MANIPAL INSTITUTE OF TECHNOLOGY
MANIPAL
(A constituent unit of MAHE, Manipal)

II SEMESTER MCA
MAKE UP EXAMINATIONS
APRIL-2018
SUBJECT: CLOUD COMPUTING (MCA 4204)

REVISED CREDIT SYSTEM

(23/06/2018)

Time: 3 Hours   MAX. MARKS: 50

Instructions to Candidates:

❖ Answer **ALL FIVE** questions.
❖ Missing data may be suitable assumed.

1A.	What are the characteristics of big data? How can map reduce framework can be used to solve big data related problems. Explain with an example.	5
1B.	Explain different types of scalability with its features, advantages and disadvantages.	3
1C.	An e-commerce site XYZ (having 100 million users) wants to offer a gift voucher of 100$ to its top 10 customers who have spent the most in the previous year. Discuss the solution for the case study.	2
2A.	With a neat diagram, explain the machine reference model. Also describe different approaches of virtualization.	5
2B.	What is hypervisor? What are the different types of hypervisors? Explain the internal organization of Virtual Machine Manager?	3
2C.	What is service oriented computing? Explain its characteristics.	2
3A.	Compare and contrast different types of cloud deployment models and service models with examples.	5
3B.	What is SLA? Describe the life cycle of SLA. Also explain any four metrics to be covered in SLA for QoS.	3
3C.	Explain different types of cluster classification	2

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4A.	Explain different metrics and policies to be followed by load balancing algorithms. Also describe any four load balancing algorithms with its advantages and disadvantages.	5
4B.	With suitable diagrams, explain different types of parallel processing models.	3
4C.	Compare traditional RDBMS and Map Reduce	2
5A.	Explain different steps that end users should take to ensure successful migration of existing applications to cloud computing.	5
5B.	What are the key challenges of IOT? Explain different technologies that helped in development of IOT.	3
5C.	What are the five key features of cloud computing services? Explain in detail.	2