Name:

Enrolment No:



UPES End Semester Examination, Dec 2024

Course: Cloud Computing Program: B.Tech CSE+DevOps Course Code: CSVT3023

Semester : V Time : 03 hrs. Max. Marks: 100

SECTION A (5Qx4M=20Marks) S. No. Marks CO Q 1 Write 4 characteristics of an optimal IT infrastructure. **CO1** 4 Mention 4 factors responsible for the increased popularity of Q 2 4 CO₂ Virtualization. Q 3 Draw a neat diagram of the virtualization reference model and list 3 4 **CO3** major components of a virtualized environment. Give 4 differences between virtualization and cloud. Q4 4 **CO4** Q 5 Define the term 'cloud migration'. Mention 4 benefits of migrating to the 2+2**CO5** cloud. **SECTION B** (4Ox10M= 40 Marks) Define VPN. What is a VPN used for and how does it work? Q 6 3+3+4 **CO1** Q 7 Define VMM. Explain three main modules of a VMM with the help of 2+4+4CO₂ a neat diagram. Also, explain various types of VMM. Give at least ten points of difference between public and private cloud. Q 8 10 **CO3** Q 9 Write NIST definition of cloud computing. Explain the various 2+8**CO4** components of cloud anatomy. **SECTION-C** (2Qx20M=40 Marks) Q 10 Draw a neat diagram of NIST cloud computing reference architecture. Explain its various components in detail. **CO5** OR 5 + 15Draw a neat diagram of IBM cloud computing reference architecture. Explain its various components in detail. Compare and contrast the IaaS, PaaS, and SaaS cloud delivery models, Q 11 explaining their key characteristics, advantages, and limitations. Provide 20 **CO1** examples of scenarios or businesses that would benefit most from each model and justify your choices.