MCS-206

POST GRADUATE DIPLOMA IN

COMPUTER APPLICATION

(PGDCA) (NEW)

Term-End Examination

December, 2021

MCS-206 : OBJECT ORIENTED PROGRAMMING USING JAVA

Time : 3 Hours　　　　　*Maximum Marks : 100*

Weightage : 70%

Note : *(i) Question No. **1** is compulsory and carries 40 marks.*

*(ii) Attempt any **three** questions from the rest.*

1. (a) What is Object Oriented Programming ? What is an object ? How is it created in Java ? Explain with the help of an example. 6

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   (b) Write a Java program which takes three numbers as input and displays the largest among these. 5

   (c) Explain why main method in Java is always static. 5

   (d) Differentiate between String and String-Buffer classes in Java. 5

   (e) What is Package in Java ? Explain, with example, how a user defined package is created in Java. 6

   (f) What is JDBC ? Explain use of Driver-Manager class in the context of JDBC. 5

   (g) What is Multithreading ? Explain Java thread model with the help of a diagram. 8

2. (a) What is an Abstract Class ? Explain advantages of abstract class with the help of a program. 10

(b) Explain use of "super" keyword in Java programming with the help of an example.   5

(c) Write a Java program to demonstrate how a thread is created in Java. Also set the priority of created thread to 8.   5

3. (a) What is Exception ? Why proper exception handling is necessary in Java Programming ? Write a program to demonstrate use of multiple "catch" clauses in exception handling.   10

(b) What is "File" class in Java ? List any *two* methods of "file" class. Also explain use of these methods with the help of a program.   10

4. (a) What is Polymorphism ? What are the different types of polymorphism ? Explain how polymorphism helps in code reuse in Java programming with the help of a program.   10

(b) Explain the use of the following classes in Java programming with the help of example :   10

(i) Date

(ii) List

5. (a) What is JavaFX ? Explain the features of JavaFX.   10

(b) What is JDBC batch processing ? Explain with the help of a program.   10

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