

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER –VII • EXAMINATION – SUMMER 2014

Subject Code: 170704

Date: 29-05-2014

Subject Name: Advance Computing Technology

Time: 02.30pm to 05.00pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** What is cluster computing? Explain different scalable computer architecture in detail. **07**
- (b)** Explain cluster classification in detail. **07**
- Q.2 (a)** What is Resource Management Scheduling (RMS) in cluster computing? Explain the services provided by it. **07**
- (b)** Explain High performance virtual machine (HPVM) project and Beowulf project in cluster computing? **07**
- OR**
- (b)** What is cluster tuning? Explain the policies used for cluster tuning. **07**
- Q.3 (a)** Define Grid Computing? What are components of Grid? Explain the applications of Grid Computing. **07**
- (b)** What is Virtual organization? Explain different protocol, services, and tools to build scalable Virtual organization? **07**
- OR**
- Q.3 (a)** Explain Grid architecture in detail. **07**
- (b)** Why there is need of Grid Computing? Explain Web Resource Framework in detail in Grid Computing. **07**
- Q.4 (a)** Define Cloud Computing? Explain the features of Cloud Computing. **07**
- (b)** Explain benefit and limitations of Cloud Computing. **07**
- OR**
- Q.4 (a)** Explain Private Cloud, Public Cloud and Hybrid Cloud in detail. **07**
- (b)** Explain Infrastructure as a Service(IaaS), Platform as a Service(PaaS) and Software as a Service(SaaS) in Cloud Computing. **07**
- Q.5 (a)** Explain the Cloud Components in detail. **07**
- (b)** Explain the situation when we can use Cloud Computing and when we can not use Cloud Computing. **07**
- OR**
- Q.5 (a)** Mention the characteristics of Workload and Explain the different types of Workload. **07**
- (b)** List different types of data stored in Cloud. Compare traditional IT Service Provider and Cloud Service Provider. **07**
