





12. a) "Data produced by a large Hadron Collider may exceed several petabyts". What type of grid service model(s) will you suggest for such an application ? Illustrate with diagrams.

(OR)

- b) What is OGSA ? Explain open grid services architecture in detail with the functionalities of the components.

13. a) Describe service and deployment models of a cloud computing environment with illustrations. How do they fit in NIST cloud architecture ?

(OR)

- b) What is virtualisation ? Describe para and full virtualisation architectures. Compare and contrast them.

14. a) Illustrate dataflow in HDFS during file read/write operation with suitable diagrams.

(OR)

- b) What is GT4 ? Describe in detail the components of GT4 with a suitable diagram.

15. a) What is the purpose of GSI ? Describe the functionality of various layers in GSI.

(OR)

- b) What is the purpose of IAM ? Describe its functional architecture with an illustration.