

AMCAT Data Types Questions

1. Which of the following does not store a sign?

- A. Short
- B. Integer
- C. Long
- D. Byte
- E. Single

Answer-D

```
2. short s1 = 20;
   short s2 = 400;
   int a;
   a = s1 * s2;
```

- A. A value 8000 will be assigned to a.
- B. A negative value will be assigned to a.
- C. During arithmetic if the result exceeds the high or low value of the range the value wraps around till the other side of the range.
- D. An error is reported as widening conversion cannot take place.
- E. An overflow error will be reported since the result of the multiplication exceeds the range of a Short Integer.

Answer-A

```
3. int x = 1;
   float y = 1.1f;
   short z = 1;
   Console.WriteLine((float) x + y * z - (x += (short) y));
```

- A. 0.1
- B. 1.0
- C. 1.1
- D. 11

Answer-A

4. Which of the following does not store a sign?

- A. Short
- B. Integer
- C. Long
- D. Byte

E. Single

Answer: Option D

5. Which of the following is the correct default value of a Boolean type?

- A. 0
- B. 1
- C. True
- D. False
- E. -1

Answer: Option D

6. Which of the following is the correct ways to set a value 3.14 in a variable pi such that it cannot be modified?

- A. float pi = 3.14F;
- B. #define pi 3.14F;
- C. const float pi = 3.14F;
- D. const float pi; pi = 3.14F;
- E. pi = 3.14F;

Answer: Option C

7. Which of the following are the correct way to initialise the variables i and j to a value 10 each?

- 1. int i = 10; int j = 10;
 - 2. int i, j;
 - 3. i = 10 : j = 10;
 - 4. int i = 10, j = 10;
 - 5. int i, j = 10;
 - 6. int i = j = 10;
- A. 2, 4
 - B. 1, 3
 - C. 3, 5
 - D. 4, 5

Answer: Option B

8. Which of the following statement correctly assigns a value 33 to a variable c?

byte a = 11, b = 22, c;

- A. c = (byte) (a + b);
- B. c = (byte) a + (byte) b;
- C. c = (int) a + (int) b;

- D. `c = (int)(a + b);`
- E. `c = a + b;`

Answer: Option A

10. Output of following program?

```
#include<stdio.h>
int main()
{
    float x = 0.1;
    if ( x == 0.1 )
        printf("IF");
    else if (x == 0.1f)
        printf("ELSE IF");
    else
        printf("ELSE");
}
```

- A. ELSE IF
- B. IF
- C. ELSE
- D. None of these

Answer:- Option A