

Student ID: **612413**

Full Name: **Boaz Turyahikayo**

**No 1:**

1: because  $x=1$  from global declaration

8: because function  $c$  is called with parameter  $a=8$

8: because in function  $f$  we assign  $a$  to  $b$  with  $a$  coming from function call  $c(8,9,10)$  where  $a = 8$

9: because  $b$  at this point comes from function call  $c(8,9,10)$

10: because  $b$  is 10 from global scope

1: because  $x$  from global scope is not changed

**NO 2:**

Global scope is the entire document scope where all function or variable declarations are hoisted and are accessible by all functions.

Local Scope refers to variables and function declaration that are inside function block/scope and are not accessible outside.

**No 3:**

- a. No they do not have access.
- b. Yes they have access only if no new var is declared in B with same name.
- c. No they do not have access.
- d. Yes they have access
- e. Yes they have access

**No 4**

- i. 81. Because return  $9*9$  from var  $x$  when function is called
- ii. 25. Because return  $5*5$  from var  $x$  when function is called

**No 5:**

10: because var  $foo$  is hoisted to top of function  $bar$  with value 'undefined'. Undefined is a falsey value and so the  $if(!undefined)$  is true and so  $foo$  is set to 10 inside the function  $bar$ .