B.E / B.Tech (Part Time) DEGREE EXAMINATIONS, APRIL/MAY 2014

Branch : IT

Semester VI

PTIT 9354 GRID COMPUTING

(Regulation 2009)

Time: 3 Hours   Answer ALL Questions   Max. Marks 100

PART-A (10 x 2 = 20 Marks)

1. Differentiate parallel and distributed computing.
2. List the XML standards associated with web services.
3. What is scalable wide area monitoring in Grid?
4. What is GPIR? Explain its uses.
5. Explain the role of certification authority.
6. Justify the need for rescheduling in Grid.
7. What is the difference between first and second generation grid portal?
8. What are federation services?
9. List the globally available grid middlewares.
10. What is a semantic grid?

Part – B (5 x 16 = 80 marks)

11. (i) List the various grid scheduling paradigms and explain them.   (8)

    (ii) Explain with an example, how grid scheduling works.   (8)

12. (a) (i) Explain the characteristics of Grid.   (8)

    (ii) Describe the architecture of the Grid.   (8)

OR

    (b) (i) Explain the role of web services in Grid with an example.   (8)

    (ii) Highlight the features of WSRF.   (8)

13. (a) (i) Explain the Grid Monitoring Architecture. (8)

(ii) Explain the role of java agent for monitoring and management in grid. (8)

OR

(b) (i) Highlight the features of Grid Portal Information Repository. (8)

(ii) List any two monitoring tool in Grid and highlight their features. (8)

14. (a) (i) List the grid portal services and explain them. (8)

(ii) How workflow management is carried out in Grid? Explain. (8)

OR

(b) (i) Highlight the features of Grid portals. (8)

(ii) What are the data management challenges in Grid? (8)

15. (a) (i) Describe the structure of Globus Toolkit 3. (8)
(ii) Explain the GT3 core services. (8)

OR

(b) (i) Explain the GT3 programming model. (8)

(ii) Explain the security services associated with Grid. (8)