### KADI SARVA VISHWAVIDYALAYA RESEMESTER-II (New Course) Examination June 2023

Subject Code: CC111

Nuligiest Numer OBJECT ORIENTED PROGRAMMING USING 'C++'

Total Marks: 70

Dute:20/06/2023

1. Answer each section in separate answer sheet. Instructions:

3. All questions are Compulsory.

4. Indicate clearly, the option you attempt along with its respective question number.

5. The desired property of the option you attempt along with its respective question number. 5. Use the last page of main supplementary of rough work.

<u>Section-I</u>

Q-1 (A) i) How does main() function in C differ from C++? Give General format of

(B) Define pointer? Explain pointer and array with example.

(C) Enlist and explain the basic characteristics of OOP in detail.

(C) Define a structure called "Student" that represents a student's information, including their name, ID, and marks for three subjects: Math, English, and Science.

Q-2 (A) Explain type conversion from class type to basic type and one class type to another class type with suitable example

(B) What is function overloading? Illustrate with suitable example.

Q-2 (A) Define Terms: i) Object ii) Class iii) Destructor iv) Token v) Identifiers.

(B) Explain Access specifiers: public and private with example.

Q-3 (A) Explain inline function with suitable example

(B) What is a constructor? Explain different types of constructors with an appropriate example.

OR

Q-3 (A) What is friend Function? Explain the characteristics of friend function

(B) Explain 'this' pointer' with example.

#### Section-II

Q.4	(A)	to the sections of innertance with diagrammatic mustations.	[5]
Q.	570 10	Explain call by value and call by reference with example.	[5]
	<b>(B)</b>	Explain can by the stand Weight and the stand bines: 't'	[5]
	(C)	What is an operator Overloading? Write a program to overload binary '+' operator as a member function.  OR	
		operator as a month of	[5]
		Explain overriding member function with example.	[2]
	(C)	Explain overriend	[5]
		Describe abstract class with example	[5]
Q-5	(A)	Define virtual and pure virtual function with example.  OR	[2]
	<b>(B)</b>	Define virtual and P	161
- 12	10717 55	OR  Explain Runtime polymorphism. Explain and demonstrate, how virtual function to	[5]
Q-5	(A)	Explain Runtime polymorphism? achieve runtime polymorphism? Explain scope resolution operator (::) with an example.	[5]
	<b>(B)</b>	Explain scope reserved.  Explain Function and Class Templates with appropriate example.  Explain Function and Class Templates with appropriate example.	[5]
		Explain Function and Class Templates with appropriate charge	[5]
Q-6	(A)	Explain 2 Demonstrate trycatch block With example.	-
	<b>(B)</b>	Explain Function and Class Tompton Transport of the Explain Function Transport of the Explain Func	[5]
		Comments I/O operations	[5]
Q-6	(A)	Describe various stream classes for console I/O operations.  Write a C++ program to handle Exception "division by zero" situation	[2]
	<b>(B)</b>	Write a Con Pro-	

#### KADI SARVA VISHWAVIDYALAYA LDRP INSTITUTE OF TECHNOLOGY & RESEARCH, GANDHINAGAR

#### B.E. MID-SEMESTER EXAMINATION MAY- JUNE 2022

	Date : 0	1/06/2022	Branch : CE/IT/EC	
S	Subject	Name & Code: Object Oriented Programming using C++(CC111-N)	Semester : 2nd	
T	Time :	9:30 am to 11:00 am	Max. Marks : 30	
	Instruc	1) All questions are compulsory. 2) Figures to the right indicate full marks. 3) Indicate clearly, the options you attempt along with its respect to the last page of main supplementary for rough work.	ctive question number.	
				Mar
Q.1	(A)	Differentiate procedure oriented programming and object oriented progra	ımming.	15
	(B)	Explain the basic concepts of OOPC and its advantages.		[5
Q.2	(A)	Illustrate with example, working of end, setw manipulator.		15
	(B)	Explain the usage of inline function. Write a program to demonstrate the creating 1 inline functions for multiplication operation.	use of inline functions by	15
Q.2	(A)	Which concept of OOP demonstrate the function overloading. Explain texample.	function overloading with	15
	( <b>B</b> )	Explain Access specifier: Public and Private in Detail.		[5]
Q.3	(A) (B)	Demonstrate + operator (Binary operator) overloading using an example. State the output or errors (if any).		[5] [5]
		# include <stdio.h> void fun(int *ptr)  *ptr = 30;  int main()  Int main()    # include <stdio.h> int x; car() { cout &lt;&lt; "constructe" } Int main() {</stdio.h></stdio.h>	or called";	
		int y = 20; fun(&y); printf("%d", y); return 0;		
0.3	245	int y = 20; fun(&y); printf("%d", y); return 0;		
Q.3	(A)	int y = 20; fun(&y); printf("%d", y); return 0; OR	ction.	[5]

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# KADI SARVA VISHWAVIDYALAYA LDRP INSTITUTE OF TECHNOLOGY & RESEARCH, GANDHINAGAR

