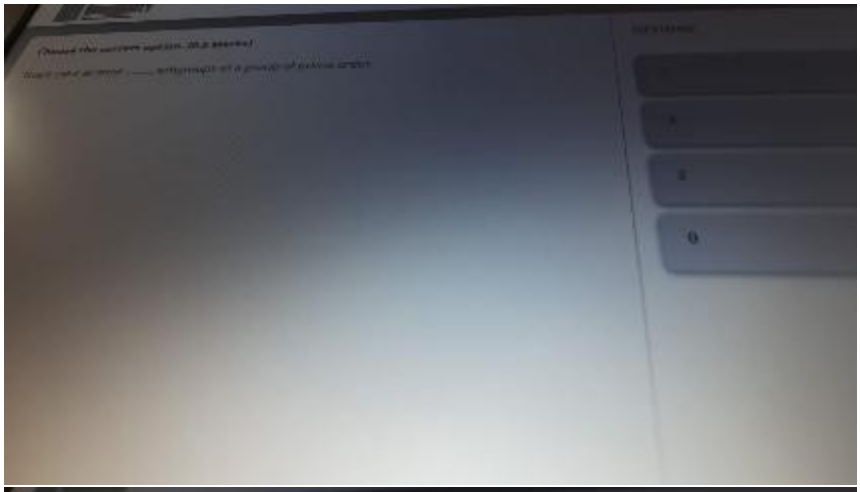
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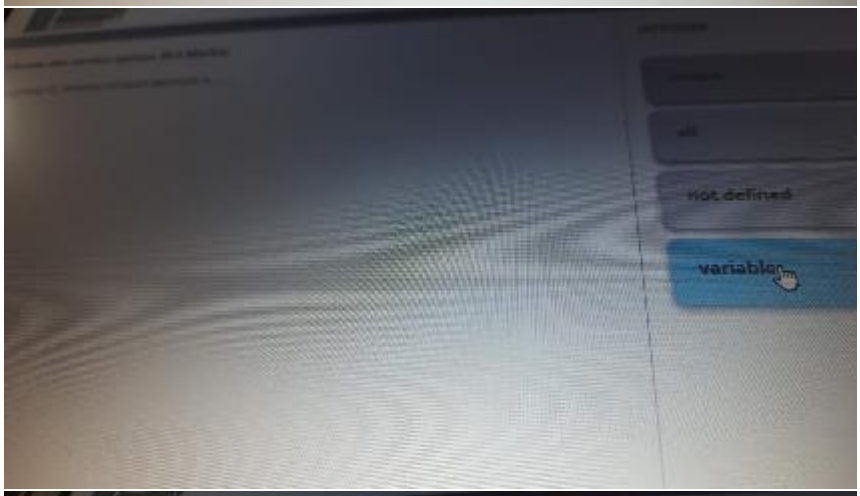
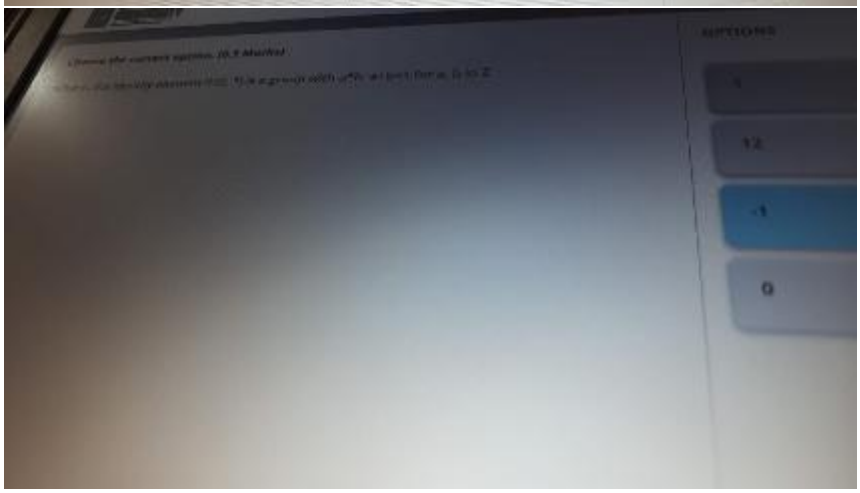
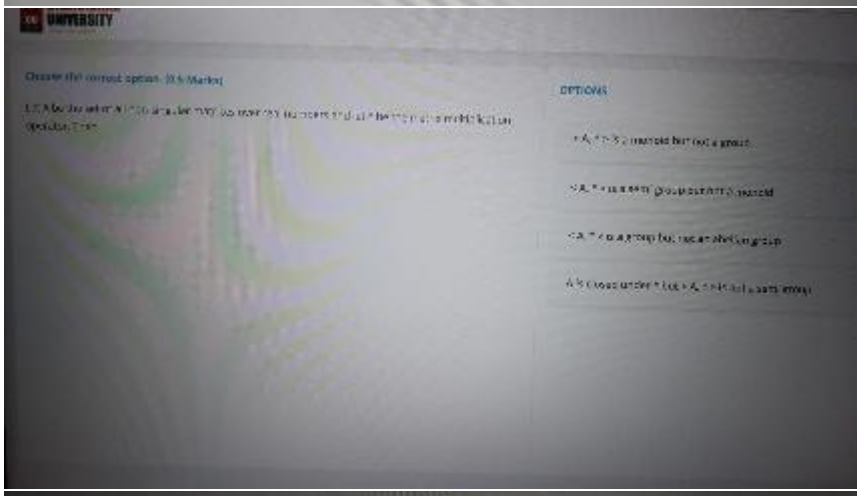

not defined
variable


OPTIONS
12
-1
0

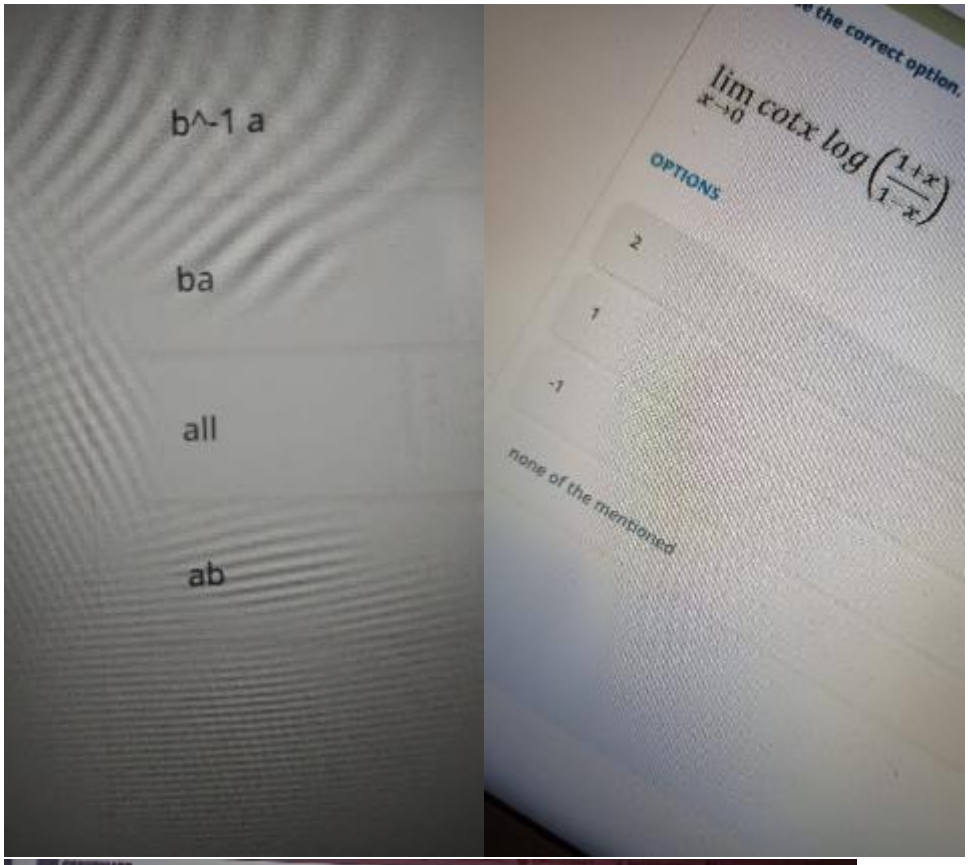
Choose the correct option. (0.5 Marks)

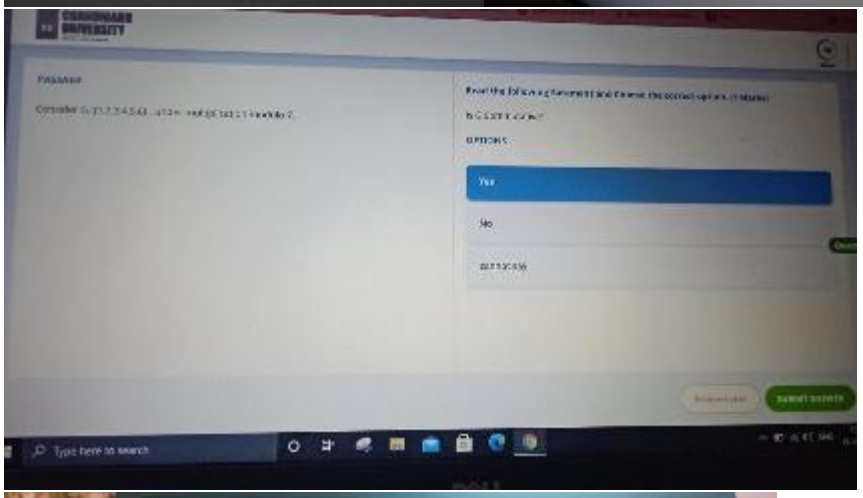
The set Q of rational numbers under + is a

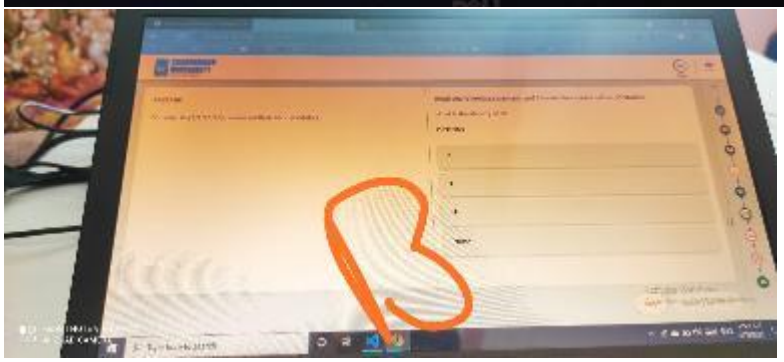


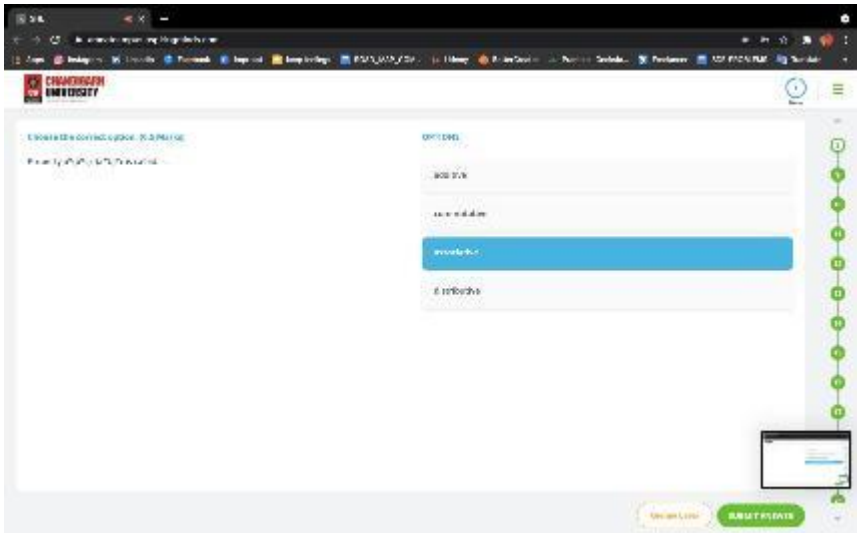
Choose the correct option. (0.5 Marks)

