

M. Sc. DEGREE EXAMINATION, NOVEMBER 2018
BIOINFORMATICS
FIRST SEMESTER

COURSE : CORE
PAPER : PROGRAMMING IN C++
TIME : 90 MINUTES

MAX. MARKS: 50

SECTION A

ANSWER ALL QUESTIONS

(30 X 1 = 30)

1. The programming language C++ was invented by
a) Dennis M. Ritchie b) Bjarne Stroustrup c) Linus Torvalds d) Grady Booch
2. The software that converts a C++ program into machine understandable instructions is called
a) Compiler b) Interpreter c) Installer d) Browser
3. The wrapping up of data and functions into a single unit is called _____.
4. Every C++ program begins execution from the _____ function.
5. An abstract data type is created in C++ using the keyword _____.
6. A C++ program can be broken down to smallest individual units known as
a) Expressions b) Blocks c) Strings d) Tokens
7. The value of x, after the execution of the statement “int x = 4 + 3 * 2;” is
a) 14 b) 11 c) 10 d) 9
8. Which one of the following is not a valid identifier in C++?
a) temp b) string2int c) 7days d) MAX_LENGTH
9. The lowest value that can be assigned to a variable of type unsigned char is
a) 127 b) 0 c) -128 d) -32768
10. A class is a
a) User-defined data type b) Derived data type c) Integral data type d) Basic data type
11. When _____ is used, the statements in the loop are executed at least once.
a) for b) while c) do-while d) switch
12. _____ describes the function interface to the compiler by giving details such as the number and type of arguments and the type of return values.
a) Function Prototype b) Function definition c) Function pointer d) None of the above
13. The _____ keyword restricts the visibility of a data member to the member functions of the class.
14. Creating an _____ from a class is known as instantiation.
15. A _____ is a special member function whose task is to initialize the objects of its class.
16. Class Apple is derived from class Fruit. When an object of Apple is destroyed, the destructor of class _____ is called first.
17. If we want member functions of class Rectangle to access the private data members of class Point, then class Rectangle needs to be declared as a _____ in class Point.
18. Data members of the base class are declared under public or _____ region, If they are to be accessed from the member functions of the derived class.
19. What is the use of the manipulator “endl”?
20. To perform unformatted output, one should open the file in _____ mode.
a) ios::in b) ios::in | ios::binary c) ios::out d) ios::out | ios::binary

21. The _____ block flows the try block and contains code to handle an exception.
22. The class _____ is the base class for all exception classes in the C++ standard library.
23. When a binary operator is overloaded using a member function, the number of arguments in the operator function is
 - a) 1
 - b) 2
 - c) 3
 - d) 0
24. Write statements to create an empty string object and then insert the character 'c'.
25. The class _____ is used to read the contents of a file.
 - a) ostream
 - b) ofstream
 - c) ifstream
 - d) basic_ostream
26. The _____ operator is used to invoke a member function of an object, when a pointer to the object is available.
27. If ptr is pointer to an int array, then ptr++ increments the address pointed by
 - a) 0 bytes
 - b) 1 byte
 - c) sizeof(int)
 - d) sizeofptr
28. A program accepts two arguments, "smc" and "bi" through command line. How will you obtain the first command line argument?
29. C++ supports a mechanism known as _____ functions to achieve run time polymorphism.
30. The _____ function returns true, if end-of-file is encountered while reading from file.
 - a) put()
 - b) get()
 - c) good()
 - d) eof()

SECTION B

ANSWER ANY 2 QUESTIONS

(2 x 10 = 20)

31. Compare for, while and do..while in C++.
32. Explain how the keywords private, public and protected are used in a class to control visibility of members.
33. Explain exception handling in C++.
34. Describe the steps that are needed to
 - a) open a file
 - b) read all characters and print
