2103230199

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE, APRIL - 2025

OBJECT ORIENTED PROGRAMMING

[Maximum marks: 75]   [Time: 3 Hours]

PART A

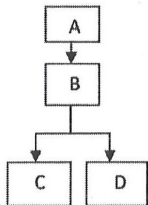**I. Answer all the following questions in one word or one sentence. Each question carries 1 mark**

(9 x 1 = 9 Marks)

		Module outcome	Cognitive level
1	………..is a blueprint or prototype from which objects are created.	M1.01	R
2	Why is java programs said to be platform independent?	M1.02	R
3	Which keyword is used for implementing inheritance in java.	M2.01	R
4	Which inheritance is implemented with the help of interface.	M2.07	R
5	List any two swing components.	M3.01	R
6	Define an event.	M3.02	R
7	………is used to create a button using swing.	M3.06	R
8	What is the fullform of JDBC.	M4.03	R
9	Which method is used to register the Driver class for database connectivity.	M4.04	R

PART B

II. Answer any eight questions from the following. Each question carries 3 marks.

(8 x 3 = 24 Marks)

		Module outcome	Cognitive level
1	Explain how a parameterized constructor can be used to initialize the objects of a class BankAccount with instance variables accno and name.	M1.04	U
2	Compare the private, protected and public access modifiers in java.	M1.10	U
3	Write the java code for implementing following inheritance hierarchy	M2.01	U

4	Write the uses of final keyword.	M2.06	U
5	List the advantages of Swing.	M3.01	R
6	Write down the events and the corresponding event listeners associated UI elements such as TextField, Button and Window.	M3.02	U
7	List the various types of mouse and keyboard events.	M3.04	U
8	What is relational database?	M4.01	U
9	Write down the various types of SQL commands.	M4.02	R
10	Write down the uses Prepared Statement interface.	M4.04	U

PART C
Answer all questions. Each question carries seven marks

(6 x 7 = 42 Marks)

		Module outcome	Cognitive level
III	Explain about the different types of object oriented concepts.	M1.01	U
	OR		
IV	Explain about different types of constructors.	M1.06	U
V	Outline the general structure of a java program and explain steps to create, compile and execute a program.	M1.03	U
	OR		
VI	With the help of an example explain how exceptions can be handled in java.	M1.12	U
VII	Build a class named Person with instance variables name and address, a constructor for initializing. Derive a new class Student from Person class with instance variables roll no and class, constructor for initializing. Create the objects of student class. Implement this scenario in java.	M2.03	A
	OR		
VIII	Consider a scenario where there are two classes: 'BaseClass' and 'DerivedClass', such that 'DerivedClass' is inherited from 'BaseClass'. A function 'public void myFunction()' is defined in both classes. State just the code sequences that would lead to a method overriding scerario and why this scenario is known as run time polymorphism.	M2.04	A

IX	MotorBike Instance variable: speed Instance method:totalDistance() Cycle Instance variable: distance method:speed() Two Wheeler Instance variable: totalDistance Instance method:avgSpeed() llustrate how the above scenario can be implemented in java program. [hint: totalDistance=speed*distance avgspeed=totalDistance/speed] **OR**	M2.07	U
X	Write down the java code for creating a package with name pack1 which contains a class Book with instance variables name, author and publisher, instance method read() for reading the details, show() method for displaying the details. Explain how objects of Book class can be created in another package named pack2.	M2.08	U
XI	Write down the event handling mechanism in java. **OR**	M3.02	R
XII	What are different types of event classes and corresponding interfaces in java?	M3.03	R
XIII	Write down the different steps in java to connect with the database. **OR**	M4.03	A
XIV	Explain about the various SQL commands create, drop, alter, insert, update, delete, select.	M4.04	A

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