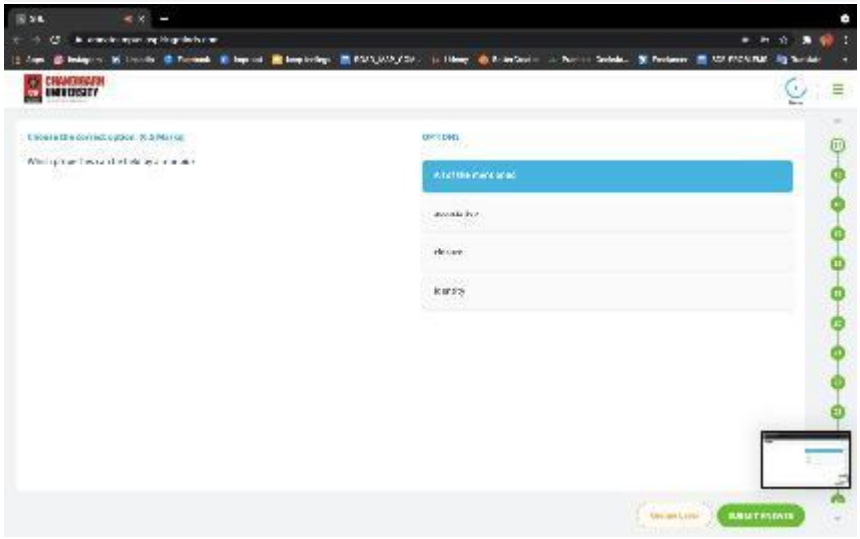
What is the value of (a^- 1 b)^- 1 is in the group (G, .)?

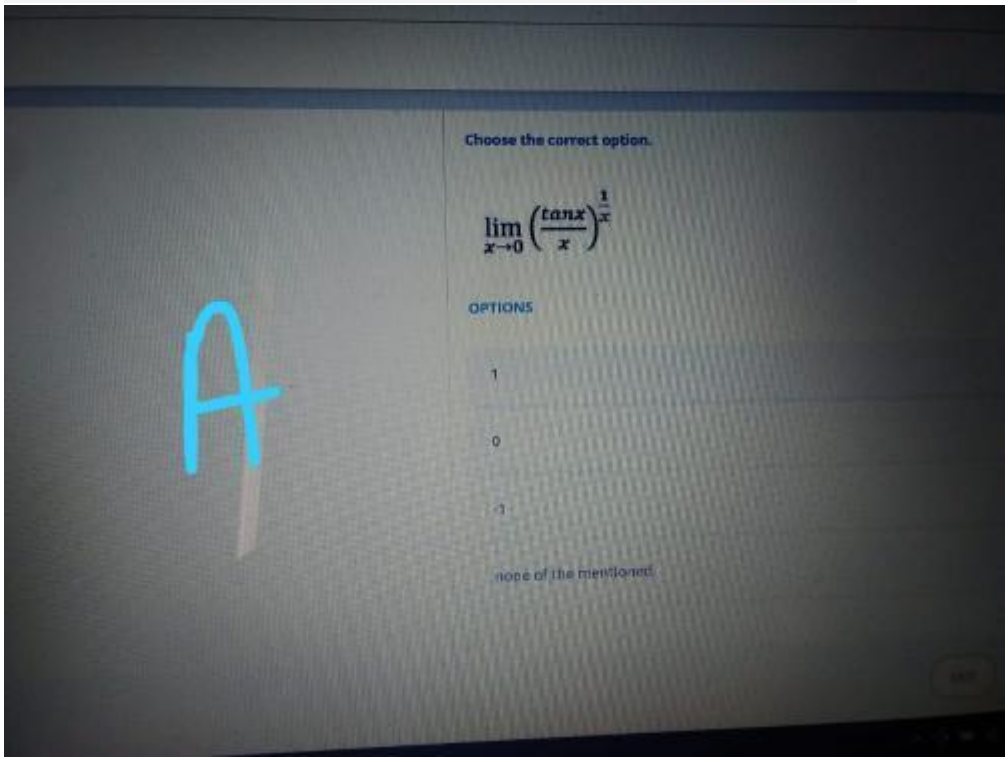

b^-1 a
ba
all
ab
the correct option.
$\lim_{x\to 0} \cot x \log\left(\frac{1+x}{1-x}\right)$
OPTIONS
2
1
-1
none of the mentioned

