

Registration No. _____									
	INDIRA GANDHI INSTITUTE OF TECHNOLOGY, SARANG 4 <sup>th</sup> Semester Regular/ Back Paper Examination AY 2024-25							Total no. of Pages: 02	
Branch				Programme	B. Tech				
Subject Name	<b>OOP using C++ (Minor)</b>			Semester	3 <sup>rd</sup>				
Subject Code	<b>MNCS0201</b>			Year	2024-25				
Time: 03 Hrs	<b>Answer Question number 1 which is compulsory and any five from the rest.</b>			Maximum Marks	60				
<b>Each Question Carry Marks(M) as Indicated in the right-hand Margin</b>									
<b>Q's</b>	<b>Questions</b>					<b>M</b>	<b>BL</b>	<b>CO</b>	<b>PO</b>
1. a	Write main object oriented principles					<b>01</b>	L2	CO 1	PO 2
b	What do you mean dynamic allocation of memory?					<b>01</b>	L4	CO 2	PO3
c	Which operator can not be overloaded					<b>01</b>	L5	CO4	PO1
d	Constructor must have the return type. (true/false)					<b>01</b>	L4	CO3	PO4
e	What is default constructor?					<b>01</b>	L4	CO 2	PO3
f	How do you declare a constant in C++					<b>01</b>	L5	CO4	PO1
g	Define derive class properties					<b>01</b>	L4	CO3	PO4
h	Is it possible to destroy an object?(true/false)					<b>01</b>	L5	CO4	PO1
i	What is the use of new operator?					<b>01</b>	L4	CO3	PO4
j	Overloading is a type of dynamic polymorphism (true/false)					<b>01</b>	L1	CO4	PO1
2. a	Write a C++ program to print all possible values of amount (v) for different values of p, r and n in proper format. Here p is the principal amount, r is the rate of interest, n is the number of years and v is the value including simple interest.					<b>05</b>	L4	CO3	PO4
b	Create a C++ program to find area of circle and rectangle using function overloading.					<b>05</b>	L5	CO4	PO1
3.a	Create a class called bank ac with data members as acno and balance. Use proper member functions to deposit and withdraw for an amount.					<b>05</b>	L4	CO 2	PO3
b	What is the difference between constructor and member function.					<b>05</b>	L5	CO4	PO1
4.	What is meant by inheritance? Describe different types of inheritance.					<b>10</b>	L4	CO3	PO4
5.a	Create a class called first having protected members as i and j. Derive another class called second having member as k. Use inheritance to add i with j and store in k. Use proper member functions.					<b>05</b>	L4	CO 2	PO3
b	Discuss different access specifiers in C++					<b>05</b>	L5	CO4	PO1
6.a	Create a class called BClass having member as x. Derive another class					<b>05</b>	L1	CO 1	PO 2

	called Dclass having data member as y. Use proper inheritance to access both x and y by using DClass object.				
<b>b</b>	What do you mean by derivation. Discuss different types of derivations and restrictions.	<b>05</b>	L1	CO 1	PO 2
<b>7.a</b>	Write a program to add two complex numbers. Use constructors	<b>05</b>	L4	CO 2	PO3
<b>b</b>	Describe different rules and restrictions of constructors.	<b>05</b>	L5	CO4	PO1
	<b>Short notes type Questions Only (Answer any Two)</b>				
<b>8.a</b>	Overloading	<b>05</b>	L1	CO 1	PO 2
<b>b</b>	Dynamic binding	<b>05</b>	L4	CO 2	PO3
<b>c</b>	Friend functions	<b>05</b>	L2	CO 1	PO 3
<b>d</b>	Advantages of OOP	<b>05</b>	L1	CO 1	PO 2

#### Attendance

Sunday 26 October 2025 11:42:49 AM IST

Subhashree Sahu

11:06

Yes sir

Megha

11:20

Megha Satapathy, ETC, 438040.

Latika Nayak

11:20

Latika priyadarshini nayak, mechanical 433063

Satyabrata Sahoo

11:20

Satyabrata Sahoo, Mechanical 433118

Umakanta Mohapatra

11:21

Umakanta Mohapatra, Electrical ,432154

Subhashree Sahu

11:21

Subhashree sahu Mechanical 433135

Subhajeet Behera

11:21

Subhajeet behera, electrical,432142

Surat Ranjan Sahoo

11:21

Surat Ranjan Sahoo, Mechanical,433144

Sarita Panda

11:21

Sarita Panda ETC 438059

Shrikumar Kishanlal M sahoo

11:22

Shrikumar kishanlal sahoo mechanical 433121

Pratyasa Punyatoya Samal

11:22

Pratyasa Punyatoya Samal Civil 431093

Abatar Kundu

11:22

Abatar Kundu 432002

Tapodhan Dass

11:22

Tapodhan Dass ETCLE

PRATIKSHA

11:22

Pratiksha Swain Electrical 432086

62 - Kalpataru Das

11:23

Kalpataru Das Civil 431062

Tapodhan Dass

11:23

Tapodhan Dass ETC LE05

Kamalakanta Kabi

11:30

Kamalakanta Kabi Mechanical 433061

Aurosish Das

11:38

Aurosish Das ETC LE 01

Abatar Kundu

11:39

Abatar kundu Electrical 432002

Udayananda Sahu

11:39

Udayananda Sahu ETC LE06

Jyotijeeban Maharana

11:39

Jyoti jiban maharana

EE:-432066

Biswapati Moharana

11:40

Biswapati Moharana EE:- 432043

**Tuesday 28 October 2025 07:40:19 PM IST**

**Udayananda Sahu**

19:35

Udayananda sahu E&TC:-LE/06

Dikshit Mukkala

19:35

Mukkala Dikshit

ETC:-LE/03

Subhashree Sahu

19:35

Subhashree sahu Mechanical - 433135

Subhajeet Behera

19:36

Subhajeet behera electrical 432142

PRATIKSHA

19:36

Pratiksha swain Electrical 86

Pratyasa Punyatoya Samal

19:36

Pratyasa Punyatoya Samal Civil- 431093

Rishiraj Khatua

19:36

Rishiraj Khatua EE/99

Shrikumar Kishanlal M sahoo

19:36

Shrikumar kishanlal sahoo Mechanical 433121

Tapodhan Dass

19:36

Tapodhan Dass ETC-LE/05

Aurosish Das

19:36