5	Subject	Name & Code: Object Oriented Programming using C+ 9:30 am to 11:00 am	Branch : CE/IT/E	C
1	lime :	9:30 am to 11:00 am	+(CC111-N) Semester: 2nd	$\neg$
		ctions: 1) All questions are compulsory.	Max. Marks : 30	
-		2) Figures to the right indicate full marks. 3) Indicate clearly, the options you attempt along 4) Use the last page of main supplementary for re-	with its respective question number.	_
1	(A) (B)	Differentiate procedure oriented programming and object of Explain the basic concepts of OOPC and its advantages.	priented programming.	Marks [5] [5]
2	(A)	Illustrate with example, working of endi, setw manipulator		101
	(B)	Explain the usage of inline function. Write a program to de creating 1 inline functions for multiplication operation.  OR	emonstrate the use of inline functions by	[5] [5]
2	(A)	Which concept of OOP demonstrate the function overload example.	ding. Explain function overloading with	[5]
	<b>(B)</b>	Explain Access specifier: Public and Private in Detail.		[5]
3	(A) (B)	Demonstrate + operator (Binary operator) overloading usin State the output or errors (if any).	g an example.	[5] [5]
		void fun(int *ptr) int : car(     *ptr = 30;	1000	
		OR		225
3	(A)	Write a Program to find Maximum out of Two Numbers us Note: Here one number is a member of one class and the	ing friend function. other number is member of some other	[5]

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		KADI SARVA VISHWAVIDYALA B.E. Semester-II Examination (July -20	AYA	
SUB	JEC	T CODE: CC111-N SUBJECT NAME: Object Oriented		
DAT	E: (	09/07/2022 TIME: 10:30 am to 1:30 pm	TOTAL MARK	S: 70
Instr	uctio	ons:	, i	_
1. An	swe	r each section in separate Answer Sheet.		
2. US 3. All	c or l auc	scientific Calculator is permitted. estions are compulsory.		*
		e clearly, the options you attempted along with its respective ques	ition number.	
		last page of main supplementary for rough work.		
*		SECTION - 1		
Q-1.	2)	Explain the difference between OOP and POP.		5
	b)	m 's Ot ! !!! Close !!! Constant Variable IV	) Token	,
	7.	N CONTRACT THE PROPERTY OF THE		5
	c)	the second function in C differ from CTT; Give	General torms	
		Class		
		ii) what is reference variable in c++.		
				5
	c)	Explain the basic concept of OOPC and its advantages.	des of	5
	-,	100	enter rollno, marks of	8
0.1	a)	What is structure? Write a program in c using structure to	ich student .	5
Q-2.	-,	What is structure? Write a program in c using structure to the three subject for 3 student and find total obtained by each three subjects for 3 student and find total obtained by each three subjects for 3 student and find total obtained by each three subjects for 3 student and find total obtained by each three subjects for 3 student and find total obtained by each three subjects for 3 student and find total obtained by each three subjects for 3 student and find total obtained by each three subjects for 3 student and find total obtained by each three subjects for 3 student and find total obtained by each three subjects for 3 student and find total obtained by each three subjects for 3 student and find total obtained by each three subjects for 3 student and find total obtained by each three subjects for 3 student and find total obtained by each three subjects for 3 student and find total obtained by each three subjects for 3 student and find total obtained by each three subjects for 3 student and find total obtained by each three subjects for 3 student and find total obtained by each three subjects for 3 student and find total obtained by each three subjects for 3 student and find total obtained by each three subjects for 3 student and 5 studen		
	μ١	Carolain USC OI SCIW MILE		17,000
	b)	i) Explain use of services and services of the	ate area of rectangle	5
		write a program	graf	5
	2)	Explain function overloading.		J
<b>)-2</b> .	4)	Explain function overloading.  and triangle using function overloading.  Explain scope resolution operator (::) with an example.  Explain scope resolution operator (::) with an Example.		5
	44	Carolain Scope 1		5
	b)	Explain with example	<b>.</b>	
5 <b>4</b> 6	۵۱	What is Inline Punctifiers: public and private war	minate data	5
<b>)-3</b> .	a) h)	Explain Access specific	of two private	
	b)	wing? Write a production a common	40	.2
	<b>a</b> )	What is Inline Function? DR  Explain Access specifiers: public and private when OR  What is friend function? Write a program to find out sum of two classes X and Y using a common members a and b of two classes X and Y using a common homeometry and be the prototype for both the classes will be void Assume that the prototype for both the classes will be what is the use of constructor and destructor. Explain def	sum (A, 1)	5
<b>)-3.</b>	2)	members a and be prototype for both the classes. Explain def	ault const	
		Assume that the inconstructor and desired		
	61	What is the		
	b)	example.		

example.

#### SECTION - 2

	ooan e	a) What is an operator Overloading? Write a program to overload binary +	0
Q-	4.	operator as a member function.	
	1	Explain overriding member function with example.	
	c	What is a constructor? Explain copy constructor and parameterized constructor with examples.	5
		OR	5
	c)	Explain Late binding and abstract class with example.	3
Q-5.	. a)	Define Inheritance. Write the types of Inheritance. Explain Inheritance with example. Consider Example with respect to print result of Student and Student	5
		Details	5
	b)		
		OR	5
0-5.	a)	Define multi-path inheritance with example.	5
·	b)	What is polymorphism? Explain compile time and run time polymorphism.	and run time polymorphism.
			5
<b>)-6.</b>	a)	Explain Exception handling with example.	5
	b)	What is stream class? Explain ifstream, ofstream and fstream class.	
		OR	_
-6.		The ide with stream with one example.	5
	a)	What is the purpose of using template in C++? Explain template function and	5
	b)	What is the purpose of using template class with example.	

\*\*\*\*\*\*BEST OF LUCK\*\*\*\*\*