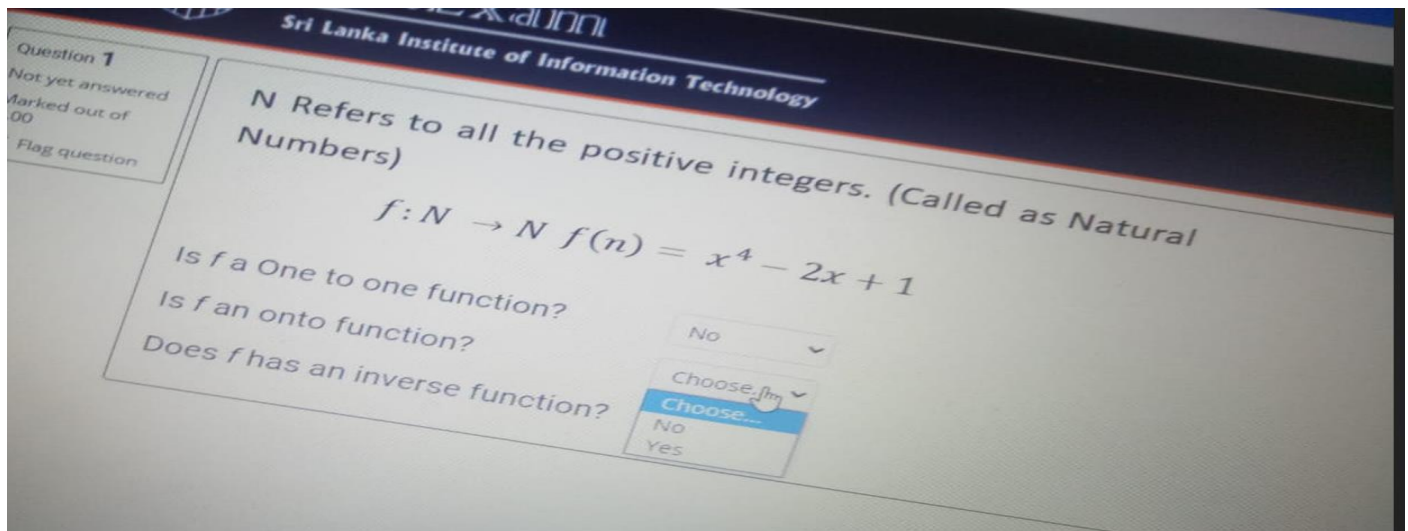


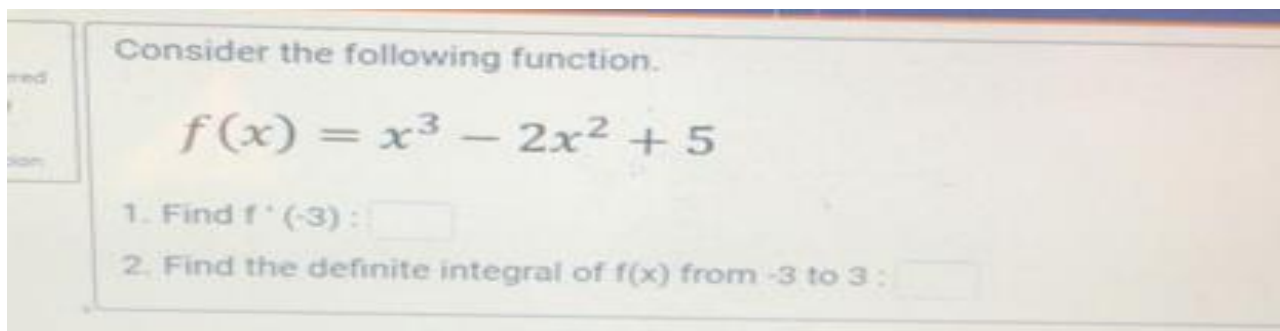
1.  $\mathbb{N}$  Refers to all the positive integers. (Called as Natural Numbers)

