that are older than two days automatically</p>	<b>10M + 10M</b>	<b>CO1 CO3 CO4</b>