

M.E. DEGREE EXAMINATIONS: NOVEMBER 2009

Third Semester

COMPUTER SCIENCE AND ENGINEERING

P07CSE08 Grid Computing

(Common to Full Time and Part Time)

Time : Three Hours

Maximum Marks : 100

Answer ALL questions:-

PART A (10 x 2 = 20 Marks)

1. What are the features of Grid?
2. What is a virtual organization?
3. List any 2 services provided by Grid.
4. Illustrate peer to peer grid architecture. What are its benefits?
5. Mention the characteristics of Desktop grids
6. Give any four OGSA platform interfaces.
7. Using the OGSA interfaces, illustrate how a distributed data mining computation is invoked?
8. What are the challenges in establishing 'single sign-on'?
9. Why do we need computational grids?
10. What is the use of Globus?

PART B (5 x 16 = 80 Marks)

11.a) Describe in detail the architecture and design issues of grid computing systems

(OR)

b) Write a comparison note on how grid computing is different from other technologies like parallel computing, cluster computing, distributed computing?

12. a) Describe in detail the methods of deployment of applications in Grid.

(OR)

b) What are Cluster grids? Explain with an example.

13. a) Explain how video encoding can be done rapidly on a compute Grid

(OR)

b) Explain the lifecycle of a Grid Service in detail.

14. a) Draw the Montague River Grid (MRG) architecture. Explain how it provides the necessary functionality to support the inter-domain and inter-provider management of network based services?

(OR)

b) Discuss the Virtualization services for data grids.

15. a) How will you develop OGSA based Grid using Globus toolkit? Explain.

(OR)

b) Discuss how grid technology can be applied to develop a categorization based search tool.
