18SCN31

Third Semester M.Tech. Degree Examination, Dec.2019/Jan.2020
Cloud Computing

Time: 3 hrs.   Max. Marks: 100

Note: *Answer any FIVE full questions, choosing ONE full question from each module.*

Module-1

1   a.   List and explain service / compliance level agreements with respect to cloud computing.
(10 Marks)
    b.   Explain three types of clouds and delivery models with a neat diagram.   (10 Marks)

OR

2   a.   Explain the core components of Azure with a neat diagram. List the various services offered by Google.   (10 Marks)
    b.   What is Vendor Lock – in problem? Explain how this problem is solved with RAID – 5 systems.   (10 Marks)

Module-2

3   a.   What is a Workflow? Explain the life cycle of the workflow by comparing with a computer program.   (10 Marks)
    b.   Describe the categories of existing cloud applications and opportunities for new application. Discuss i) AND Split   ii)   XOR merge   iii)   Multiple merge workflow patterns.   (10 Marks)

OR

4   a.   With a neat diagram, explain the MapReduce programming model.   (10 Marks)
    b.   Explain working of Grep The Web application with a neat diagram.   (10 Marks)

Module-3

5   a.   Define Virtual machine. Explain with block diagram different types of Virtual machines.
(10 Marks)
    b.   Explain Layering and Interfaces in virtualization, with a neat diagram.   (10 Marks)

OR

6   a.   List and explain the problems faced by virtualization of X86 architecture.   (10 Marks)
    b.   Explain the optimization of network virtualization in Xen 2.0 with the help of a neat diagram.   (10 Marks)

Module-4

7   a.   Explain policies and mechanisms for resource management.   (10 Marks)
    b.   Explain two – level resource allocation architecture with a neat diagram.   (10 Marks)

OR

8   a.   With a schematic diagram, explain ASCA combinatorial Auction Algorithm.   (10 Marks)
    b.   Discuss resource management and dynamic application scaling.   (10 Marks)

Module-5

9   a.   With a neat diagram, explain virtual security services provided by VMM.   **(10 Marks)**

    b.   Brief the steps to install hadoop on eclipse and write the pre – requisites and software packages.   **(10 Marks)**

OR

10   a.   Explain the security risks posed by a management OS with a neat diagram.   **(10 Marks)**

    b.   Explain the process of connecting clients to cloud instances through firewalls.   **(10 Marks)**

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