

(43)

ANNA UNIVERSITY CHENNAI
B.Tech degree Examinations, APR/MAY 2011
SEVENTH SEMESTER

IT514-GRID COMPUTING

Time: 3Hrs

Max.Marks: 100

Answer all questions
PART A (10 x 2 = 20 Marks)

1. State the advantage of layered model of Grid community related with integration of Grid resources.
2. List down the various building blocks of Grid.
3. Define the term Single sign-on in grid Computing.
4. How Legion differed from Globus?
5. How a Virtual Organization in OGSA qualifies as a Grid service?
6. What do you meant by data grid?
7. State the functionality of Globus toolkit.
8. What is GSI and GRAM?
9. What is OGSi? State its role in Grid computing environment.
10. How OGSA supports for intermittently connected mobile Grid services?

PART B (5 x 16 = 80 Marks)

11. a) Explain in detail about the layered architecture of Community Grid model. (12)
b) Discuss in brief about how Grid computing plays a major role in life sciences. (4)

12. a) i) Discuss in detail about the main design features required at the data and computational fabric of Grid. (12)
ii). State the properties of third generation's autonomic system in Grid computing. (6)

Or

- b) i. Compare the second generation of Grid evolution with first generation in terms of support of various applications. (16)

13. a) i. Wrote notes on

1. Virtual Organizations
2. Data Grid services. (6+10)

Or

- b) Discuss in detail about the shortcomings and open issues which acts a potential areas of future development of OGSA. (16)

14. a) Explain in details about the various modules of GridRPC and the design of Ninf-G. (16)

Or

- b) With an example model discuss in detail about how an implemented Grid service is evaluated. (16)

15. a) Discuss in detail about high level Grid services. (16)

Or

- b) Explain in detail about Grid computing on mobile devices- Mobile OGSI.NET. (16)