

FACULTY OF INFORMATICS

Code No. 3167

B.E. 4/4 (I.T.) I-Semester (Main) Examination, December 2010

Subject : **Grid Computing**
(Elective-II)

Time : 3 Hours}

{Max. Marks: 75

Note: Answer **all** questions of Part - A and answer any **five** questions from Part-B.

PART – A (25 Marks)

1. Define Grid Computing. What is the difference between early Grid Computing and current Grid Computing ? (3)
2. Write short notes on teragrid project. (3)
3. What are the differences between Grid Computing and Cluster Computing ? (3)
4. Draw the grid architecture. Why using grid architecture in grid computing? (3)
5. Write SOA interaction pattern. Write difference between WSDL 1.1. (3)
6. Explain data types in the MPI. (2)
7. Write about communicators in MPI ? (2)
8. Write difference between MPI – ALL GATHER and MPI-ALLTOALL. (2)
9. Write OGSA basic Services. (2)
10. Write about layers in OGSA architectural organization. (2)

PART – B (50 Marks)

11. Describe the organization development middleware's and frameworks. (10)
12. Give complete description about XML messages and enveloping. (10)
13. Write simple program on point-to-point communication in MPI and explain about communication modes in MPI. (10)
- 14.(a) Write grid services and client programming model. (5)
(b) Write sample use case of the online media and entertainment. (5)
15. Explain about index, data management and resource management service in GT3 Toolkit. (10)
- 16.(a) Describe how grid computing in business area is helpful. (5)
(b) Explain Grid Architecture. (5)
- 17.(a) Give explanation of the common management model services. (5)
(b) Explain the following operation in collective communication. (5)
 - (i) Scatter
 - (ii) Gather
 - (iii) Gather-to-ALL