CS124 Unit 1 Practice Test   Name _____

Instructions: This is a closed book and closed note test. Please write your answer (A, B, C, D, or E) clearly in the Answer column. When you are done, complete the quiz in I-Learn. After you submit your test, you can retake the quiz a second time to correct errors made. Your highest grade between the two attempts will be recorded. You must turn in the paper exam afterwards. Please ensure your name is written on the top.

Problem	Question	Choices	Answer
1	What does CPU stand for?	a) Central Processing University b) Center Processing Unit c) Central Processing Unit d) Central Progressing Unit e) Core Processing Unit	C
2	Who invented the Automatic Computing System?	a) John von Neumann b) Bjarne Stroustrup c) Edith Clarke d) Chester Carlson e) Bill Gates	A
3	Which of the following set of linux commands can be used to copy a file, remove a file, and display a list of files?	a) ls, cp, mv b) cp, rm, cd c) mkdir, cp, mv d) cd, rm, ls e) cp, rm, ls	E
4	Which of the following will display Hello to the screen?	a) cout << "Hello"; b) cout >> "Hello"; c) cin << "Hello"; d) cin >> "Hello"; e) cout "Hello"	A
5	Which of the following will read input from the keyboard into a variable called age?	a) cout << age; b) cout >> age; c) cin << age; d) cin >> age; e) cin >> "age";	D
6	Which of the following is not True about displaying special characters?	a) \" will print one quote b) \n will print a newline c) \\\\ will print two backslashes d) \\\ will print two backslashes e) \\ will print one backslash	D
7	Left alignment can be attained using which of the following:	a) setw b) cout.precision c) \t d) endl e) setLeftAlign	C

Problem	Question	Choices	Answer
8	If you want to right align a number in a field 10 characters long, what would you use?	a) cout.precision(10) b) setw(10) c) \t\t\t\t\t\t\t\t\t\t d) Use 10 spaces e) cout.setf(ios::rightalign)	B
9	Which variable would be best for storing a first name?	a) char name; b) int name; c) float name; d) bool name; e) char name[50];	E
10	Which variable would be best for storing a temperature to the nearest hundredth of a degree?	a) int temp; b) float temp; c) char temp; d) bool temp; e) real temp;	B

11	What is wrong with the following code:
	
	#include <iostream>
	using namespace std;
	int main()
	{
	  cout << "What is your age? ";
	  cin >> age;
	  cout << "You are " << age << "years old" << endl;
	  return 0;
	}
		a) "<<" should be ">>"
		b) Main should not return anything
		c) Variable age is not declared
		d) Forgot to #include <iomanip>
		e) The keyword endl cannot be used
			C

12	Which of the following is not True about order of operations?	a) ()'s are done first b) =, +=, -=, *=, /=. %= are done last c) + and – are done before ++ , -- d) *, /, % are done before + , - e) When + and – are done they are performed from left to right.	C
13	What is the output of this code: int x = 0; int y = (x++) + 3 int z = (++x) + 3 cout << x << "," << y << "," << z;	a) 2 3 5 b) 2 4 5 c) 2 5 5 d) 3 5 5 e) 3 4 5	A
14	What does the % operator do?	a) Apply a percentage b) Get the address in memory c) Provide the remainder after dividing d) Perform integer division e) Calculate an exponent	C

Problem	Question	Choices	Answer
15	Which of the following is <u>not True</u> about pass by value parameters?	a) Provides an input to a function b) The parameter is put inside the ()'s of the function declaration c) A copy of the value is passed to the function. d) A function can have 0, 1, or more parameters passed by value e) If the function updates the parameter, then the calling function will see the update.	E

16	What is the output of the following code?
	
	void doWork(int x, int &y)
	{
	  x = x + 2;
	  y = y + 3;
	}
	
	int main()
	{
	  int x = 5;
	  int y = 6;
	  doWork(x, y);
	  cout << x << "," << y;
	  return 0;
	}
		a) 5,6
		b) 5,9
		c) 7,6
		d) 7,9
		e) 8,7
			B

17	Which of the following techniques can be used to provide an output from a function?	a) Pass by Value b) Pass by Reference or Return c) If statement d) cout e) Return but not Pass by Reference	B
18	Which of the following functions has 4 outputs?	a) void foo(int x, int y, int z) b) int foo(int x, int y, int z) c) int foo(int &x, int &y, int z) d) void foo(int &x, int &y, int &z) e) int foo(int &x, int &y, int &z)	E
19	When should the return type of a function be "float"?	a) If the function will display a float using cout b) If the function has no output parameters c) If the function returns an output of data type float d) If the function has an input of data type float e) The function performs calculations using float	C

Problem	Question	Choices	Answer

20	What is wrong with the following code?
	
	`#include <iostream>`
	`using namespace std;`
	
	`int getAnswerToEverything()`
	`{`
	`   return 42;`
	`}`
	
	`int main()`
	`{`
	`   int answer = getAnswerToEverything;`
	`   cout << "Answer = " << answer;`
	`   return 0;`
	`}`
		a) The function should have "void" instead of "int".
		b) The assignment operator (the equals sign) should not be used when a function returns a value.
		c) The function call should show ()'s even though there are no parameters
		d) The datatypes of answer should be "char" instead of "int"
		e) The function should have used passed by reference instead of a return.
			C

21	Which of the following boolean operators is performed first (i.e. highest in the order of operations table)?	a) ! b) && c) || d) == e) >=	A
22	Which of the following correctly show the boolean expression for "x is equal to 30 or y is less than 70"?	a) (x = 30) || (y <= 70) b) (y < 70) || (x == 30) c) (x == 30) && (y < 70) d) (x != 30) && (y == 70) e) (x < 70) && (x = 30)	B

23	What is wrong with the following code:
	
	`if (a == 2);`
	`{`
	`   cout << "Two";`
	`}`
	`else if (a == 3);`
	`{`
	`   cout << "Three";`
	`}`
	`else (a == 4);`
	`{`
	`   cout << "Four";`
	`}`
		a) Semicolons should not be put after the ()'s
		b) Boolean expression should not be added to the else case
		c) == is not a boolean operator
		d) Options (a) and b) are wrong
		e) Options (a), (b), and (c) are wrong
			D

Problem	Question	Choices	Answer

24	What is the output of the following code:
	
	``cpp
	#include <iostream>
	using namespace std;
	
	bool passClass(int fullGrade, int finalExamGrade)
	{
	  if (fullGrade >= 70)
	  {
	    return true;
	  }
	  else if (finalExamGrade >= 90)
	  {
	    return true;
	  }
	  else
	  {
	    return false;
	  }
	}
	
	int main()
	{
	  cout << passClass(72, 82) << ","
	       << passClass(64, 91);
	  return 0;
	}
	``
		a) 0,0
		b) 0,1
		c) 1,0
		d) 1,1
		e) Unknown
		
		NOTE: Remember that false = 0 and true = 1
			D

25	Which of the following boolean expressions will result in true if the variable x is in the range [10,20]? NOTE: Square brackets means that the range includes the numbers 10 and 20.	a) 10 <= x <= 20 b) 10 < x < 20 c) (x >= 10) && (x <= 20) d) (x >= 10) || (x <= 20) e) (x > 10) || (x < 20)	C