

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/  
COMMERCIAL PRACTICE, APRIL - 2024**

**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 the blueprint or prototype from which objects are created.	M1.04	R
2	..... is used for initializing objects with default values at the time of object creation.	M1.06	R
3	Define inheritance.	M2.01	R
4	The value of a ..... variable cannot be altered any way.	M2.06	R
5	If any access modifier is not used, it is treated as friendly by default. State true or false.	M2.05	U
6	Which package must be include in all swing programs?	M3.02	R
7	The contents of a JLabel must always be centered. State True or False.	M3.06	U
8	What is meant by JDBC.	M4.03	R
9	Write the command used to delete a database table.	M4.02	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	What is meant by bytecode?	M1.02	R
2	List the features of Object oriented programming.	M1.01	R
3	Define packages. Write any two system packages in java.	M2.08	R
4	What is meant by abstract class?	M2.02	U
5	What is JComboBox? Which method is used to return the currently selected item in the JComboBox?	M3.06	U
6	Write short note on event listeners.	M3.05	R
7	Describe ActionEvent.	M3.06	U
8	What is meant by relational database?	M4.01	R
9	Explain the <b>create table</b> command in SQL.	M4.02	U
10	How would you execute an sql query statement in java?	M4.04	A

**PART C**

**Answer all questions. Each question carries seven marks**

**(6 x 7 = 42 Marks)**

		Module outcome	Cognitive level
III	Explain class and object with an example. <b>OR</b>	M1.04	U
IV	Explain visibility modifiers in java.	M1.10	R
V	Write a java program to create a class called <b>BankAccount</b> that has <b>balance</b> and <b>accountNumber</b> as instance variable. Add a <b>constructor</b> that initializes these variables and methods called <b>deposit()</b> and <b>withdraw()</b> that add and subtract from the balance, respectively. <b>OR</b>	M1.06	A
VI	Explain method overloading with example.	M1.08	U
VII	Write a java program to create a class called <b>Person</b> with instance variables <b>name</b> and <b>age</b> . Create a subclass called <b>Student</b> that adds an instance variable <b>Grade</b> . Display the name, age and grade of the student using a method <b>printDetails()</b> . <b>OR</b>	M2.02	A
VIII	Write short note on final variables, final methods and final class.	M2.06	R
IX	Explain single and multilevel inheritance with example. <b>OR</b>	M2.01	U
X	Write a java program to create an interface called <b>Shape</b> with a method called <b>calculateArea()</b> . Create a class called <b>Rectangle</b> that implements the shape interface and overrides the <b>calculateArea()</b> method to calculate and return the area of a rectangle.	M2.07	A
XI	Explain the Common GUI event types. <b>OR</b>	M3.05	U
XII	Describe the following components. (a) JButton (b) JList (c) JTextField	M3.02	U
XIII	Write the steps taken by a java program to access database. <b>OR</b>	M4.03	U
XIV	Describe the following SQL commands: (a) insert (b) select (c) update	M4.04	U

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