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P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belagavi)

Sixth Semester, B.E. - Information Science and Engineering

Semester End Examination; June - 2017

Cloud Computing

Time: 3 hrs   Max. Marks: 100

Note: *Answer **FIVE** full questions, selecting **ONE** full question from each unit.*

UNIT - I

1 a.	Discuss the ethical issues in cloud computing and also the cloud vulnerabilities.	10
b.	Explain the major challenges faced by cloud computing.	10
2 a.	Discuss the energy use and ecological impact of large scale data centers.	10
b.	List out the various user experience and also explain the software licensing for cloud computing.	10

UNIT - II

3 a.	Explain the Zookeeper coordination service and its service guarantees.	10
b.	Discuss the GrepThe web application case study with the work flow.	10
4 a.	Explain cloud computing for biology research.	10
b.	Compare the high performance challenge (HPCC) benchmark with performance of EC2.	10

UNIT - III

5 a.	What are the important rules of virtualization? Explain Virtual Machine Monitors (VMM) in detail.	10
b.	Explain the two basic approaches of processor virtualization [Full virtualization and Para virtualization].	10
6 a.	Explain the optimization of network virtualization in XEN 2.0.	10
b.	List and explain the problems faced by virtualization of the X86 architecture.	10

UNIT - IV

7 a.	Explain two-level resource allocation with a neat diagram.	10
b.	List and explain five classes of cloud resource management policies.	10
8 a.	Explain resource management and dynamic application scaling.	10
b.	Explain fair queuing and start time fair queuing in detail.	10

UNIT - V

9 a.	Explain the surfaces of attacks in a cloud computing environment using diagram.	10
b.	Explain operating system security in detail.	10
10a.	Explain in brief the security risks posed by shared images.	10
b.	Explain the security model of Xoar and its components.	10

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