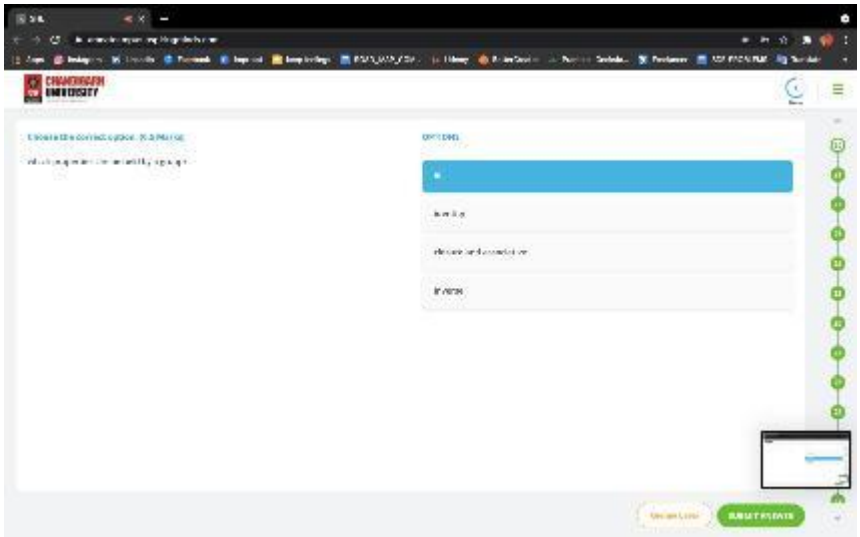

OPTIONS
Yes
No

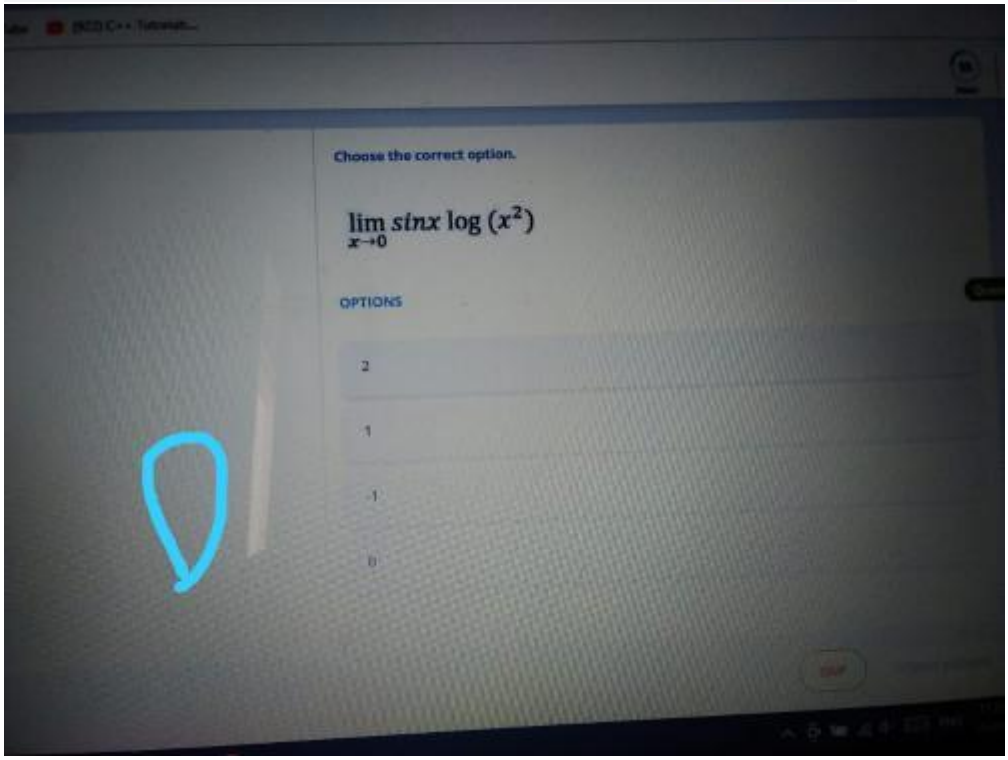


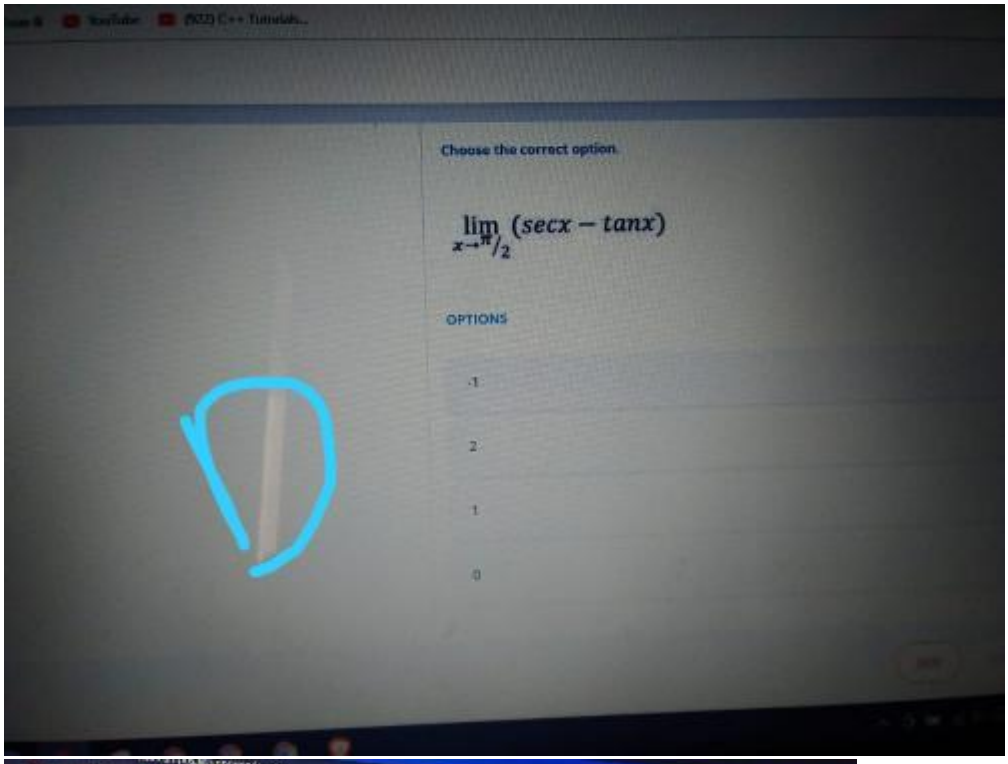


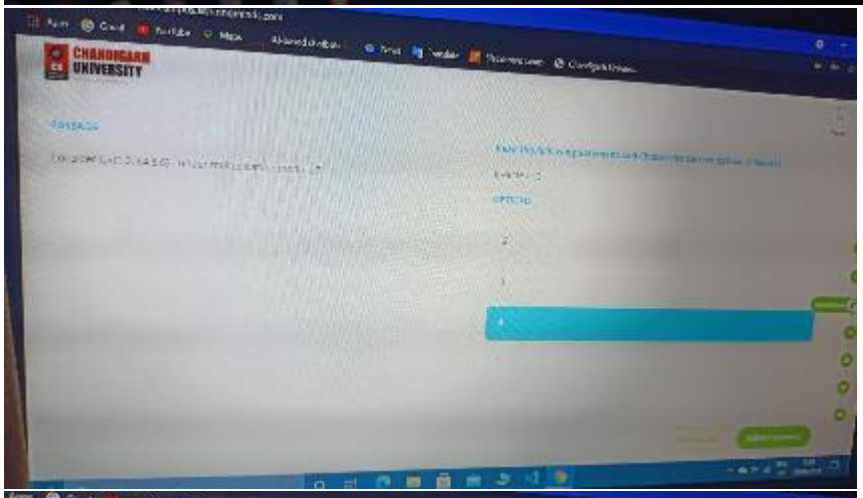


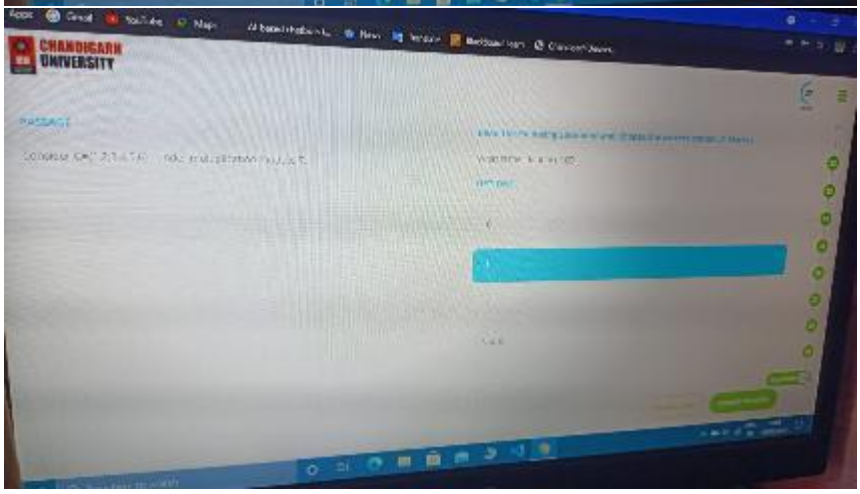

Choose the correct option.
$\lim_{x\to 0}\left(\frac{\tan x}{x}\right)^{\frac{1}{x}}$
OPTIONS
1
0
-1
none of the mentioned
A

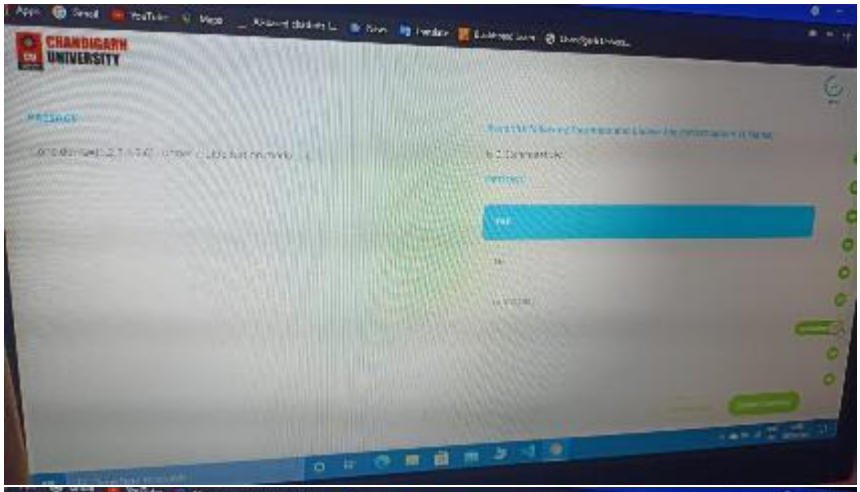


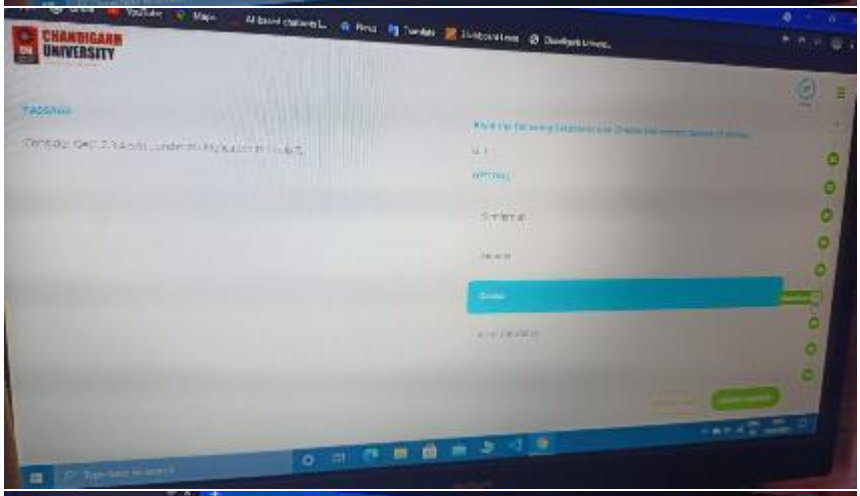

Choose the correct option.
$\lim_{x \to 0} sinx \log(x^2)$
OPTIONS
2
1
-1
0

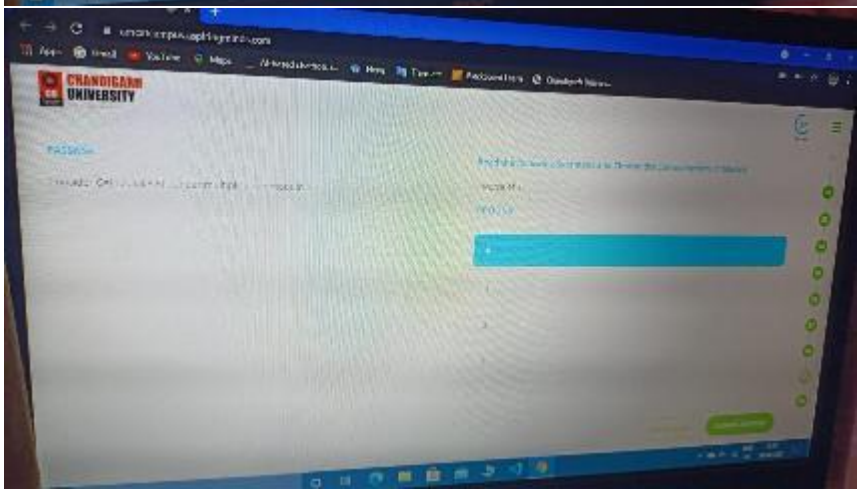

Choose the correct option
$\lim_{x \to \pi/2} (secx - tanx)$
OPTIONS
-1
2
1
0

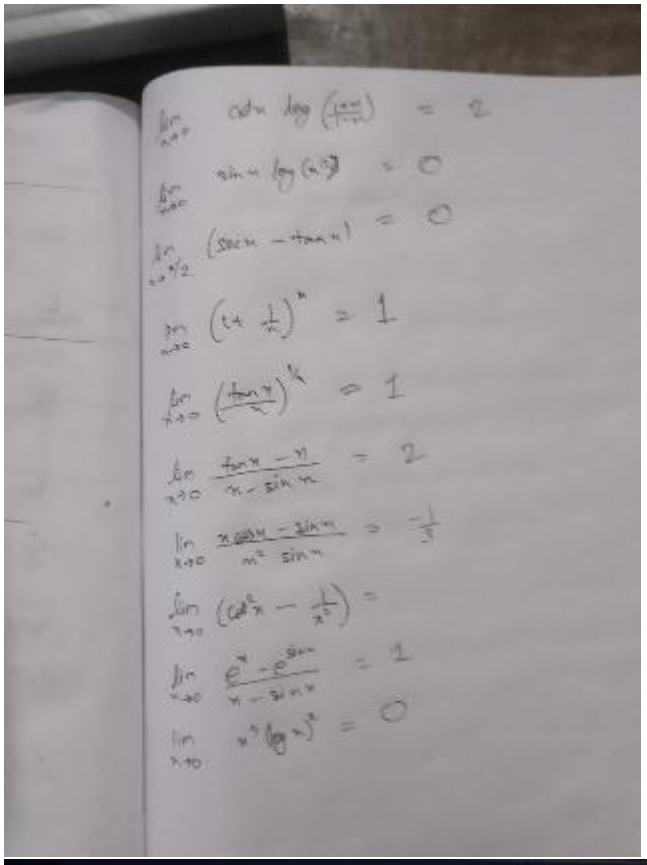

CHANDIGARH UNIVERSITY


CHANDIGARH UNIVERSITY


CHANDIGARH
UNIVERSITY


CHANDIGARH
UNIVERSITY


CHANDIGARH
UNIVERSITY



Choose the correct option.

