

		 		T			
Reg. No.:							
_	1		ł l				

Question Paper Code: 91411

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2019 Seventh/Sixth Semester

> Computer Science and Engineering CS 6703 – GRID AND CLOUD COMPUTING

(Common to Information Technology)

(Regulations 2013)

(Also Common to PTCS 6703 – Grid and Cloud Computing for B.E. Part-Time – Sixth Semester Computer Science and Engineering – Regulations 2014)

Time: Three Hours

Maximum: 100 Marks

Answer ALL questions

PART - A

 $(10\times2=20 \text{ Marks})$

- 1. Define Grid computing.
- 2. What is the impact of SOA in cloud?
- 3. What are the requirements for the web services based on OGSI?
- 4. What is the need for data intensive grid service models?
- 5. List the pros and cons of cloud computing.
- 6. Give the significance of virtualization for data center automation.
- 7. What is the usage of Globus?
- 8. State the significance of heart beat message in Hadoop.
- 9. Differentiate between authentication and authorization.
- List out the key privacy issues in cloud.

PART - B

(5×13=65 Marks)

- 11. a) Illustrate the evolution of distributed computing to grid and cloud computing.

 (OR)
 - b) Describe the grid architecture.

12. a) Illustrate the detailed view of OGSA/OGSI.

(OR)

- b) Explain about the OGSA services.
- 13. a) Illustrate the cloud delivery models in detail.

(Oℝ)

- b) Illustrate the design of a large-scale virtual cluster system.
- 14. a) Explain the Globus toolkit architecture.

(OR)

- b) Illustrate the design of Hadoop file system.
- 15. a) Explain the grid and cloud security infrastructure.

(OR)

b) Describe the IAM practices in Saas, PaaS and IaaS availability in cloud.

PART - C

 $(1\times15=15 \text{ Marks})$

16. a) Compare and contrast the cloud deployment models.

(OR)

b) Analyze how MapReduce framework supports parallel and distributed computing on large data sets with a suitable example.