



- Notes :
1. All questions carry marks as indicated.
 2. Solve Question 1 OR Questions No. 2.
 3. Solve Question 3 OR Questions No. 4.
 4. Solve Question 5 OR Questions No. 6.
 5. Solve Question 7 OR Questions No. 8.
 6. Solve Question 9 OR Questions No. 10.
 7. Solve Question 11 OR Questions No. 12.
 8. Due credit will be given to neatness and adequate dimensions.
 9. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) Define grid what are the key distinctions between cluster and grid computing? **6**
b) Discuss about cluster middle ware. **7**

OR

2. a) Explain cluster Architecture. **7**
b) Explain networking, protocols for clusters. **6**
3. a) Discuss about PARAM cluster system. **6**
b) What is a single system Image? Describe different SSI Layers. **7**

OR

4. a) Explain process scheduling. **7**
b) Explain COMP as cluster system. **6**
5. a) Discuss the characteristics of grid in detail. **6**
b) Explain Grid types and topologies. **8**

OR

6. a) Discuss about Grid Architecture. **6**
b) Explain grid components and layers. **8**
7. a) Give the web services architecture with neat explanation. **6**
b) Explain briefly about Globus GT4 toolkit. **8**

OR

8. a) Write OGSA architecture and its goals. 7
b) Explain traditional paradigms for distributed computing. 7
9. a) Explain about semantic web services. 7
b) Discuss about layered structure of semantic grid. 6
- OR**
10. Write short note on. 13
a) Meta fata
b) Grid Activities
c) Autonomic computing
11. a) Discuss about grid security Infrastructure. 7
b) Explain briefly about grid monitoring system. 6
- OR**
12. a) Explain grid scheduling and Resource management. 8
b) Discuss about scheduling paradigms. 5