$$\lim_{x \to 0} \left(1 + \frac{1}{x}\right)^{x}$$

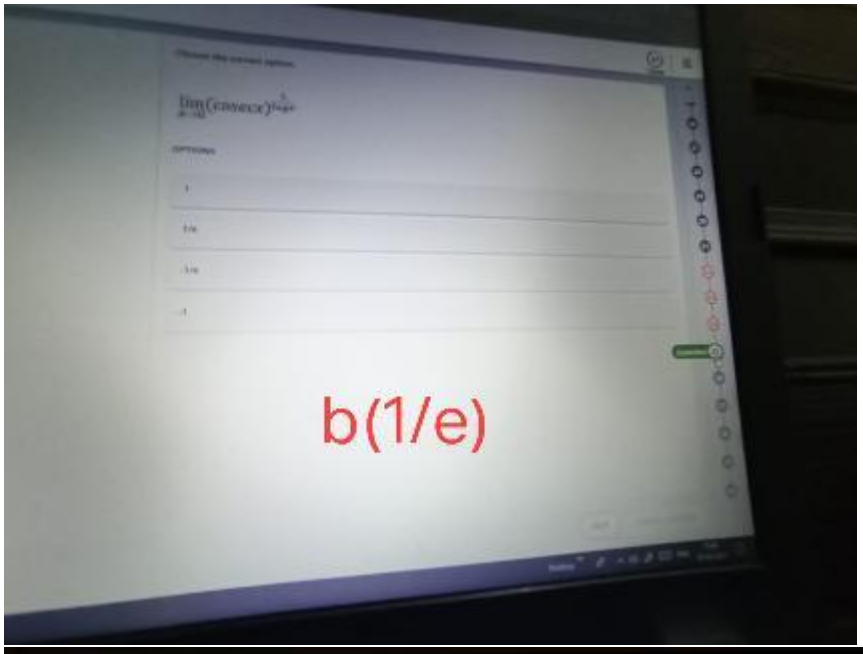
OPTIONS

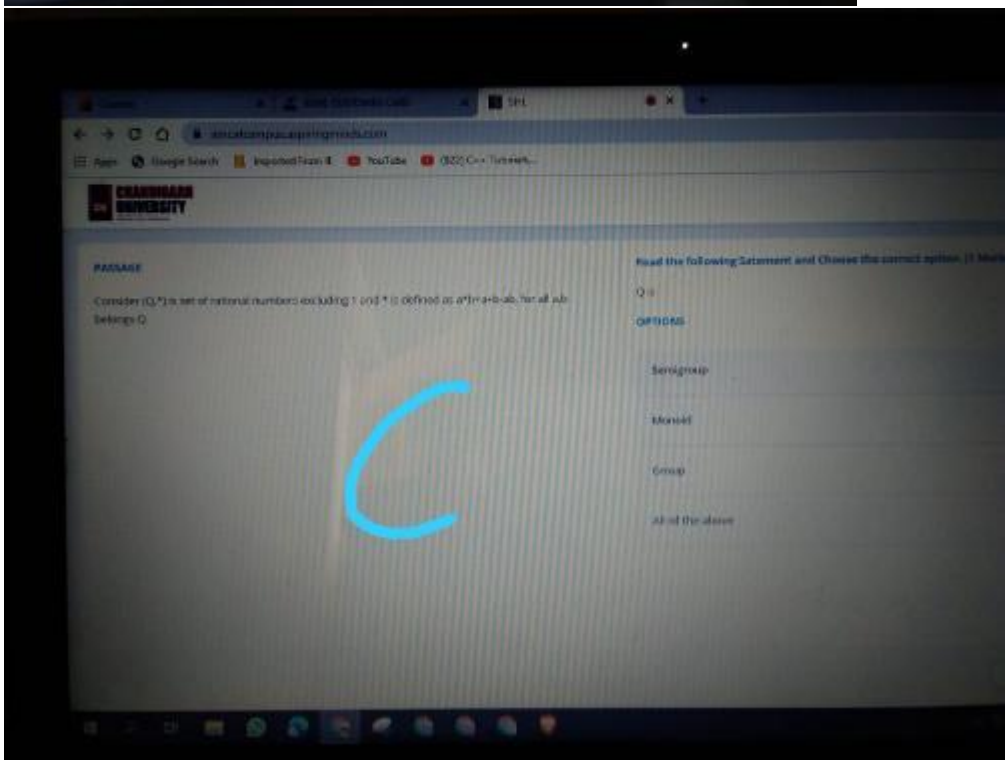
0

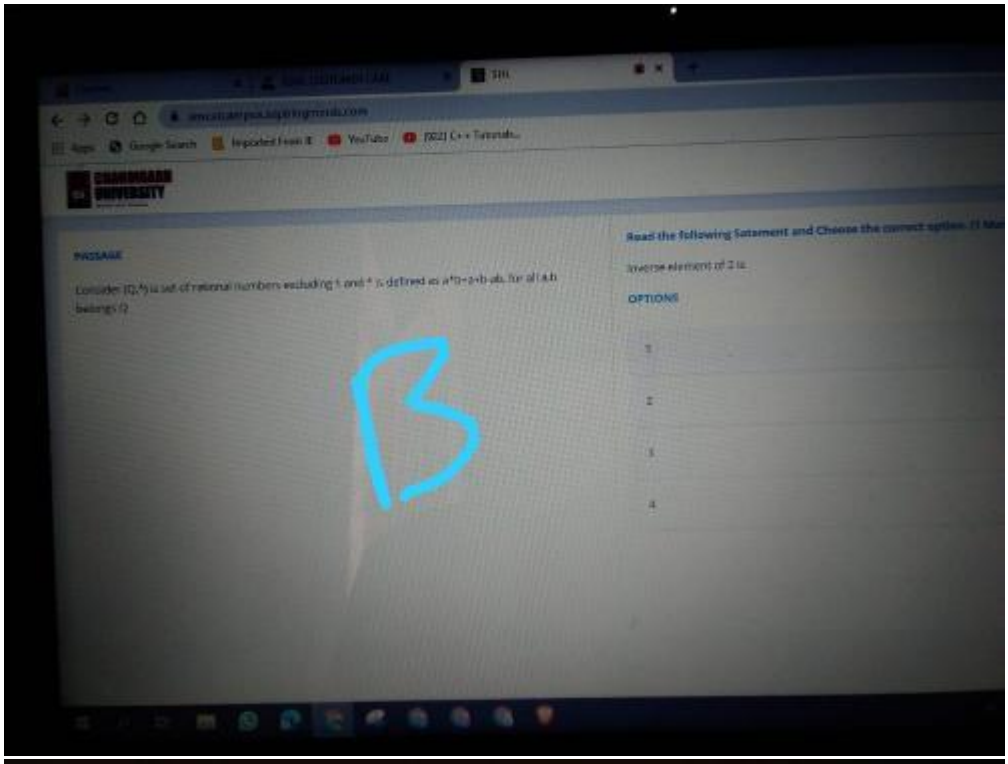
1

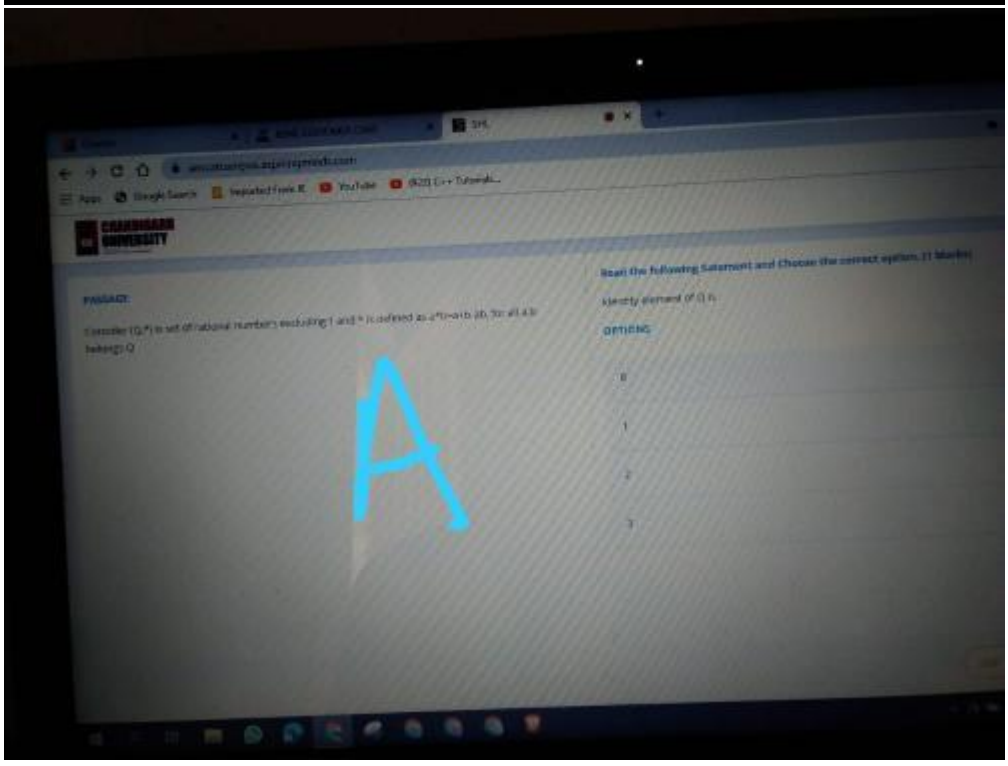
2

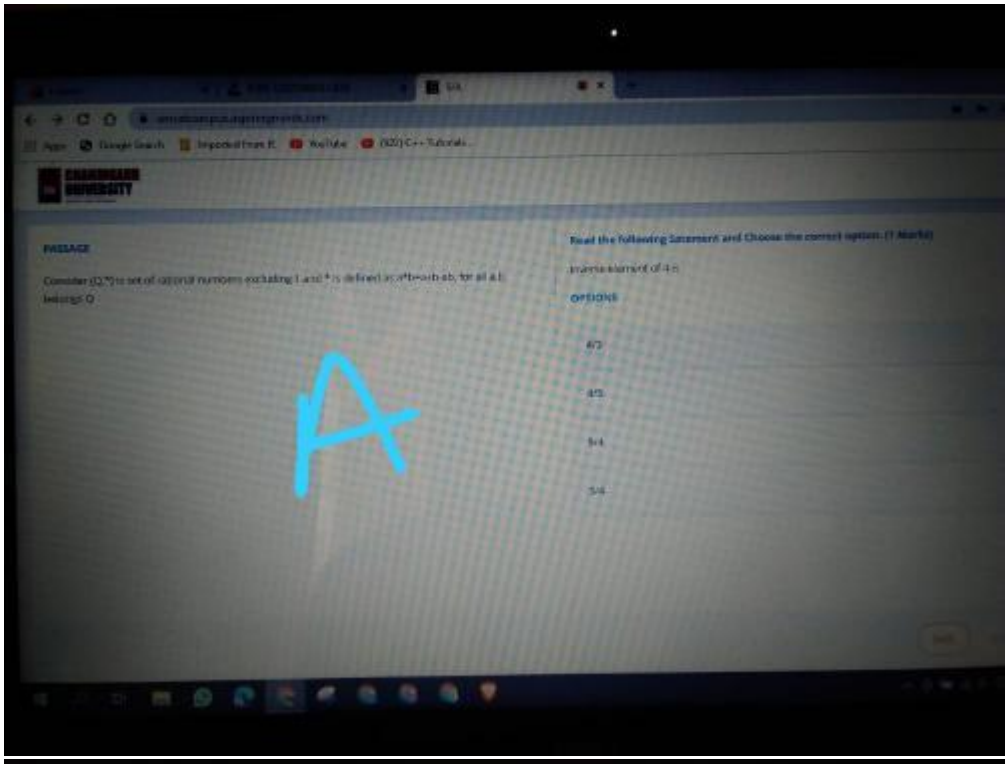
none of the mentioned

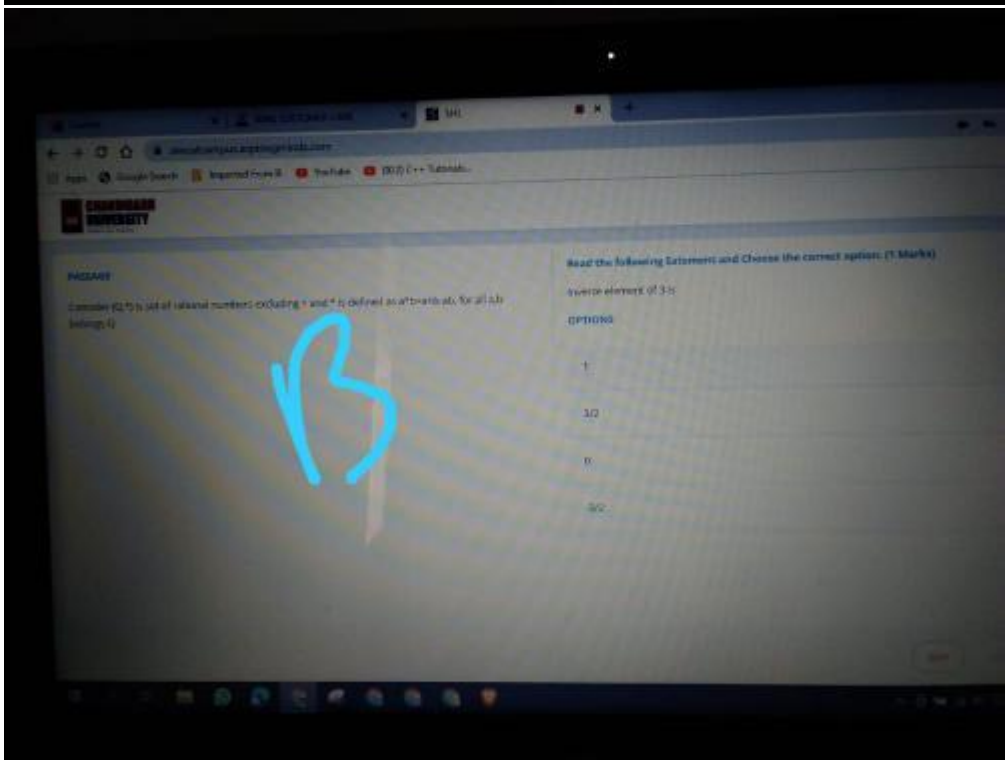

b(1/e)