$$f: \mathbb{N} \longrightarrow \mathbb{N} \quad f(n) = x^4 - 2x + 1$$

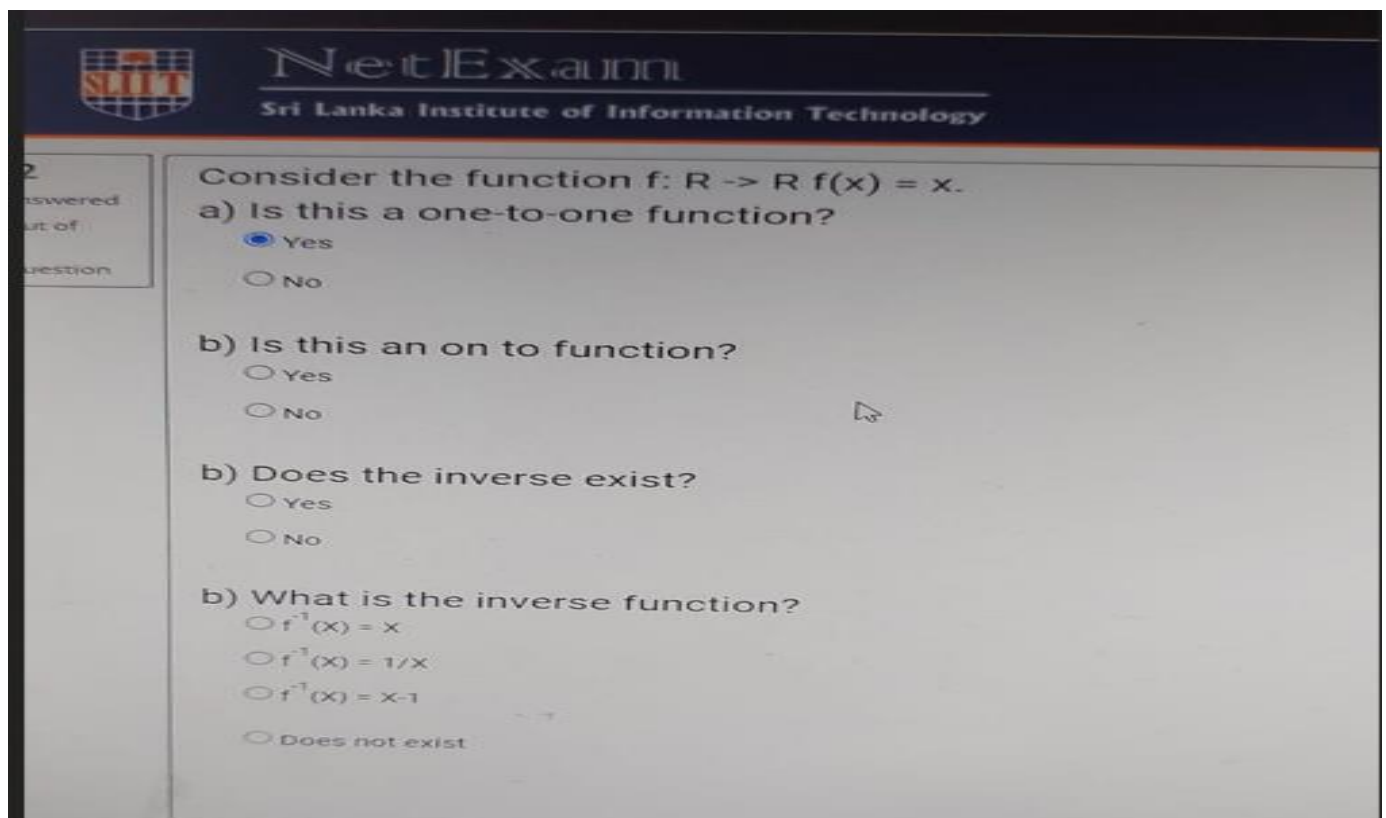


2.  $\mathbb{N}$  Refers to all the positive integers. (Called as Natural Numbers)

$$f: \mathbb{N} \longrightarrow \mathbb{N} \quad f(n) = x^3 - 2x^2 + 5$$



3. Consider the function  $f: \mathbb{R} \rightarrow \mathbb{R} \quad f(x) = x$



4.  $\mathbb{N}$  Refers to all the positive integers. (Called as Natural Numbers)

$$f: \mathbb{N} \longrightarrow \mathbb{N} \quad f(n) = n^3 + 3$$

Question 5  
Not yet answered  
Marked out of 9.00  
Flag question

$\mathbb{N}$  Refers to all the positive integers. (Called as Natural Numbers)

$$f: \mathbb{N} \rightarrow \mathbb{N} \quad f(n) = n^3 + 3$$

Is  $f$  a One to one function?

Is  $f$  an onto function?

Does  $f$  has an inverse function?

Yes  
No

3.  $\mathbb{N}$  Refers to all the positive integers. (Called as Natural Numbers)

$$f: \mathbb{N} \longrightarrow \mathbb{N} \quad f(n) = n^3 - 3$$

$\mathbb{N}$  Refers to all the positive integers. (Called as Natural Numbers)

$$f: \mathbb{N} \rightarrow \mathbb{N} \quad f(n) = n^3 - 3$$

Is  $f$  a One to one function?

Is  $f$  an onto function?

Does  $f$  has an inverse function?

5. Consider the following function. Find  $g^{-1}(-3)$

$$g: \mathbb{R} \longrightarrow \mathbb{R} \quad g(x) = \frac{(12 - 3x)}{4}$$

Consider the following function.

$$g: \mathbb{R} \rightarrow \mathbb{R} \quad g(x) = \frac{(12 - 3x)}{4}$$

Find  $g^{-1}(-3)$

Hint : Find the inverse of  $g$  and substitute  $-3$ .

Answer:

6. Consider the function  $f: \mathbb{R} \rightarrow \mathbb{R}$   $f(x) = x^2 - 1$

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**Question 3**  
Not yet answered  
Marked out of 8.00  
🚩 Flag question

Consider the function  $f: \mathbb{R} \rightarrow \mathbb{R}$   $f(x) = x^2 - 1$

a) Is this a one-to-one function?

☐ Yes

☐ No

b) Is this an on to function?

☐ Yes

☐ No

b) Does the inverse exist?

☐ Yes

☐ No

b) What is the inverse function?

☐  $f^{-1}(x) = x^{1/2}$

☐  $f^{-1}(x) = 1/x^2$

☐  $f^{-1}(x) = x-1$

☐ Does not exist