

## Assignment-2:

- 1) Define hybrid cloud in brief. Discuss the various advantages and shortcomings of the hybrid cloud. A hybrid cloud can be the best option for anyone. - Justify your answer. Discuss the various applications that help manage the load in the hybrid cloud. (4+6+5+5)
- 2) Write a short note on the Open stack and its various software resources. Define IBM Softlayer in brief. Briefly discuss IBM Bluemix, its advantages, and its architecture. (5+5+10)
- 3) List out the various steps of managing workloads of a hybrid cloud. Discuss the IBM cloud marketplace in brief. Describe the different features of Bluemix architecture. Explain the workings of the trusted cloud precisely. (6+5+5+4)
- 4) Define open stack architecture along with its different features. Write a short note on Monitoring and management tools as a service. Explain the various aspects of dynamic scalability architecture. Illustrate the different steps of the resource replication process of the private cloud. (5+5+5+5)
- 5) Briefly discuss the IaaS infrastructure. State the various advantages and disadvantages of IaaS. Draw a comparison between IaaS and ISPs. Explain whether IaaS can be the best option or not. Discuss the entire life cycle of API management. (4+6+5+5)
- 6) 3. Illustrate the elastic resource capacity architecture. Demonstrate IBM SoftLayer elaborately. List out the various aspects of creating a cloud deployment strategy plan. Write a short note on vendor lock-in. (5+5+6+4)
- 7) Discuss PaaS architecture briefly and its characteristics. State the differences between API management and iPaaS. Explain whether the PaaS can be the best option or not. Briefly Discuss the SaaS ecosystem. (5+4+6+5)
- 8) Write the IBM SmartCloud entry process and deployment in the private cloud. Outline the importance and needs of SLA in brief. Write the differences between cloud automation and cloud orchestration. Define the different backup and disaster recovery policies of a public cloud. (6+4+5+5)
- 9) Briefly discuss SaaS architecture and its different characteristics. Define collaboration as service in brief. Discuss the various cloud management tools elaborately. Discuss whether SaaS can be the best option or not. (5+4+5+6)
- 10) Define OpenStack architecture and list its utilities. Discuss precisely NIST reference architecture mapping. List down the importance of resource pooling architecture. Classify the various Cloud computing patterns and state their applications concisely. (5+5+4+6)
- 11) Write a short note on the hypervisor. Briefly discuss the type-1 and type-2 hypervisors. Describe elaborately the hypervisor clustering architecture. Define various load-balancing strategies of various hypervisors. (4+6+5+5)
- 12) Write the various features of elastic disk provisioning. Outline the architectural differences between elastic resource capacity and service load balancing in any cloud. Write a short note on Open Cloud Computing Interface (OCCI). Define the various lock-in conditions for the public cloud. (5+6+5+4)
- 13) Briefly elaborate on the non-disruptive service location, zero downtime, cloud balancing, and resource reservation architectures. (5+5+5+5)
- 14) Compare the functionalities of data locality and data center. Differentiate between cloudonomics and cloud pricing in brief. Illustrate the various aspects of workload management of any hybrid cloud. Outline the distinct benefits of IBM Bluemix. (5+4+6+5)

- 15) Briefly discuss dynamic failure detection and recovery architecture. Define Bare-Metal Provisioning and Rapid Provisioning architectures in brief. Discuss the need for cloud automation. Discuss storage workload management in brief. (5+6+5+4)
- 16) Demonstrate the compensation within SLA in brief. Point out the roles of exclusion filters in cloud-based protection. Write a short note on Jurisdiction and cloud computing. Illustrate cloud interoperability and point out its importance in brief. (6+4+4+6)
- 17) Write a short note on Live migration. Distinguish between the pre-copy and post-copy live migrations. Discuss the workload distribution architecture of any cloud. Define Automated administration in brief. (5+6+4+5)