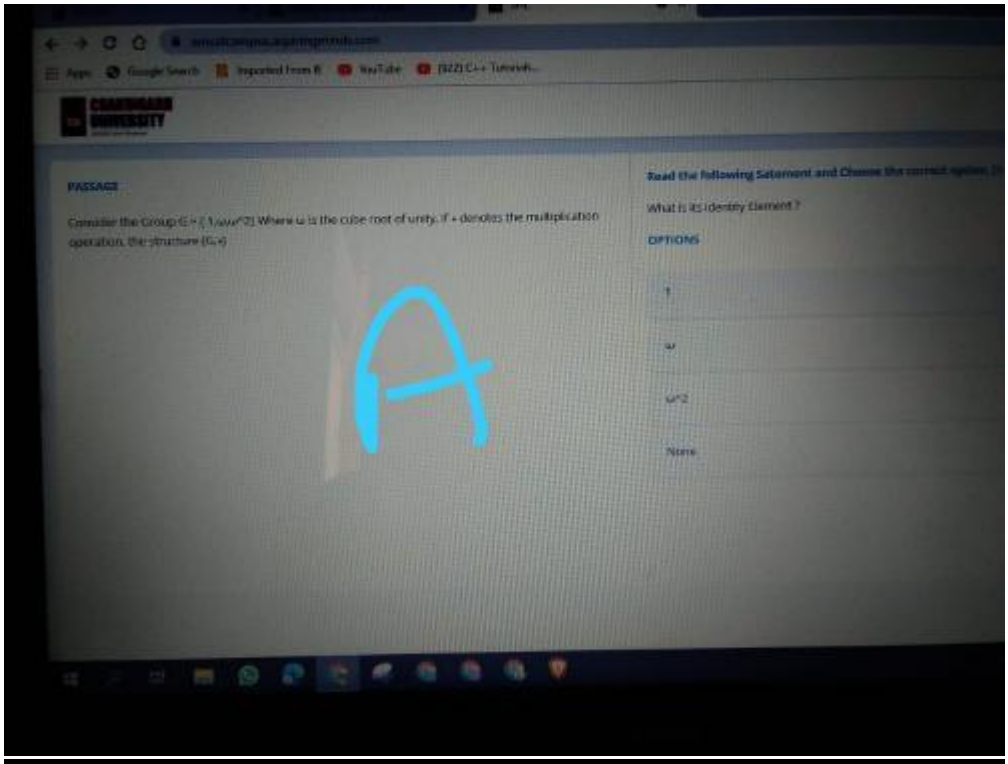

PASSAGE
OPTIONS
Semigroup
Monoid
Group

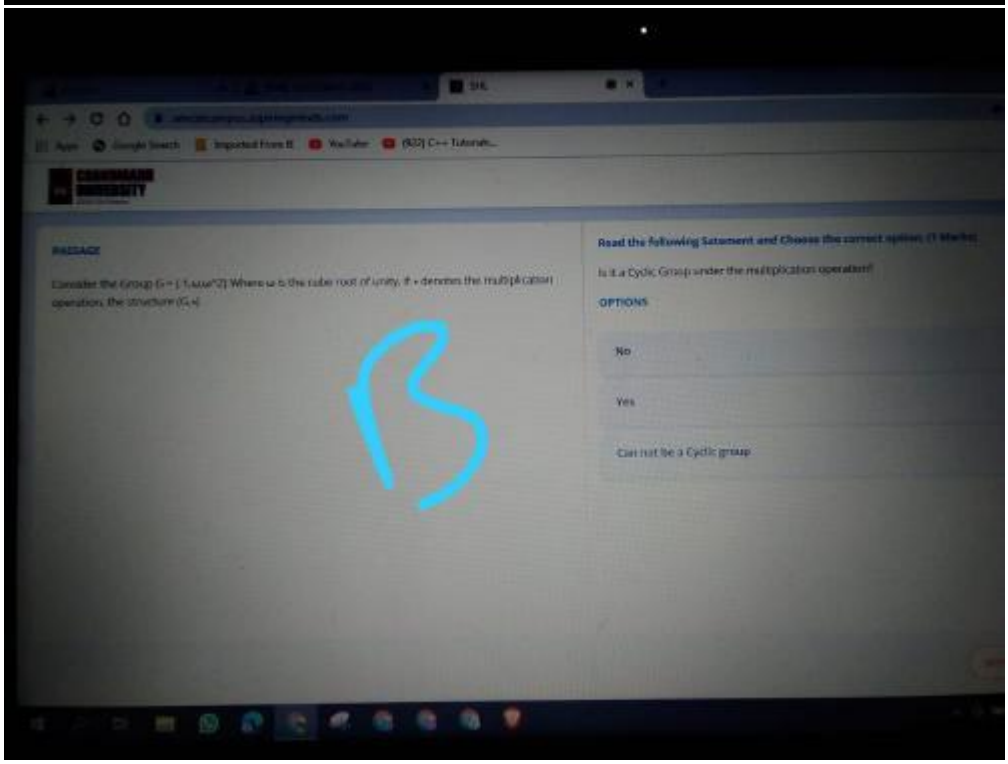

PASSAGE
OPTIONS
B

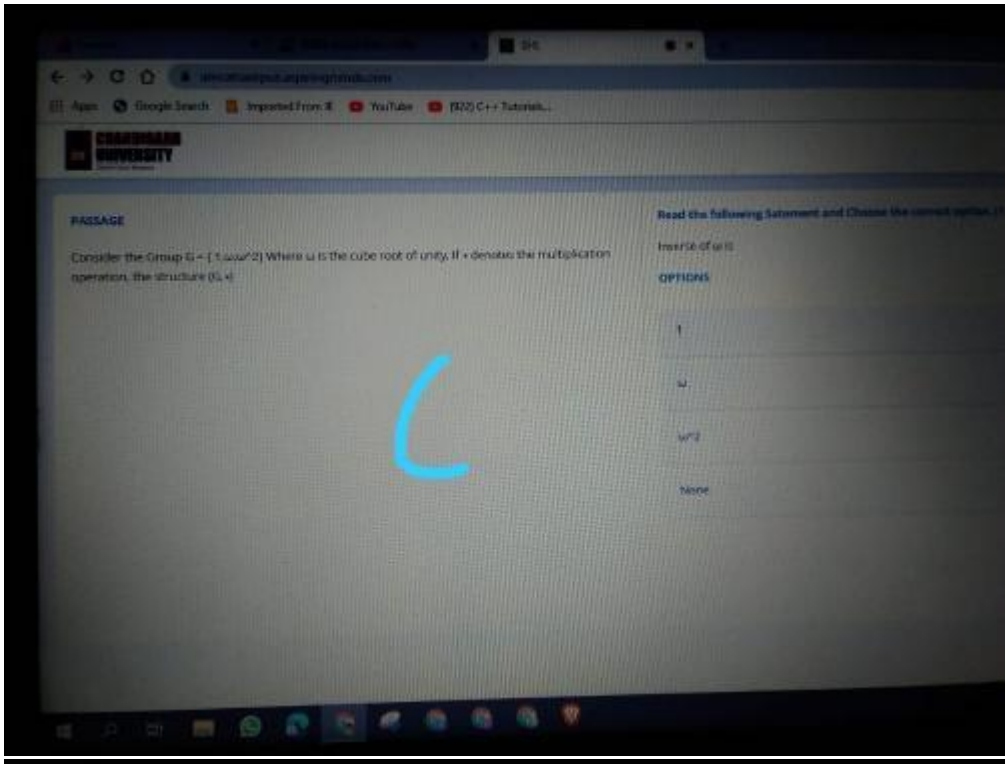

PASSAGE:
OPTIONS
A

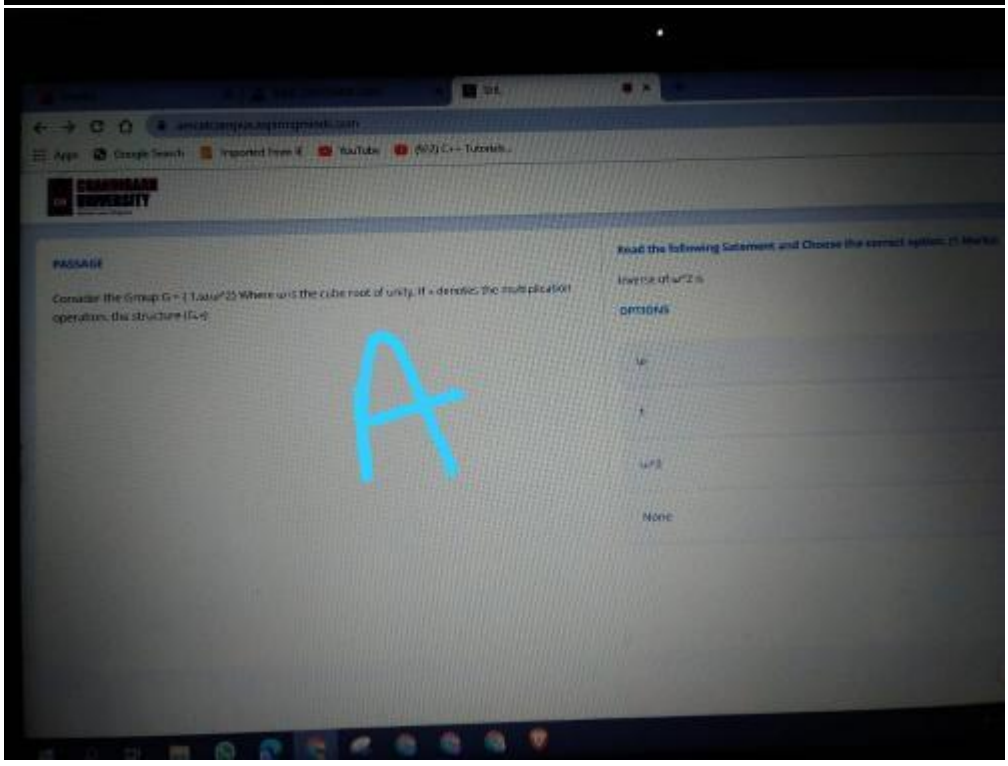

PASSAGE
Read the following Statement and Choose the correct option: (1 Marks)
OPTIONS
A

