20MCA342 USN TUTE OF Third Semester MCA Degree Examination, Jan./Feb. 2023 **Cloud Computing** Max. Marks: 100 M Note: Answer any FIVE full questions, choosing ONE full question from each module. BANGALORE Module-1 2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice. What are the uses of creating data centre? Explain practical examples of cloud computing. (10 Marks) With a neat diagram, explain cloud computing reference model. (10 Marks) b. Define cloud computing. Explain the characteristics and benefits of clod computing. 2 a. (10 Marks) Explain how the two technologies grid computing and Web 2.0 has contributed for cloud (10 Marks) computing. Explain different hardware architectures for parallel processing. (10 Marks) 3 a. Define component and connector, Explain data-centered architectural style. (10 Marks) b. Explain client-server architectural style. (10 Marks) 4 a. What is a service? Explain the characteristics that identify service (10 Marks) b. Module-3 Explain the advantages of visualization in detail. (10 Marks) What is Hypervisor? With a neat diagram, explain the types of hypervisor. (10 Marks) b. Explain different types of hardware virtualization. (10 Marks) 6 a. With a neat diagram, explain Xen-Paravirtualization. (10 Marks) Module-4 With a neat diagram, explain Infrastructure as a service reference implementation. (10 Marks) 7 What is the need for private cloud? Discuss the advantages of using private cloud. (10 Marks) Explain the sectors where community clouds are used. (10 Marks) 8 a. (10 Marks) Explain the challenges in cloud computing. What is open stack? Discuss the important components of open stack. (10 Marks) a. Explain briefly the storage services of Amazon Web services. (10 Marks) b. OR Explain any two scientific applications where cloud computing can be used. (10 Marks) 10 Explain in detail business and consumers application of cloud computing (10 Marks) **BANGALORE** - 560 037

Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages