1. **What is the main purpose of decision-making statements in C#?**  
   a) To define variables  
   b) To repeat a set of statements  
   c) To execute a block of code based on conditions  
   d) To perform arithmetic operations  
   **Answer:** c) To execute a block of code based on conditions
2. **Which of the following is the correct syntax for an if statement in C#?**  
   a) if condition {}  
   b) if (condition) { statements; }  
   c) if condition: {}  
   d) if { condition }  
   **Answer:** b) if (condition) { statements; }
3. **What will be the output of the following C# code?**

int a = 10;

if (a < 20)

{

Console.WriteLine("a is less than 20");

}

Console.WriteLine("value of a is: " + a);

a) Compilation Error  
b) a is less than 20  
value of a is: 10  
c) No output  
d) Only value of a is: 10  
**Answer:** b) a is less than 20  
value of a is: 10

1. **What is the function of the else statement in C#?**  
   a) Executes when the if condition is true  
   b) Executes when the if condition is false  
   c) Repeats a loop indefinitely  
   d) Terminates a program  
   **Answer:** b) Executes when the if condition is false
2. **Which decision-making statement allows multiple conditions to be checked sequentially?**  
   a) if statement  
   b) switch statement  
   c) if-else if-else statement  
   d) for loop  
   **Answer:** c) if-else if-else statement
3. **In a switch statement, what type of values can be used for case labels?**  
   a) float and double  
   b) int, char, and string  
   c) boolean  
   d) Any data type  
   **Answer:** b) int, char, and string
4. **Which of the following statements about the switch statement in C# is true?**  
   a) It can check ranges of values  
   b) It only works with boolean values  
   c) It allows multiple cases to execute using fall-through behavior  
   d) It must include a default case  
   **Answer:** c) It allows multiple cases to execute using fall-through behavior
5. **What does the conditional (?:) operator do in C#?**  
   a) It performs bitwise operations  
   b) It replaces if-else statements with a single-line expression  
   c) It allows loops inside conditions  
   d) It is used to define classes  
   **Answer:** b) It replaces if-else statements with a single-line expression
6. **What will be the output of the following code?**

int x = 30;

string result = (x > 20) ? "Greater" : "Smaller";

Console.WriteLine(result);

a) Greater  
b) Smaller  
c) Compilation Error  
d) No Output  
**Answer:** a) Greater

1. **What will happen if a switch statement does not have a break statement in a case?**  
   a) Compilation error  
   b) The next case will execute until a break is found  
   c) The program will terminate  
   d) It will execute only the matched case  
   **Answer:** b) The next case will execute until a break is found