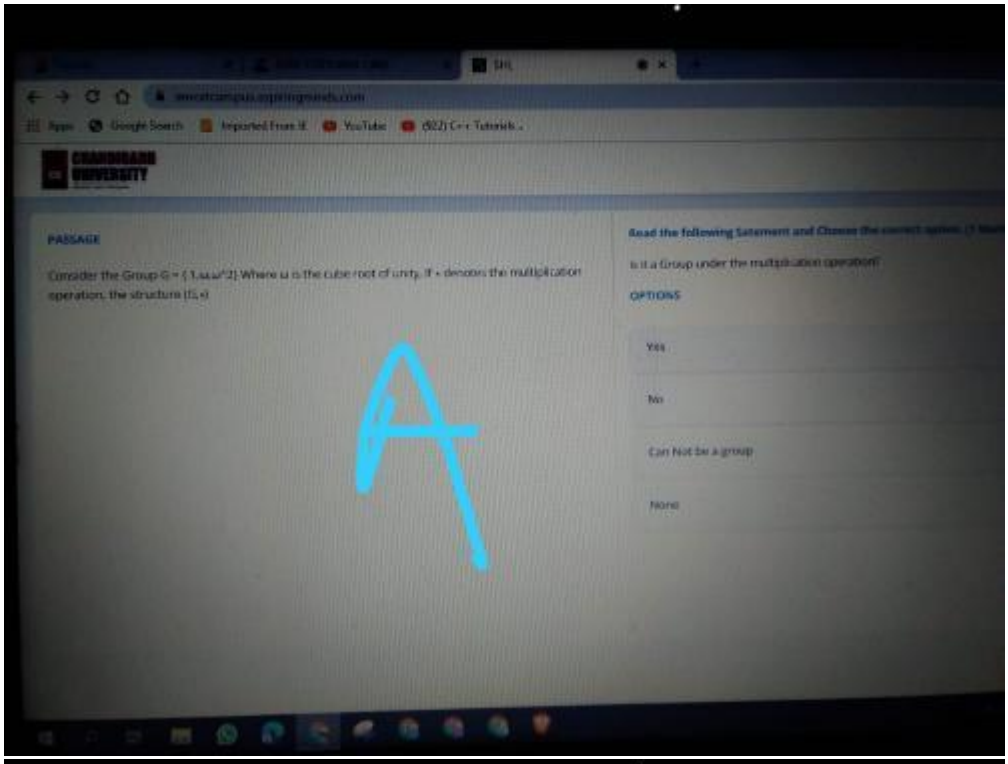

PASSAGE
Read the following Statement and Choose the correct option: (1 Marks)
OPTIONS
B

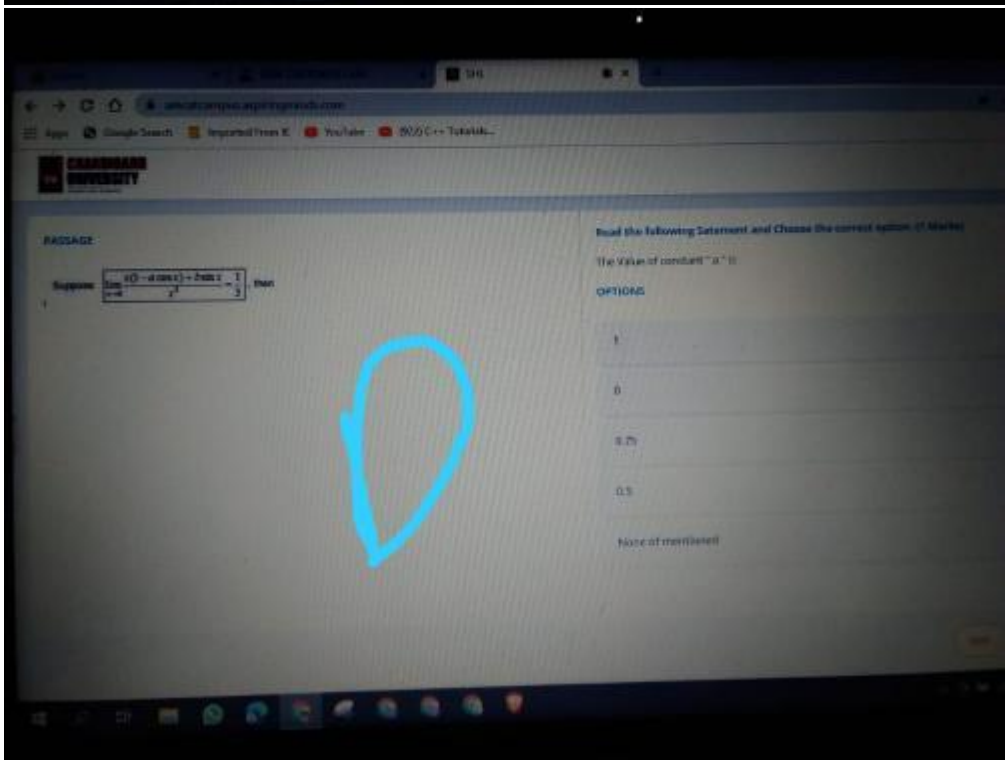

PASSAGE
Consider the Group G = { 1,ω,ω^2} Where ω is the cube root of unity. If • denotes the multiplication operation, the structure (G,•)
Read the following Satement and Choose the correct option.
What is its identity Element ?
OPTIONS
1
ω
ω^2
None
A

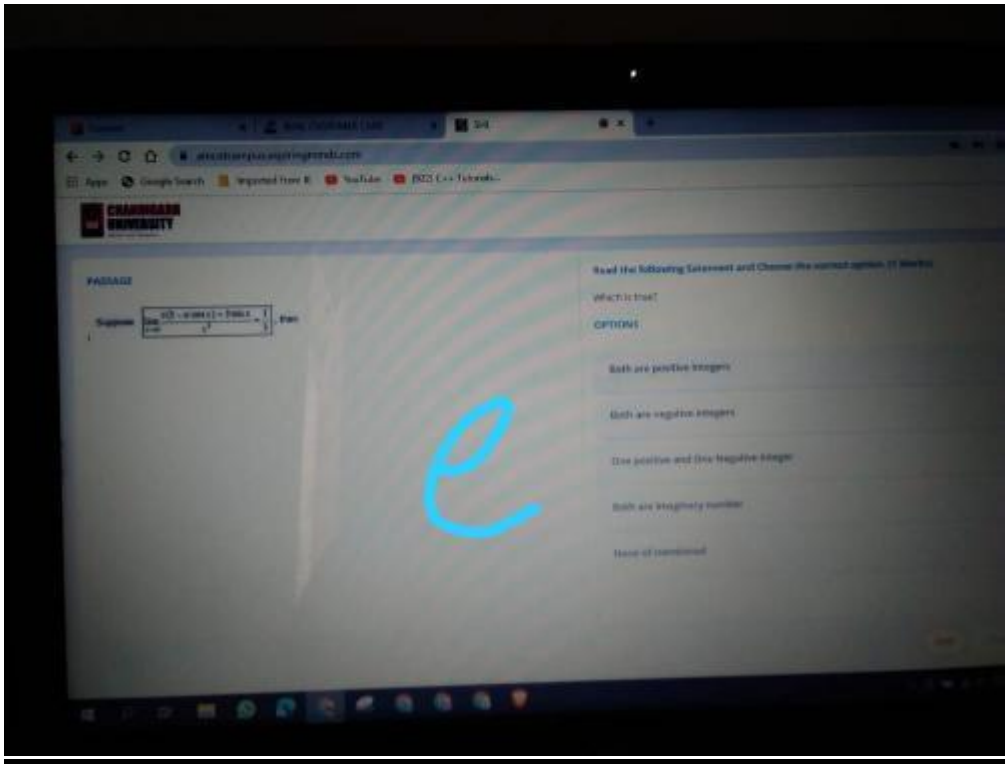

PASSAGE
Consider the Group G = { 1,ω,ω^2} Where ω is the cube root of unity. If • denotes the multiplication operation, the structure (G,•)
Read the following Satement and Choose the correct option. (1 Marks)
Is it a Cyclic Group under the multiplication operation?
OPTIONS
No
Yes
Can not be a Cyclic group
B

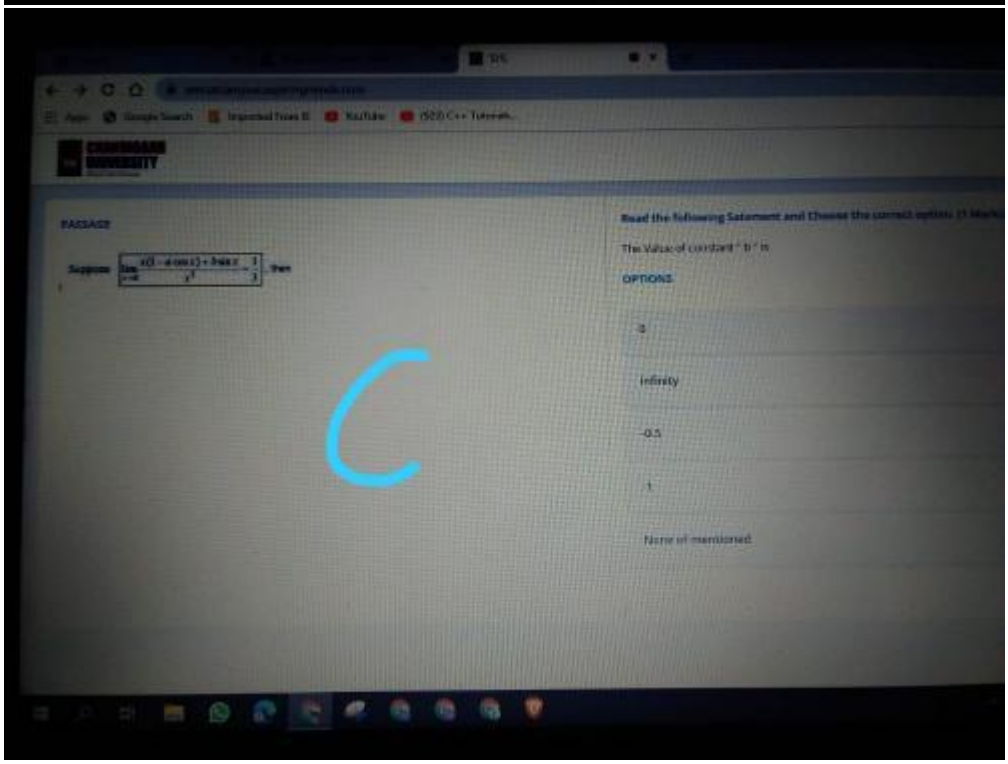

PASSAGE
Consider the Group G = { 1,ω,ω^2} Where ω is the cube root of unity, If ∘ denotes the multiplication operation, the structure (G, ∘)
Read the following Statement and Choose the
Inverse of ω is
OPTIONS
1
ω
ω^2
None
C

