

Question Paper

Exam Date & Time: 25-Apr-2018 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

SCHOOL OF INFORMATION SCIENCES (SOIS) FIRST SEMESTER MASTER OF ENGINEERING- ME (Big Data and Data Analytics)

DEGREE EXAMINATION-APRIL 2018

Wednesday, 25 April 2018

Time: 10:00am to 1:00pm

Large Scale Distributed Computing Systems [BDA 609]

Marks: 100

Duration: 180 mins.

Answer all the questions.

- 1) Outline the security threats that is posed to a distributed system in the current cyber age and what are the security measures that are required to adopt counter the same. (10)
- 2) Explain the ACID properties of a distributed system. (10)
- 3) With a help of an example, explain Hybrid and De-Centralized Architecture. (10)
- 4) Explain the implementation of BigTable in Distributed Systems. (10)
- 5) How do you pass a file from Client to server? Explain with a code snippet. (15)
- 6) List the steps followed in deploying a VM inside Hyper-V environment? (10)
- 7) Can you satisfy all the properties of CAP theorem on a system? Explain any two with an example. (10)
- 8) Differentiate between Virtual Hard disk and Virtual Memory. (5)
- 9) Explain RPC with example. (10)
- 10) Which are different locking protocols in a distributed transaction environment? Explain Concurrency Control - Locking Protocols. (10)

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