

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VII EXAMINATION – WINTER 2015

Subject Code: 170704

Date: 16/12/2015

Subject Name: Advance Computing Technology

Time: 10:30am to 1:00pm

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) Explain the key characteristics of scalable parallel computers in details. **07**
(b) Describe the benefit of single system image. **07**
- Q.2** (a) Draw and explain the cluster computing architecture. **07**
(b) What do you mean by resource management and scheduling (RMS)? Explain the services provided by a RMS environment. **07**
- OR**
- (b) Explain the flexible load sharing algorithm in detail. **07**
- Q.3** (a) Define grid computing and explain the various building blocks of the Grid. **07**
(b) Explain CROSS-SITE TRUST MANAGEMENT in production grid. **07**
- OR**
- Q.3** (a) Discuss evolution of grid with respect to first, second and third generation. **07**
(b) Explain in detail the role of virtual organization in grid computing. **07**
- Q.4** (a) Explain I-WAY project in detail. **07**
(b) What is cloud computing? Explain the features of cloud computing. **07**
- OR**
- Q.4** (a) Mention the common needs of grid applications. What are the data and functional requirements of grid computing? **07**
(b) What is cloud computing? Explain the benefits and limitations of cloud computing. **07**
- Q.5** (a) Explain the different types of clouds in detail. **07**
(b) Explain the different types of data that is stored on clouds and explain the important parts related to the protection of the data in detail. **07**
- OR**
- Q.5** (a) Explain the different cloud models in detail. **07**
(b) Explain the working model of SaaS in detail. **07**