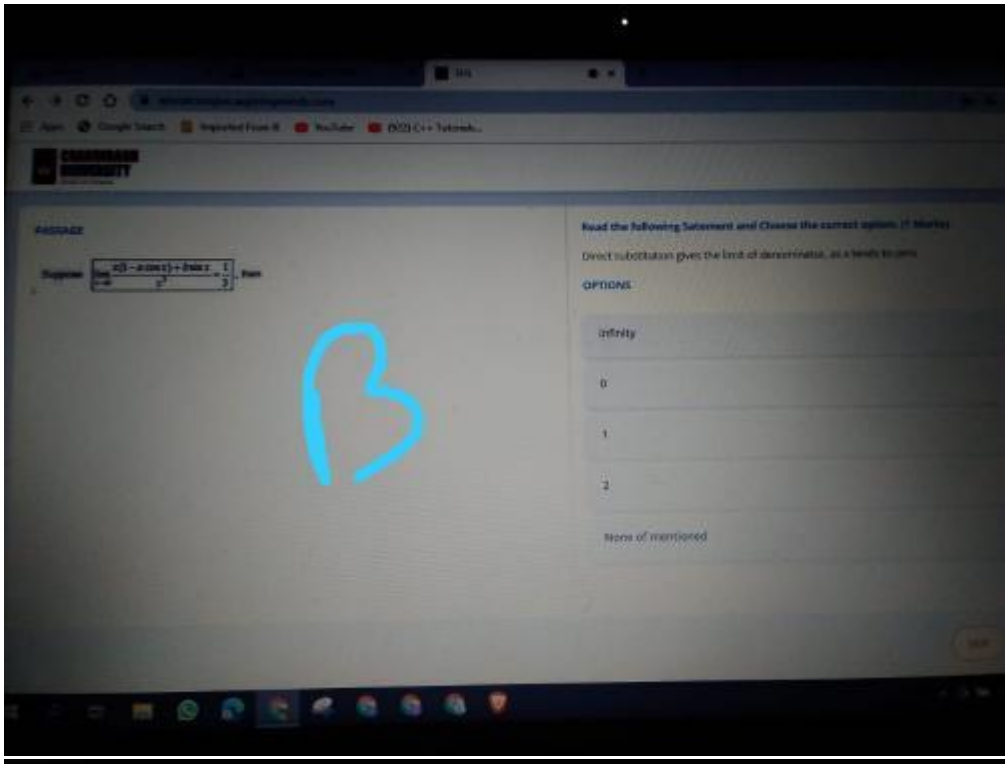

PASSAGE
Consider the Group G = { 1,ω,ω^2} Where ω is the cube root of unity, If ∘ denotes the multiplication operation, the structure (G, ∘)
Read the following Statement and Choose the
Inverse of ω^2 is
OPTIONS
ω
1
ω^2
None
A

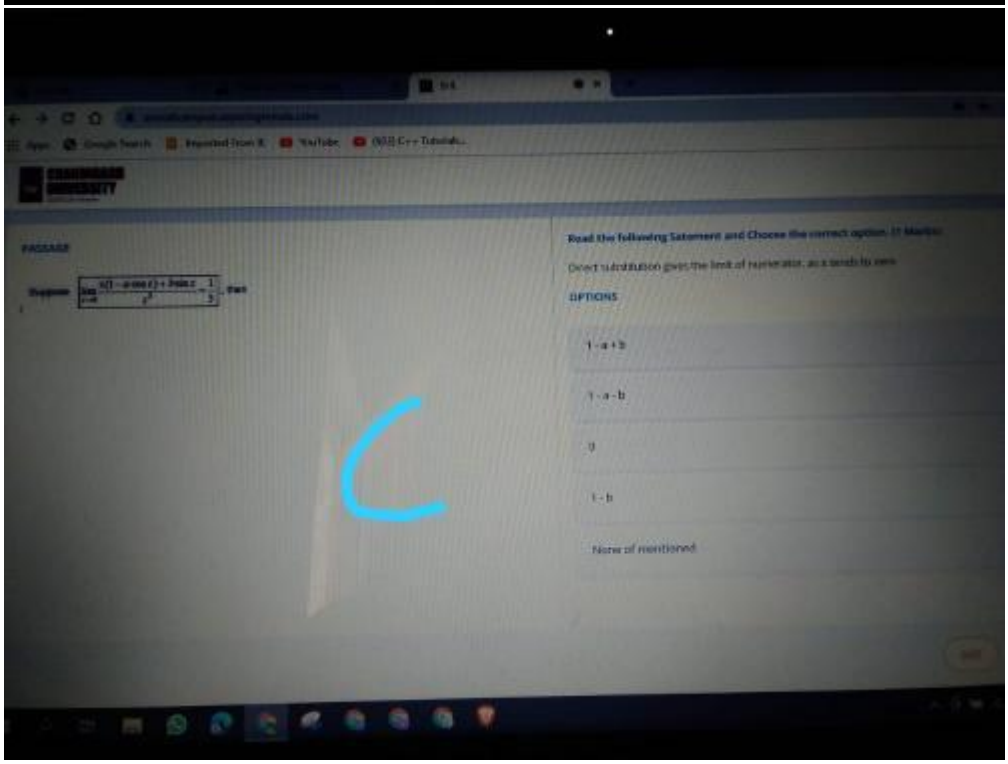

CHANDIGARH UNIVERSITY
PASSAGE
Consider the Group G = { 1,ω,ω^2} Where ω is the cube root of unity. If • denotes the multiplication operation, the structure (G,•)
Read the following Satement and Choose the correct option.
is it a Group under the multiplication operation?
OPTIONS
Yes
No
Can Not be a group
None
A


CHANDIGARH UNIVERSITY
PASSAGE
Read the following Satement and Choose the correct option.
The Value of constant " a " is
OPTIONS
1
0
0.75
0.5
None of mentioned
D


CHANDIGARH UNIVERSITY
PASSAGE
Read the following Statement and Choose the correct option (1 Marks)
What is true?
OPTIONS
Both are positive integers
Both are negative integers
One positive and One Negative Integer
Both are imaginary number
None of mentioned
e


CHANDIGARH UNIVERSITY
PASSAGE
Read the following Statement and Choose the correct option (1 Marks)
The Value of constant " b " is
OPTIONS
0
Infinity
-0.5
1
None of mentioned
c


PASSAGE
Read the following Satement and Choose the correct option. (1 Marks)
Direct substitution gives the limit of denominator, as x tends to zero
OPTIONS
Infinity
0
1
2
None of mentioned


PASSAGE
Read the following Satement and Choose the correct option. (1 Marks)
Direct substitution gives the limit of numerator, as x tends to zero
OPTIONS
1 - a + b
1 - a - b
0
1 - b
None of mentioned

Closure Property: The set G is closed under the operation *, since $a * b = \frac{ab}{4}$ is a real number. Hence, it belongs to G.

Associative Property: The operation * is associative. Let a,b,c∈G, then we have

$$(a*b)*c = \left(\frac{ab}{4}\right)*c = \frac{\left(\frac{ab}{4}\right)c}{4} = \frac{abc}{16}$$

Similarly $a*(b*c) = a*\left(\frac{bc}{4}\right) = \frac{a\left(\frac{bc}{4}\right)}{4} = \frac{abc}{16}$

Identity: To find the identity element, let us assume that e is a +ve real number. Then $e*a = a$, where a∈G.

$$\frac{ea}{4} = a \quad \text{or} \quad e = 4$$

Similarly $a*e = a$

$$\frac{ae}{4} = a \quad \text{or} \quad e = 4$$

Thus, the identity element in G is 4.

Inverse: let us assume that a ∈ G. If $a^{-1} \in Q$ is an inverse of a, then $a*a^{-1} = 4$

Therefore $\frac{aa^{-1}}{4} = 4 \quad \text{or} \quad a^{-1} = \frac{16}{a}$

Similarly $a^{-1}*a = 4$

Therefore $\frac{a^{-1}a}{4} = 4 \quad \text{or} \quad a^{-1} = \frac{16}{a}$

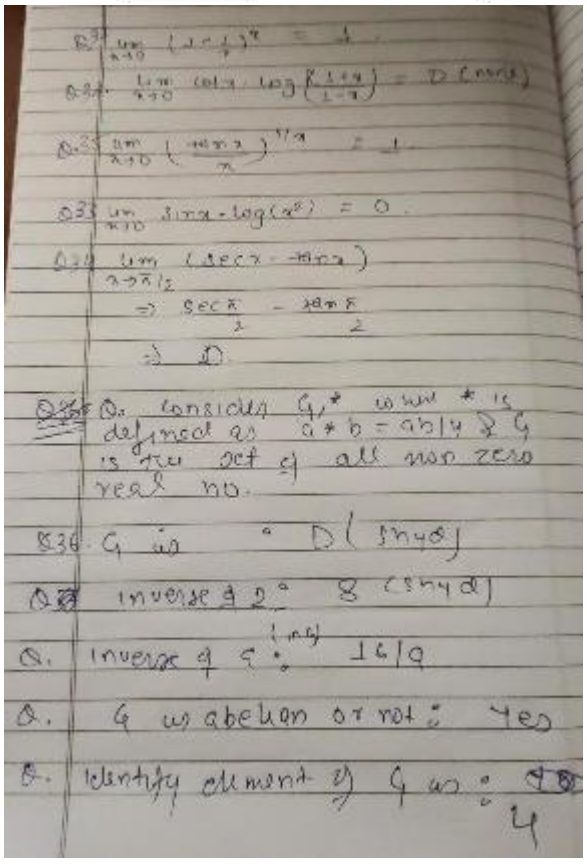
Thus, the inverse of element a in G is $\frac{16}{a}$

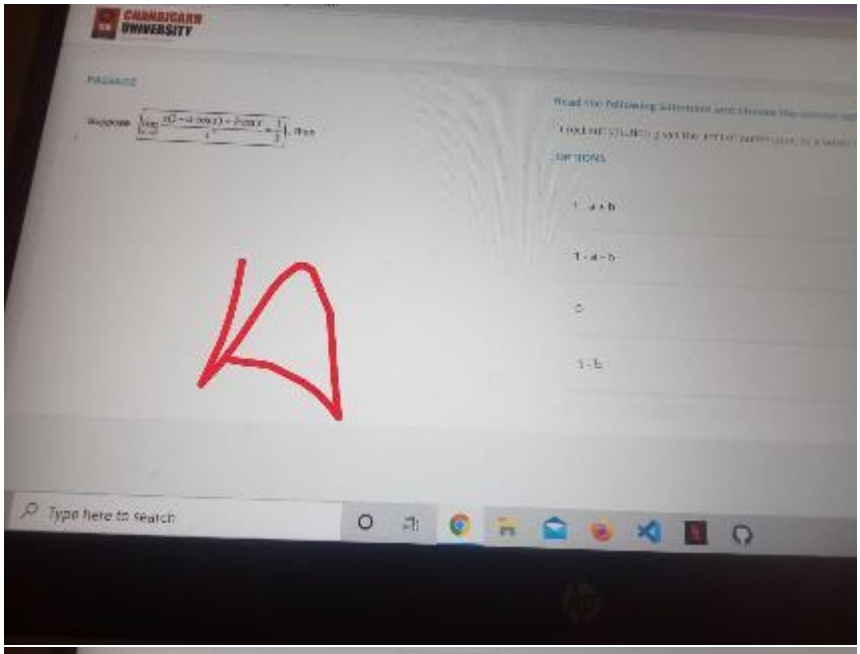
Commutative: The operation * on G is commutative.

