Seat No.:	Enrolment No
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GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER - II • EXAMINATION - SUMMER • 2013

	•	code: 1720106 Date: 05-06-2013	
	•	Name: Grid Computing	
		10.30 am – 01.00 pm Total Marks: 70	
Ins	struc	 Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. 	
Q.1		 Answer the following questions. What is Grid Computing? Explain resource sharing in a virtual organization with example. What do you mean by Business on demand and list out characteristics of it. Discuss in brief SETI Grid Project. 	02 04 04 04
Q.2	(a) (b)	Explain Message Passing Interface (MPI), MPI-G and MPI-G2. Explain Grid Infrastructure in detail. OR	07 07
	(b)	Explain layered architecture of Cloud computing.	07
Q.3	(a)	Explain core objects defined by the Legion system and also describe relationship between them.	07
	(b)	What is web Service? Explain relationship between Web Service and Grid Service.	07
		OR	
Q.3	(a) (b)	List out various Grid Applications. Explain any three grid applications. Explain Sun grid engine in Detail.	07 07
Q.4	(a)	List out the functions performed by Grid Meta models and discuss any two model in detail.	07
	(b)	Describe Autonomic Computing & Explain four basic principles followed by Autonomic Computing.	07
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Q.4	(a) (b)	Explain Sky server in detail. Explain Globus infrastructure in detail.	07 07
Q.5	(a)	Discuss properties of Cloud Computing & specify pros and cons of Cloud Computing.	07
	(b)	Discuss performance monitoring parameters in Grid Computing. OR	07
Q.5	(a)	What is the significance of Resource balancing in Grid Computing Environment? How is it implemented? Discuss it with a suitable example.	07
	(b)	Explain SaaS, IaaS & PaaS cloud computing service models.	07
