QUESTIONS

1. History of cloud computing.
2. Definition of cloud computing.
3. 5 characteristics of cloud computing.
4. Service models.
5. Deployment models.
6. Abstraction.
7. Virtualization.
8. Types of virtualization.
9. Native and full virtualization.
10. Hardware enabled virtualization.
11. Paravirtualization.
12. Operating system-level virtualization.
13. Amazon Web Services.
14. Microsoft Azure.
15. Google Cloud.
16. MaaS - Metal as a Service.
17. How MaaS works.
18. Juju.
19. Web servers and load balancing.
20. Possible failure modes (request – response).
21. Invocation semantics.
22. Implementation of abstractions.
23. Marshalling / unmarshalling.
24. HTTP.
25. SOAP.
26. REST.
27. JSON.
28. Ceph.
29. Hive.
30. Tez.
31. BLOB, object storages.
32. Swift API.
33. Amazon S3.
34. Amazon AWS instance store.
35. Amazon AWS EBS.
36. Amazon AWS Glacier.
37. Amazon AWS EFS.
38. Dropbox.
39. Spark.
40. Resilient Distributed Datasets.
41. Hortonworks.
42. HDFS.

43. MapReduce.
44. Consistency in a distributed system, fallacies of distributed computing.
45. Eric Brewer’s CAP theorem.
46. Asynchronous network model.
47. Partially synchronous network model.
48. T-connected consistency.
49. ACID model.
50. BASE methodology.
51. Difference between virtual machines and containers. Describe the architecture of a system with virtual machines and containers.
52. Steps of creating a container. Dockerfile.
53. Steps of creating a container. Docker image.
54. Steps of creating a container. Docker container.
55. Life cycle of a container.
56. Creation and launching of a user-defined container.