**四川大学期末考试试题（闭卷）**

**（2022——2023学年第 2 学期） A卷**

课程号：304024030 课序号：08 课程名称：高级语言程序设计-Ⅱ 任课教师：赵启军 成绩：

适用专业年级：计算机学院2022级 学生人数：12 印题份数： 学号： 姓名：

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| **考 生 承 诺**  我已认真阅读并知晓《四川大学考场规则》和《四川大学本科学生考试违纪作弊处分规定（修订）》，郑重承诺：  1、已按要求将考试禁止携带的文具用品或与考试有关的物品放置在指定地点；  2、不带手机进入考场；  3、考试期间遵守以上两项规定，若有违规行为，同意按照有关条款接受处理。  **考生签名：** |
| **一、选择题（本大题共10小题，每题2分，共20分）**  1. Which of the following is not a features of Object-Oriented programming? **（ D ）**  A. Inheritance  B. Encapsulation  C. Polymorphism  D. Abstraction  Overview oop  2. Which of the following C++STL containers does not have the subscript operator []?**（ D ）**  A. vector  B. map  C. unordered\_map  D. set  3. The keyword for declaring a virtual base class is?**（ B ）**  A.inline  B.virtual  C.public  D.static  4.Which of the following is not a type of visibility mode for members in a class? **（ D ）**  A. Public |

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| B. Protected  C. Private  D. Static  5.What is the difference between "new" and "malloc" in C++? **（ B ）**  A. "new" is used to allocate memory for objects, while "malloc" is used to allocate memory for variables.  B. "new" is used to initialize an object, while "malloc" is used to allocate memory without initialization.  C. "new" and "malloc" are interchangeable and can be used interchangeably.  D. "new" is a keyword in C++, while "malloc" is a function from the standard library.  6.Which is the correct way to define a pure virtual function? **（ C ）**  A. virtual void foo(); B. virtual void foo() {}  C. virtual void foo() = 0; D. void foo(){}  7.Which function will not be created by compiler if not defined explicitly? **（ D ）**  A. constructor function B. destructor function  C. copy constructor function D. inline function  8.The key word that declares operator overloading is? **（ C ）**  A. void  B.int  C.operator  D.double  9.What is the purpose of the virtual keyword in C++?**（ B ）**  A. It specifies that a function is pure virtual  B. It specifies that a function can be overridden by a subclass  C. It specifies that a function cannot be overridden by a subclass  D. It specifies that a function is static  10.What is the purpose of the keyword const in C++? **（ D ）**  A. It specifies that a variable cannot be modified once it has been initialized  B. It specifies that a function cannot modify any member variables of the class  C. It specifies that a function cannot modify any argument passed to it |

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| D. All of the above  **二、填空题（本大题共5小题，每题2分，共10分）**  1. In modern C++, the nullptr keyword is used to represent a null pointer.  2. The new keyword in C++ is used to create an instance of a class.  3. A const function is a member function that does not modify the state of the object it belongs to.  4. In C++, a constructor is a function that has the same name as the class it belongs to, and is called automatically when an object is created.、  5. The auto keyword in C++ is used to define a variable whose type is automatically deduced by the compiler based on its initialization expression.  **三、程序阅读题（本大题共8小题，每题5分，共40分）**  编写以下代码的输出（假设所有头文件都得到了处理）  1.输出为：00    2.输出为：0 |

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| 3.输出为：40    4.输出为：100  50 |

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| 5.输出为：B0::display0  B0::display0  B0::display0    6.输出为：8,4,64 |

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| 7.输出为：9 -9    请更正以下程序（指出错误并更正。如有必要，请说明原因）   1. f() in class A should not be private     **四、程序填空题（本大题共10小题，每空2分，共20分）** |

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| 【1】 \\* getFirstName()  【2】 \\* getLastName()  【3】 static int  【4】 new char[ strlen( first ) + 1 ]  【5】 new char[ strlen( last ) + 1 ]  【6】 Employee::getCount()  【7】 new Employee( "Susan", "Baker" )  【8】 new Employee( "Robert", "Jones" )  【9】 delete e1Ptr  【10】 delete e2Ptr |

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| **五、程序设计题（本大题共2小题，每题5分，共10分）**  1.Write a lambda expression to count how many numbersare greater than the LIMIT constant in the following vector.Everything with the STL has been done for you, you just have to write the lambda.    Answer：  int countIf() {  int LIMIT = 5;  // START OF STUDENT CODE  auto lambda = [LIMIT] (int n) { return n > LIMIT; };  // END OF STUDENT CODE  std::vector<int> nums = {3, 5, 10, 6, 8, 9};  return std::count\_if(nums.begin(), nums.end(), lambda);  }  2.Write a lambda to find the first number that is odd and not divisible by 3.    Answer：  int find() {  // START OF STUDENT CODE  auto lambda = [] (int n) { return n % 2 == 1 && n % 3 != 0; };  // END OF STUDENT CODE  std::vector<int> nums = {3, 9, 18, 12, 5, 7};  std::vector<int>::iterator it = std::find\_if(nums.begin(), nums.end(), lambda);  return \*it;  } |

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