Q. 1. Answer the following Questions in brief. (Any 7)

a) What is Multi-tenancy in cloud computing?
b) How virtualization allows segregation of servers?
c) Explain Blade server concept.
d) Give difference between cloud computing and virtualization.
e) Write the differences of ON DEMAND and conventional enterprise applications.
f) Explain the term ORCHESTRATION and CHOREOGRAPHY in SOA context.
g) How do we read and write an XML file using a file Adapter.
h) What is service call out? Write its implementation in SOA.

Q.2 Attempt any TWO from the following: (14 Marks)
   a) Explain fault tolerance at different level in cloud datacenter.
   b) What is Map-Reduce? How Hadoop is using it for storage management?
   c) What is XaaS? Explain its various types with its advantages and disadvantages.

Q.3 Attempt any TWO from the following: (14 Marks)
   a) What is Utility Computing? How we can compare it with cloud computing? Also explain SLA concept with both computing techniques.
   b) Explain types of virtualization with advantages and disadvantages.
   c) How cloud datacenter architecture is capable to manage its characteristics?

Q.4 Do as directed (7, 7)
   a) Explain the benefits of SOA for an organisation. Explain all the steps required to transform a conventional business process into a SOA based business process with a suitable example and scenario.
   b) Explain the life cycle of SOA based design and development.

   OR

[Contd...]
The SOA application has a BPEL end point which asks the data monthwise week wise sale for a list of products and annual grand total of sales. Half of the products and their sales are stored in one database server where as the rest are stored on another server. An EJB does the annual grand total of all the sales. Using BPEL based SOA services list all the steps to complete the application.

Q.5. Do as directed (7,7)

a) Explain complete SOA organisation in detail with suitable example
b) With suitable example show data routing, transformation and protocol treatment with Enterprise services with an example.