

Question Paper

Exam Date & Time: 12-Feb-2021 (10:00 AM - 01:15 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

MANIPAL SCHOOL OF INFORMATION SCIENCES, MANIPAL
FIRST SEMESTER MASTER OF ENGINEERING - ME (EMBEDDED SYSTEMS) DEGREE EXAMINATION - FEBRUARY
2021

Database Programming in Java [CSE-604]

Marks: 100

Duration: 180 mins.

FRIDAY, FEBRUARY 12, 2021

Answer all the questions.

- 1) a) Define Object Oriented Programming. Distinguish between procedure-oriented programming and object oriented programming. (TLO 1.1) (5 marks) (10)
b) Write a short note on "**Inheritance and Polymorphism**" as applied to OOP (TLO 1.1) (5 marks)
- 2) a) Describe the meaning of **Just in Time (JIT)** compilation in java (TLO 1.2) (4 marks) (10)
b) Explain the way in which to achieve platform independent codes in java (TLO 1.2) (6 marks)
- 3) List and explain different iteration statements available in java (TLO 1.2) (10 marks) (10)
- 4) a) Explain the use of keyword super with an examples (TLO 2.1) (5 marks) (10)
b) Discuss the Inner classes concept in Java (TLO 2.1) (5 marks)
- 5) Define dynamic method dispatching. Illustrate the concept with an example. (TLO 2.2) (10 marks) (10)
- 6) a) Distinguish between Checked and Unchecked Exceptions (TLO 2.2) (2 marks) (10)
b) Explain in details the different ways of handling the exception in Java (TLO 2.2) (8 marks)
- 7) List and explain the characteristics of database approach (TLO 3.2) (10 marks) (10)
- 8) a) Distinguish between a database schema and a database state? (TLO 3.3) (4 marks) (10)
b) Discuss various categories of Data Models? (TLO 3.3) (6 marks)
- 9) a) Define database transaction. Explain it with an example. (TLO 3.2) (5 marks) (10)
b) Explain the following API's (TLO 3.2) (5 marks)

i) Connection ii) Statement

10)

a) Write a short note on **Nested Queries** (TLO 3.4) (4 marks)

(10)

b) Discuss the following terms (TLO 3.4) (2x3 marks)

i). Views ii). GROUP BY clause

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