

Answer the following questions.

1. Which of the following stream classes is used for only writing to a file?
- ofstream
 - ifstream
 - fstream
 - iostream

[ofstream]

2. State True or False. The function `ios::good()` returns true, if the most recent I/O operation on the stream was unsuccessful.

[False]

3. What do the following statements do?

```
ofstream stream;  
stream.open("data.txt");
```

- Opens the file `data.txt` for input.
- Opens the file `data.txt` for output, the statement fails if the file already exists.
- Opens the file `data.txt` for output, the contents of the file are destroyed if the file already exists.
- Opens the file `data.txt` for input, the statement fails if the file does not exist.

[c]

4. Write a C++ statement that will declare and open a binary file `picture.gif` for input.

```
ifstream ifs ("picture.gif", ios::binary);
```

5. In C++, what is the command to clear an output stream buffer?

```
ostream::flush
```

6. State True or False. An `emplace` operation avoids unnecessary copy of object and does the insertion more efficiently than `insert` operation.

[True]

7. What does the capacity of a vector refer to in C++?

- The number of elements currently stored in the vector
- The maximum number of elements that can be stored in the vector without the need for reallocation
- The maximum size to which the vector can grow due to implementation limitations
- The unused memory space of the vector

[b]

8. Which of the following statements declares a `vector` of integer values.

- a) `std::vector<integer> vecOfInts;`
- b) `std::vector<int> vecOfInts;`
- c) `std::vector<int> vecOfInts;`
- d) `std::vector<int> vecOfInts;`

[d]

9. What is true about this statement in C++: `std::vector<int> vecInts(5);`

- a) Initialize a Vector with 5 integer values, each set to default value of 0.
- b) Initialize a Vector with 5 integer values.
- c) Initialize a Vector with 5 integer values, each set to garbage.
- d) Initialize a Vector with 5 integer values, each set to default value of 1.

[a]

10. State True or False. Given an object `ObjA` of the class `A`, the static member `count` of the class can be accessed using the following statement.

```
ObjA.count;
```

[False]