

Hall Ticket Number :

--	--	--	--	--	--	--	--	--	--	--

**R-14**

**Code: 4G174**

IV B.Tech. I Semester Supplementary Examinations April 2019

**High Performance Computing**  
( Computer Science and Engineering )

Max. Marks: 70

Time: 3 Hours

Answer *all five* units by choosing one question from each unit ( 5 x 14 = 70 Marks )

\*\*\*\*\*

**UNIT-I**

1. a) Define distributed computing? List its characteristics. 3M  
b) What are the operating system concepts relevant to the distributed computing? Explain them. 11M

**OR**

2. a) What is RMI? Where we will be using it? 4M  
b) Explain the distributed computing paradigms? 10M

**UNIT-II**

3. a) What is cluster? Why we need them? 4M  
b) Explain clustering RMS architecture 10M

**OR**

4. List and explain the Security issues of Grid Computing 14M

**UNIT-III**

5. a) What is meant by WSGA? Give brief description about it. 6M  
b) What are the characteristics of web services? 8M

**OR**

6. a) Explain about messaging in SOA? 4M  
b) How to merge the grid services architecture with web services architecture? Explain. 10M

**UNIT-IV**

7. a) What is OGSA? What are its functionalities? Explain. 6M  
b) What are the components in OGSA PLATFORM? 8M

**OR**

8. a) Define Cloud Computing? Write the applications of the same. 4M  
b) Explain open grid service architecture with sample use case? 10M

**UNIT-V**

9. a) What is Globus 3 toolkit? Discuss. 5M  
b) What are the security services in GT3? Explain. 9M

**OR**

10. a) What are the high level services present in GT3? 2M  
b) Explain the OGSI.NET middleware solutions? 12M

\*\*\*