Registration No.										

INDIRA GANDHI INSTITUTE OF TECHNOLOGY, SARANG
4th Semester Regular/ Back Paper Examination AY 2024-25

Total no. of Pages: 02

Branch		**Programme**	**B. Tech**
Subject Name	**OOP using C++ (Minor)**	**Semester**	3rd
Subject Code	**MNCS0201**	**Year**	**2024-25**
Time: 03 Hrs	**Answer Question number 1 which is compulsory and any five from the rest.**	**Maximum Marks**	**60**

Each Question Carry Marks(M) as Indicated in the right-hand Margin

Q's	Questions	M	BL	CO	PO
1. a	Write main object oriented principles	**01**	L2	CO 1	PO 2
b	What do you mean dynamic allocation of memory?	**01**	L4	CO 2	PO3
c	Which operator can not be overloaded	**01**	L5	CO4	PO1
d	Constructor must have the return type. (true/false)	**01**	L4	CO3	PO4
e	What is default constructor?	**01**	L4	CO 2	PO3
f	How do you declare a constant in C++	**01**	L5	CO4	PO1
g	Define derive class properties	**01**	L4	CO3	PO4
h	Is it possible to destroy an object?(true/false)	**01**	L5	CO4	PO1
i	What is the use of new operator?	**01**	L4	CO3	PO4
j	Overloading is a type of dynamic polymorphism (true/false)	**01**	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.	**05**	L4	CO3	PO4
b	Create a C++ program to find area of circle and rectangle using function overloading.	**05**	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.	**05**	L4	CO 2	PO3
b	What is the difference between constructor and member function.	**05**	L5	CO4	PO1
4.	What is meant by inheritance? Describe different types of inheritance.	**10**	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.	**05**	L4	CO 2	PO3
b	Discuss different access specifiers in C++	**05**	L5	CO4	PO1
6.a	Create a class called BClass having member as x. Derive another class	**05**	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	What do you mean by derivation. Discuss different types of derivations and restrictions.	**05**	L1	CO 1	PO 2
7.a	Write a program to add two complex numbers. Use constructors	**05**	L4	CO 2	PO3
b	Describe different rules and restrictions of constructors.	**05**	L5	CO4	PO1
	Short notes type Questions Only (Answer any Two)				
8.a	Overloading	**05**	L1	CO 1	PO 2
b	Dynamic binding	**05**	L4	CO 2	PO3
c	Friend functions	**05**	L2	CO 1	PO 3
d	Advantages of OOP	**05**	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
Subhrajeet Behera
11:21
Subhrajeet 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
Subhrajeet Behera
19:36
Subhrajeet 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