Name:

**Enrolment No:** 



## UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, September 2022

Programme Name: B Tech (CSE + OGI)

Semester : III

Course Name : Introduction to Virtualization & Cloud Computing

Time: 03 hrsCourse Code: CSVT 2001

Nos. of page(s) : 2

Max. Marks: 100

| SECTION A  |   |       |     |  |
|--|---|-------|-----|--|
| S. No.   | ALL QUESTIONS ARE COMPULSORY  | Marks | СО  |  |
| Q 1  | Define virtualization and cloud.  | 4     | 1   |  |
| Q 2  | Explain few challenges of traditional infrastructure which could be overcome by application virtualization. | 4     | 1   |  |
| Q 3  | Describe VLAN and VPN concept.  | 4     | 1   |  |
| Q 4  | Describe host-based mirroring in storage level virtualization.  | 4     | 2   |  |
| Q 5  | Discuss type of storage virtualization.   | 4     | 2   |  |
| _  | SECTION B   | 1     |     |  |
| ALL QUESTIONS ARE COMPULSORY. ATTEMPT ANY ONE FROM Q9  |   |       |     |  |
| Q 6  | Comprehend atleast five benefits of application virtualization to an IT organization.                       | 10    | 2   |  |
| Q 7  | Elaborate the advantages of network virtualization over traditional infrastructures.                        | 10    | 3   |  |
| Q 8  | Explain delivery models of cloud computing.   | 10    | 4   |  |
| Q 9  | Discuss the components of cloud computing.  |       |     |  |
|  | OR  | 10    | 2,3 |  |
|  | Discuss atleast five benefits of cloud computing.   |       |     |  |
| SECTION-C  |   |       |     |  |
| ALL QUESTIONS ARE COMPULSORY. ATTEMPT ANY ONE FROM Q11 |   |       |     |  |

| Q 10 | Explain concept of virtualization and discuss how it is different from traditional IT infrastructures. | 20 | 2 |
|------|--|----|---|
|      | Explain hypervisors and their types.   | 20 |   |
|      | OR   |    |   |
|      | Discuss architecture of application virtualization in detailed way.                                    |    |   |
| Q 11 |  |    | 4 |
|      |  |    |   |
|      |  |    |   |
|      |  |    |   |
|      |  |    |   |