

# GUJARAT TECHNOLOGICAL UNIVERSITY

## BE - SEMESTER-7 - EXAMINATION –SUMMER 2018

**Subject Code: 170704**

**Date: 05-05-2018**

**Subject Name: Advance Computing Technology**

**Time: 02:30 pm to 05:00 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) Define Cluster Computing. Explain its architecture in detail.                   | 07 |
|     | (b) Explain the Beowulf cluster and Berkeley Now Clusters.                          | 07 |
| Q-2 | (a) Explain various commodity components of cluster.                                | 07 |
|     | (b) What is RMS? Explain the services provided by a RMS environment.                | 07 |
|     | OR                                                                                  |    |
|     | (b) Explain Platform as a Service in Cloud Computing.                               | 07 |
| Q-3 | (a) What is cloud computing? Explain the features of cloud computing.               | 07 |
|     | (b) Explain in detail about cloud work load.                                        | 07 |
|     | OR                                                                                  |    |
|     | (a) Define grid computing and explain the various building blocks of the Grid.      | 07 |
|     | (b) Explain the cloud deployment model in detail.                                   | 07 |
| Q-4 | (a) Explain the applications of Grid Computing.                                     | 07 |
|     | (b) Explain Second generation grid -Globus project in detail.                       | 07 |
|     | OR                                                                                  |    |
|     | (a) Explain the Resource and the collective layer services of grid architecture.    | 07 |
|     | (b) Explain InterGrid Protocol.                                                     | 07 |
| Q-5 | (a) Explain the top cloud risks in detail.                                          | 07 |
|     | (b) Explain FlexiScale and Gogrid – Iaas service provider.                          | 07 |
|     | OR                                                                                  |    |
|     | (a) Discuss about Cluster of SMPs.                                                  | 07 |
|     | (b) Define production Grid. Explain Open Grid Service Architecture(OGSA) in detail. | 07 |

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