

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER– VII EXAMINATION – WINTER 2017

Subject Code: 170704

Date: 15-11-2017

Subject Name: Advance Computing Technology

Time: 10:30 am to 01:00 pm

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 cluster computing architecture using suitable diagram. **07**
- (b)** List out features of cluster computing. Explain cluster classification categories based on different factors. **07**
- Q.2 (a)** What is RMS? Explain services provided by RMS environment. **07**
- (b)** Explain key services of SSI (single system image) and availability infrastructure. **07**
- OR**
- (b)** Explain cluster system monitoring in brief. **07**
- Q.3 (a)** Give some history of beginning of grid and explain community grid model. **07**
- (b)** What are the various grid applications? Explain engineering oriented and data oriented applications in detail. **07**
- OR**
- Q.3 (a)** What do you understand by cross site trust management? Explain with examples. **07**
- (b)** Explain open grid services architecture (OGSA) and its parts. **07**
- Q.4 (a)** Explain service oriented model of third generation of grid in brief. **07**
- (b)** What are the steps that must be taken before migrating application into cloud? **07**
- OR**
- Q.4 (a)** What is virtual organization? How virtual organization is used in grid for collaboration? **07**
- (b)** What is cloud computing? Explain various features of cloud computing in detail. **07**
- Q.5 (a)** What are the cloud service models? Explain each of them in brief. **07**
- (b)** Compare traditional and cloud data center in brief. **07**
- OR**
- Q.5 (a)** Explain Amazon EC2 project in detail. **07**
- (b)** What is SaaS? Explain using suitable example. **07**
