QUESTION 1

X: undefined ***//At this point, x is undefined because variable declarations are hoisted and x is being written before its initialization to 10 thus x being undefined.***

a: 8 ***// a has value 8 because 8 is passed a parameter to the function c().***

b: 8 ***// b is 8 because b assigned the value of a which is 8 within the current scope of function f().***

b: 9 ***// b is 9 because b is then re-assigned the value of c which is 9 within the current scope of function f().***

b: 10 ***// b is 10 because b has a value of 10 which is gets from the global scope.***

x: 1 ***// x is 1 because it has a value 1 which is it gets from the global scope.***

QUESTION 2

Global Scope refers to the overall execution context/environment within which all of a program's variables, functions, and classes or objects are defined.

On the other hand,

Local Scope refers to the execution context within a function or block. For example: Variables or functions declared within a function are scoped to that function.

QUESTION 3

a) Do statements in Scope A have access to variables defined in Scope B and C? ***NO***

b) Do statements in Scope B have access to variables defined in Scope A? ***YES***

c) Do statements in Scope B have access to variables defined in Scope C? ***NO***

d) Do statements in Scope C have access to variables defined in Scope A? ***YES***

e) Do statements in Scope C have access to variables defined in Scope B? ***YES***

QUESTION 4

81 ***// myFunction() returns 81 since the value of x is 9 in the global scope.***

25 ***// myFunction() later returns 25 because the value of x has been re-assigned to 5.***

QUESTION 5

The alert prints out 10 as the value because, when the function bar() is called, in the first phase of compilation, variable foo is hoisted and its value is undefined because in the first phase of 2-pass compiling, the variable declarations are hoisted and value is set to undefined. At execution phase which is the second phase of 2-pass compiling, the if condition is true because foo is undefined thus the value of foo is set to 10.