Question Paper

MANIPAL ACADEMY OF HIGHER EDUCATION

SCHOOL OF INFORMATION SCIENCES

FIRST SEMESTER MASTER OF ENGINEERING - ME (MEDICAL SOFTWARE/ EMBEDDED SYSTEMS)
Database Programming in Java [MMS 613]

Marks: 100   **Duration: 180 mins.**

END SEMESTER DEGREE EXAMINATION NOVEMBER 2018

Answer all the questions.

1)   Distinguish between the following terms   (3+3+4 marks)   (10)
   a) Objects and classes
   b) Data abstraction and data encapsulation
   c) Inheritance and polymorphism

2)   a) What do you mean by just in time (JIT) compilation?   (4 marks)   (10)
   b) How java achieves platform independent codes?   (6 marks)

3)   List and explain different iteration statements available in java   (10 marks)   (10)

4)   a) Explain the use of keyword super with an examples   (5 marks)   (10)
   b) Explain the Inner classes concept in Java   (5 marks)

5)   Define the following   (10)
   a) Abstract class (3 marks)
   b) Multilevel Inheritance (2 marks)
   c) Dynamic method dispatch (3 marks)
   d) Method

overriding
(2 marks)

6)   a) What are the difference between Checked and   (10)
Unchecked Exceptions   (2 marks)
b) Explain in details the different ways of handling the
exception in Java   (8 marks)

7)   List and explain the characteristics of database   (10)
approach   (10 marks)

8)   a) What is the difference between a database schema and   (10)
a database state?   (4 marks)
b) What are various categories of Data Models?
    (6 marks)

9)   a) What is a database transaction? Explain it with an   (10)
example.   (5 marks)
b) Explain the following
API's   (5
marks)
    i) Connection   ii) Statement

10)   a) Write a short note on Nested   (10)
Queries   (4
marks)
b) Discuss the following terms
    (2x3 marks)
    i). Views   ii). GROUP BY clause

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