

Question Paper

Exam Date & Time: 27-Nov-2018 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

SCHOOL OF INFORMATION SCIENCES

FIRST SEMESTER MASTER OF ENGINEERING - ME (CLOUD COMPUTING)

Cloud Application Development with Java [CDC 607]

Marks: 100

Duration: 180 mins.

END SEMESTER DEGREE EXAMINATION NOVEMBER 2018

Answer all the questions.

- 1) Explain briefly the characteristics of cloud computing (10)
- 2) What are the benefits and limitations of non-relational databases over relational databases? (10)
- 3) Why do we say that Java works on the "Write once, Run anywhere" principle? Explain in detail how this is achieved. (10)
- 4) Define and explain the difference between method overloading and method overriding with suitable examples in java (10)
- 5) Explain the following with their uses (with reference to Java) (2.5 x 4) (10)
protected b) static c) final and finalize() d) Garbage Collection
- 6) a) Explain Java Streams. (10)
(3)
b) Discuss at least four methods available in File class, with an example (4)
c) Discuss predefined streams (3)
- 7) Describe briefly the four different types of communication models used in IoT system (10)
(2.5 x 4)
- 8) a) Explain briefly HTTP Request methods and Response codes (10)
(5)
b) List out the key steps involved in developing the Restful

web services using Java (5)

- 9) Compare the functioning of REST with Web socket. (10)
- 10) Write a note on QoS provided by MQTT protocol and significance of Brokers in MQTT (10)

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