NagpurStudents

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IT'S HARD TO BEAT A PERSON WHO NEVER GIVES UP.

Babe Ruth, American professional baseball player

Elective - II : Cluster & Grid Computing

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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) Describe the major trends in computing that have led to the emergence of cluster computing. **7**

   b) Discuss about cluster middle ware. **7**

OR

2. a) What do you mean by cluster computing? What type of functionality a cluster can offer? **7**

   b) Discuss various levels and layers of single system image. **7**

3. a) Differentiate between Load sharing and Load balancing. **6**

   b) Describe Compass system. **7**

OR

4. a) Describe compass in detail. **6**

   b) What do you mean by Highly Available cluster? Discuss its technologies. **7**

5. Describe in detail Grid Architecture. **13**

OR

6. a) What are the components and layers of gird computing. **7**

   b) Discuss about the standard bodies in grid computing. **6**

7. a) Explain the web services architecture with neat explanation. **7**

   b) Explain briefly abut Globus GT4 toolkit. **6**

OR

8. a) What do you mean by semantic web services? Explain layered structure of the semantic grid. **7**

   b) Write short note on OGSA. **6**

9. a) Explain metadata in semantic web. **7**

   b) Describe semantic web services. **6**

OR

10. a) What is Autonom computing? **7**

    b) Write short note on summarization of ontology languages. **6**

11. Write short note on **14**

    i) Grid security

    ii) GMA

    iii) Grid monitoring system.

OR

12. a) What is grid scheduling? Explain. **7**

    b) Describe working principles of scheduling system. **7**

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The best time to plant a tree was 20 years ago. The second best time is now.

~ Chinese Proverb