Question Paper

MANIPAL ACADEMY OF HIGHER EDUCATION

Manipal School of Information Sciences (MSIS), Manipal
First Semester Master of Engineering - ME (Cloud Computing) Degree Examination - January 2023
Cloud Application with Java and Database [CDC 5101]

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

Wednesday, January 4,2023

Answer all the questions.

1)	(TLO 1.2) a) Describe inheritance as applied to Object Oriented Programming (5) b) What do you mean by dynamic binding? How is it useful to Object Oriented Programming? (5)	(10)
2)	Briefly describe the following (with reference to Java): (TLO 2.1) a. Finalize method (3) b. Multilevel Inheritance (2) c. Multiple Inheritance (3) d. Constructor (2)	(10)
3)	. (TLO 2.1) a) Explain the use of keyword super with examples (with reference to Java). (5) b) List out the difference between interface and abstract class in Java (5)	(10)
4)	Discuss the following: (TLO 2.1) a) Java's access control mechanism (5) b) Illustrate the usage of Collections in Java Programming (5)	(10)
5)	(TLO 3.1) a) Explain significance of following classes from java.sql package (5) ResultSet DriverManager b) Explain the significance of Generics with respect to Java programming (5)	(10)
6)	Write short notes on (TLO 3.2) (5 Marks each) a. Data Lake b. Evolution of Database	(10)
7)	Discuss different phases of the Database design (TLO 2.2) (10)	(10)
8)	Describe concept of weak entity and candidate key from the context of E R model followed in DBMS with appropriate example (TLO 2.2) (10)	(10)
9)	Explain Data anomalies that can be present in 3NF and explain BCNF (TLO 2.2) (10)	(10)
10)	Illustrate the important principles to be addressed from the Design Consideration of cloud applications (TLO 1.1) (10)	(10)

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