Goa Vidyaprasarak Mandal's
GOPAL GOVIND POY RAITURCAR COLLEGE OF COMMERCE AND ECONOMICS
FARMAGUDI, PONDA - GOA
B.C.A. CBCS (SEMESTER - III) EXAMINATION, NOVEMBER 2022
OBJECT ORIENTED CONCEPTS

Duration: 2 hours   **Total Marks:** 60

Instructions:*i)All questions are compulsory.*
ii) Figures to the right indicate full marks.

Q.1. A) Fill in the Blanks: **(5x1=05)**
a)_____ diagrams are good at describing the behaviour of an object across several use cases.
b)When an object completes its life-cycle the _____ deletes that object and releases the memory occupied by it.
c)_____ represents the IS-A relationship.
d)Java uses the _____ model of exception handling.
e)The code within the _____ block is always executed regardless of whether an exception has occurred or not.

B) Define the following terms: **(5x1=05)**
a) Class
b)Object
c) Constructor
d) Run Time Errors
e)Exception Handling

Q.2. Answer the following:
A)How is Aggregation relation different from Composition relation?   **(02)**
B) Write a short note on UML.   **(03)**
C) Define OOP. Explain in brief the paradigms of OOP.   **(05)**

Q.3. Answer the following:
A)What is an Object Diagram? State the elements of Object Diagrams.   **(02)**
B)With the help of an example, explain Activity Diagrams.   **(03)**
C) Draw a class diagram forBanking System. Explain in brief the several
components from the diagram.   **(05)**

P.T.O

Q.4. Answer the following:

A) State the ways to overload the method in java. Can we overload java main() method?

Justify.   **(02)**

B).State the two rules to define Constructor. What are the different types of Constructors in Java?   **(03)**

C)Draw a Use Case diagram for Help Desk System. Explain in detail the several components from the diagram.   **(05)**

Q.5. Answer the following:

A)Differentiate between Method Overloading and Method Overriding.   **(02)**

B)Explain the similarities and differences between an Interface and a class.   **(03)**

C)Draw a Sequence diagram for User Login. Explain in detail the several components from the diagram.   **(05)**

Q.6. Answer the following:

A)Explain in brief the four types of Java access modifiers.   **(02)**

B) Write a Java program to implement Single Try and Multiple Catch.   **(03)**

C)Write a java program to implement Multilevel Inheritance.   **(05)**