P P SAVANI UNIVERSITY

INSTITUTE OF DIPLOMA STUDIES
November 2022

IDIT2010 Object Oriented Concepts & Programming

26.11.2022, Saturday   Time: 10:00 a.m. To 12:30 p.m.   Maximum Marks: 60

Instructions:
1. The question paper comprises of two sections.
2. Section I and II must be attempted in separate answer sheets.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

SECTION – I

			CO	BTL
Q - 1	MCQ/Short Question/Fill in the Blanks (Any Five)	[05]		
(i)	Which package contains the mathematical functions?		C06	1
	a) java.lang.math			
	b) java.math.lang			
	c) java.util.math			
	d) java.math.util			
(ii)	When is the object created with new keyword?		C03	4
	a) At run time			
	b) At compile time			
	c) Depends on the code			
	d) None			
(iii)	Select the valid statement.		C02	2
	a) char[] ch = new char(5)			
	b) char[] ch = new char[5]			
	c) char[] ch = new char()			
	d) char[] ch = new char[]			
(iv)	What is the extension of file having java byte code files?		C01	1
	a) .js			
	b) .txt			
	c) .class			
	d) .java			
(v)	What should be used to add something to the program other than the code?		C02	4
	a) Interface			
	b) Selection Statements			
	c) Comments			
	d) Jump Statement			
(vi)	Define Identifiers		C01	1
(vii)	Find the output of the following code.		C03	5

```
if(1+1+1+1+1 == 5)
   System.out.print("True");
else
   System.out.print("False");
```

    a)   True
    b)   False
    c)   Compile error
    d)   None

Q - 2 (a)	Define the following (Any five)	[05]	
	a) Garbage collection in Java	C03	1
	b) Array	C01	1
	c) Class	C03	1
	d) Encapsulation	C01	1
	e) Constructor	C03	1
	f) Polymorphism	C01	1
	g) Byte Code	C01	1
Q - 2 (b)	Write a program to print first N numbers in descending order, where N is the user input.	[05]	C02 6
	OR		
Q - 2 (a)	Explain switch - case with syntax and example.	[05]	C02 3
Q - 2 (b)	Write a program to find maximum of three numbers entered by user at runtime.	[05]	C02 6
Q - 3 (a)	Explain relational operators with example.	[05]	C02 5
Q - 3 (b)	Write down the difference between C and Java programming.	[05]	C01 2
	OR		
Q - 3 (a)	Explain Logical operator with example.	[05]	C02 5
Q - 3 (b)	Explain Type casting with example.	[05]	C03 5
Q - 4	Attempt any one/two.	[05]	
(i)	Explain method overriding with Example.		C03 3
(ii)	Write a program to reverse the digit that is taken as input from user.		C02 6

<div align="center">SECTION – II</div>

Q - 1	MCQ/Short Question/Fill in the Blanks (Any Five)	[05]	
(i)	Which of the following is a type of polymorphism in Java Programming?		C05 1

a) Multiple polymorphism
b) Compile time polymorphism
c) Multilevel polymorphism
d) Execution time polymorphism

(ii)	What will be the output of the following Java program?		C04 5

```
class Output
  {
    public static void main(String args[])
    {
      int arr[] = {1, 2, 3, 4, 5};
      for ( int i = 0; i < arr.length - 2; ++i)
        System.out.println(arr[i] + " ");
    }
  }
```

a) 1 2 3 4 5
b) 1 2 3 4
c) 1 2
d) 1 2 3

(iii)	Which of the below is not a Java Profiler?		C01 1

a) JProfiler
b) Eclipse Profiler

	c) JVM			
	d) JConsole			
(iv)	Which of the following is a superclass of every class in Java?		C06	1
	a) ArrayList			
	b) Abstract class			
	c) Object class			
	d) String			
(v)	Which of these keywords are used for the block to be examined for exceptions?		C07	2
	a) check			
	b) throw			
	c) catch			
	d) try			
(vi)	Which one of the following is not an access modifier?		C06	4
	a) Protected			
	b) Void			
	c) Public			
	d) Private			
(vii)	What is the numerical range of a char data type in Java?		C02	1
	a) 0 to 256			
	b) -128 to 127			
	c) 0 to 65535			
	d) 0 to 32767			
Q - 2 (a)	Difference between packages and interfaces in Java.	[05]	C06	4
Q - 2 (b)	Explain types of java exception with example?	[05]	C07	1
	OR			
Q - 2 (a)	What is exception and exception handling in java with examples?	[05]	C07	1
Q - 2 (b)	What is final method in java?	[05]	C06	1
Q - 3 (a)	Write a program to String Concatenation.	[05]	C04	6
Q - 3 (b)	Explain scanner class with Example	[05]	C04	2
	OR			
Q - 3 (a)	Explain abstract class with example	[05]	C05	2
Q - 3 (b)	Explain interface with example	[05]	C05	2
Q - 4	Attempt any one/two.	[05]		
(i)	Define package. How to create user defined package? Explain with example.		C06	3
(ii)	Java Program to determine whether a given string is same or not.(Ignore case sensitivity)		C04	6

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CO   : Course Outcome Number   BTL   : Blooms Taxonomy Level

Level of Bloom's Revised Taxonomy in Assessment

1: Remember	2: Understand	3: Apply
4: Analyze	5: Evaluate	6: Create