



B.TECH.

THEORY EXAMINATION (SEM-VIII) 2016-17

GRID COMPUTING

Time : 3 Hours

Max. Marks : 100

Note : Be precise in your answer. In case of numerical problem assume data wherever not provided.

Section A

1. Answer all the questions.

10x2=20

- List the derivatives of grid computing?
- What are the grid computing applications?
- List some of the QOS features available in grid computing.
- What is the relationship between OGSA, OGSF and Web Services?
- What are the two commonly understood SOA architecture?
- What are the features of grid service container?
- State the features of data grids.
- Define Grid Security Infrastructure (GSI).
- Define Simple Object Access Protocol (SOAP).
- Compare and contrast Grid Computing and P2P computing.

Section B

2. Answer any five questions from this section. 5x10=50

- Explain the layered architecture of grid with a neat diagram.
- What is Globus Toolkit? Trace its history and background.
- What is OGSA? Describe how it extends web services with suitable illustrations.
- What is the purpose of gLite? Discuss on grid middleware services offered by them.
- Discuss briefly about organization building and using grid based solution to solve their computing data and network requirements.
- What are the data and functional requirements of grid computing?
- Describe about the relation of grid architecture with other distributed technologies.
- What are the fundamental components of SOAP specification?

Section C

Answer any two questions of the following.

2x15=30

- Explain briefly about grid infrastructure.
 - Discuss in detail about web service and grid service.
- What are the two ways available to create and add service data to service data set?
 - Explain various components and features of grid middleware.
- Write short notes on any three of the following
 - JAMM
 - WSRF
 - Ganglia and GridMon
 - LSF-Grid Scheduling with QoS

