Exam Roll No............

Tribhuvan University
Institute of Science and Technology
2082
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Bachelor Level / Fourth Year / Eighth Semester/ Science   Full Marks: 60
Computer Science and Information Technology (CSC467)   Pass Marks: 24
(Introduction to Cloud Computing)   Time: 3 hours.
(NEW COURSE)

Candidates are required to give their answers in their own words as for as practicable.
The figures in the margin indicate full marks.

Section A

Long answer questions
Attempt any TWO questions   **(2 × 10 = 20)**

1. What is cloud? Discuss different types of clouds with their usages? What are the cloud service requirements?   [2+6+4]

2. What is the significance of virtualization in cloud computing? Discuss the implementation levels of virtualization structures. What are the infrastructure requirements for virtualization?
                                                                            [2+5+3]

3. Differentiate task from thread. How the operations like map, shuffle & sort and reduce are executed in map reduce approach for solving problems? Illustrate with example.   [3+7]

Section B

Short answer Questions
Attempt any EIGHT questions   **(8 × 5 = 40)**

4. Explain evolution of cloud computing.   [5]

5. What is SOA? Discuss why adoption of SOA is good while developing cloud applications. [1+4]

6. Explain different types of hypervisors.   [5]

7. Describe the security architecture design in cloud.   [5]

8. Discuss the various security mechanisms that are implemented to secure a cloud. [5]

9. Differentiate infrastructure as a service from platform as a service with examples.   [5]

10. What is Aneka container? Explain the components of Aneka Framework.   [1+4]

11. What is azure shell? Explain about azure monitoring services.   [1+4]

12. How cloud platforms are used in business and consumer applications?   [5]