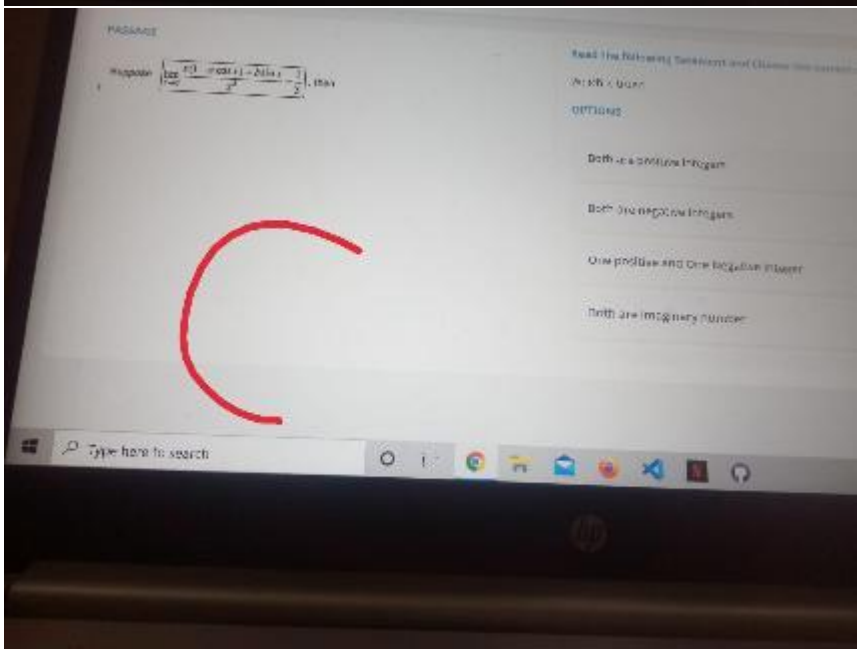
Since $a*b = \frac{ab}{4} = b*a$

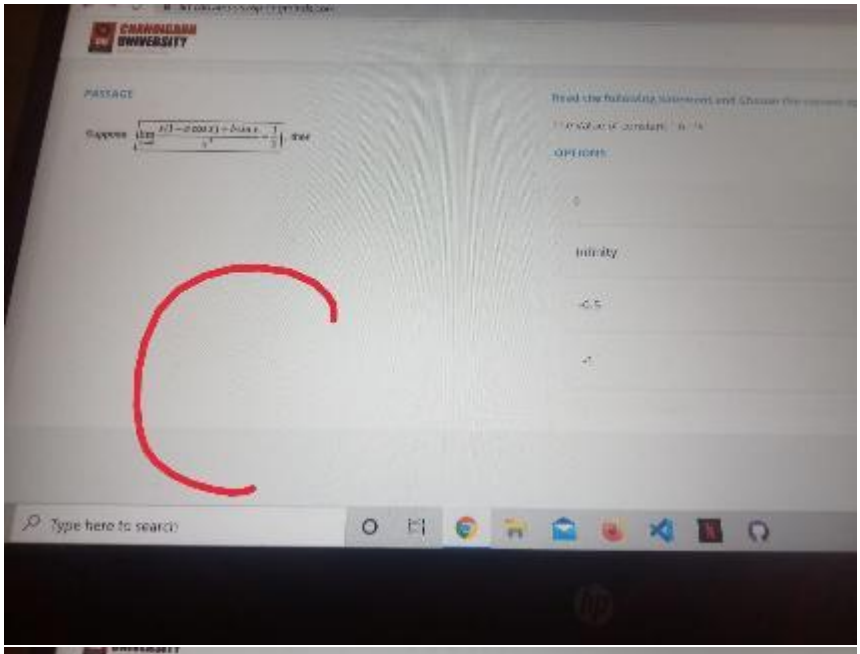
Thus, the algebraic system (G, *) is closed, associative, identity element, inverse and commutative. Hence, the system (G, *) is an abelian group.

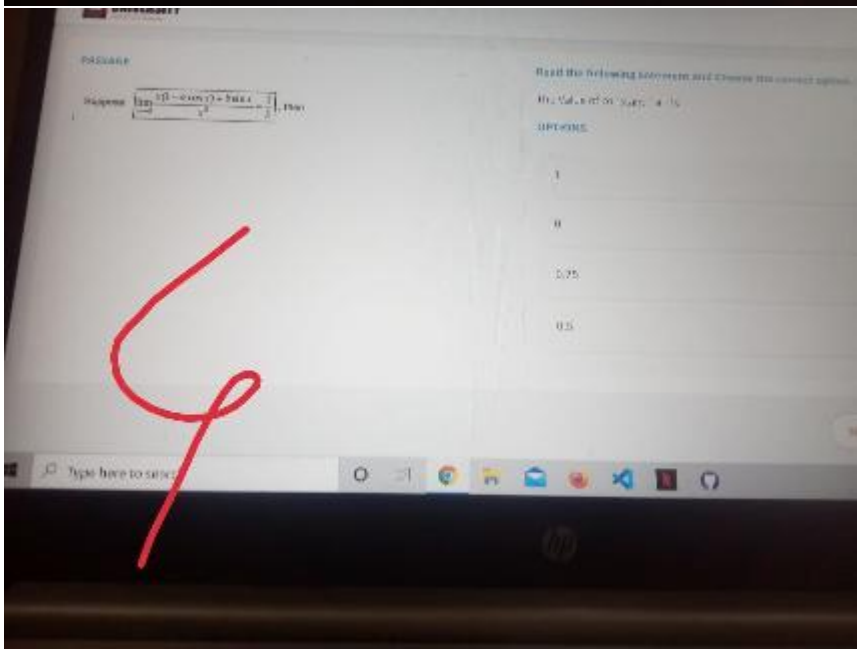
Product of Groups:

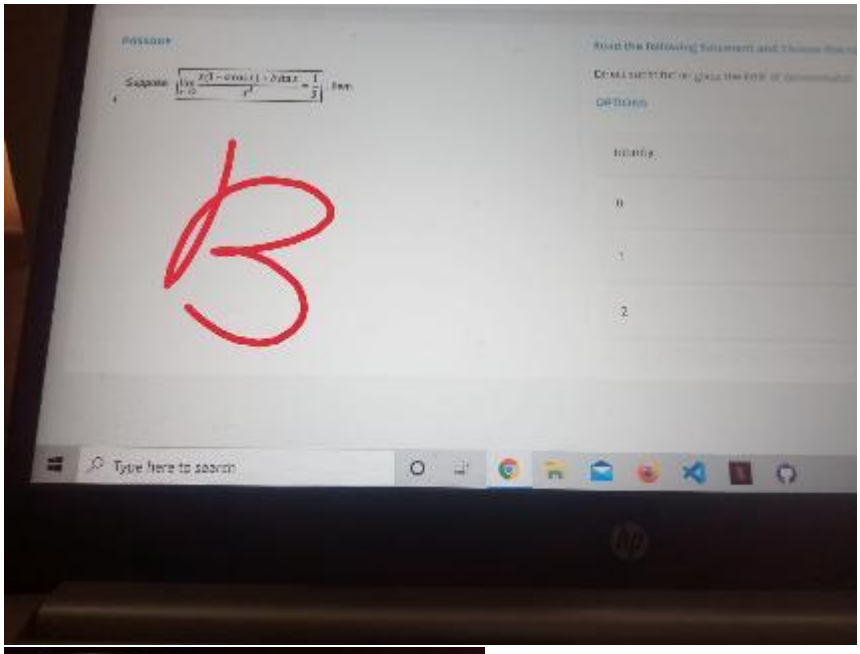


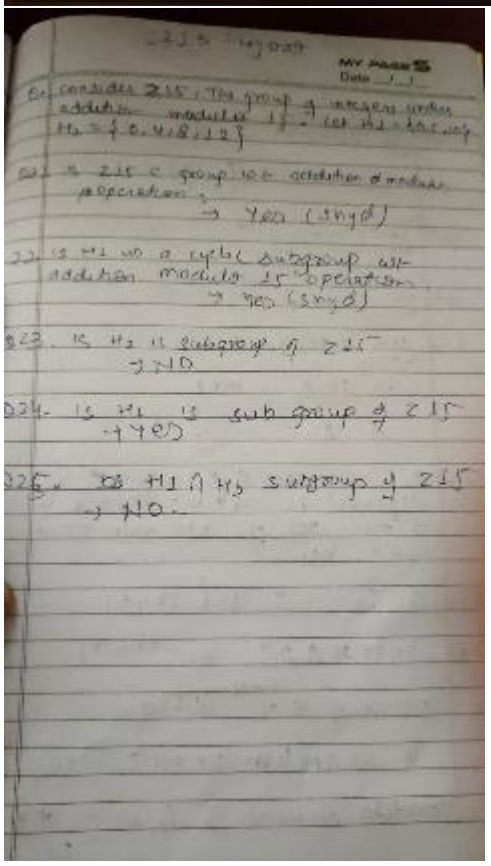

CHANDIGARH UNIVERSITY
PASSAGE
OPTIONS
Type here to search


PASSAGE
OPTIONS
Type here to search


CUNNINGHAM UNIVERSITY
PASSAGE
OPTIONS
Infinity
-0.5
-1
Type here to search


PASSAGE
OPTIONS
1
0
0.25
0.5




MY PAGES
Date / /

Ex: Consider Z_{15}: The group of integers under addition modulo 15. Let $H_1 = \{0, 5, 10\}$
$H_2 = \{0, 4, 8, 12\}$

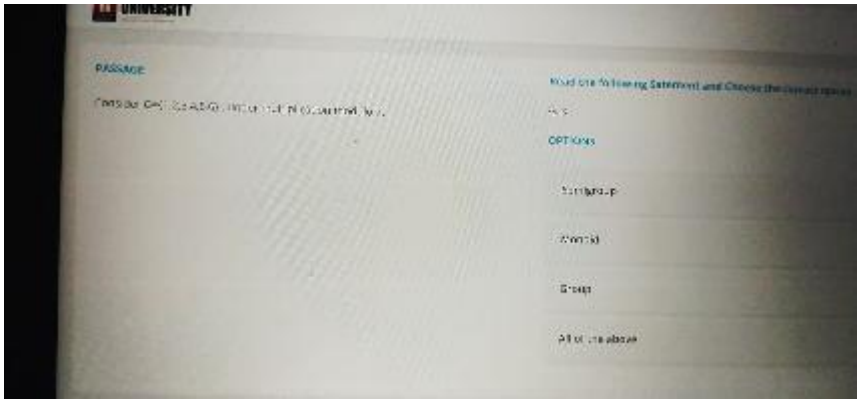
Q21. Is Z_{15} a group w.r.t addition modulo 15 operation.
→ Yes (Sym'd)

Q22. Is H_1 an cyclic subgroup w.r.t addition modulo 15 operation.
→ Yes (Sym'd)

Q23. Is H_2 a subgroup of Z_{15}
→ NO

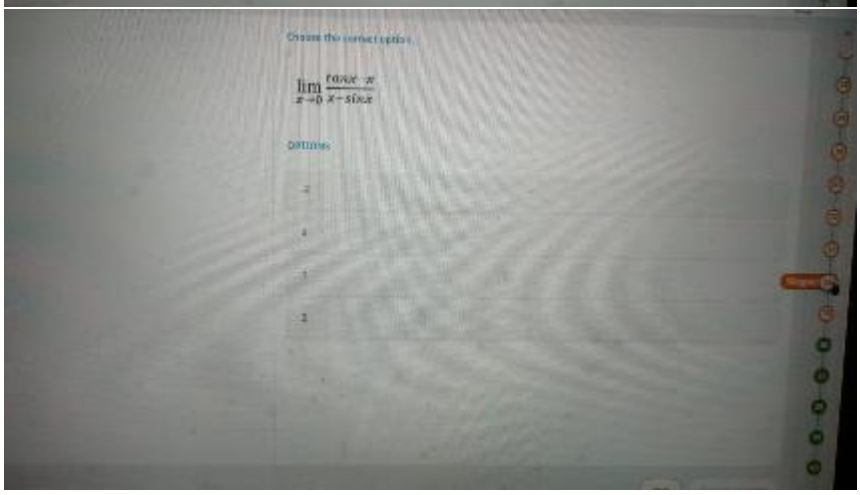
Q24. Is H_1 is sub group of Z_{15}
→ YES

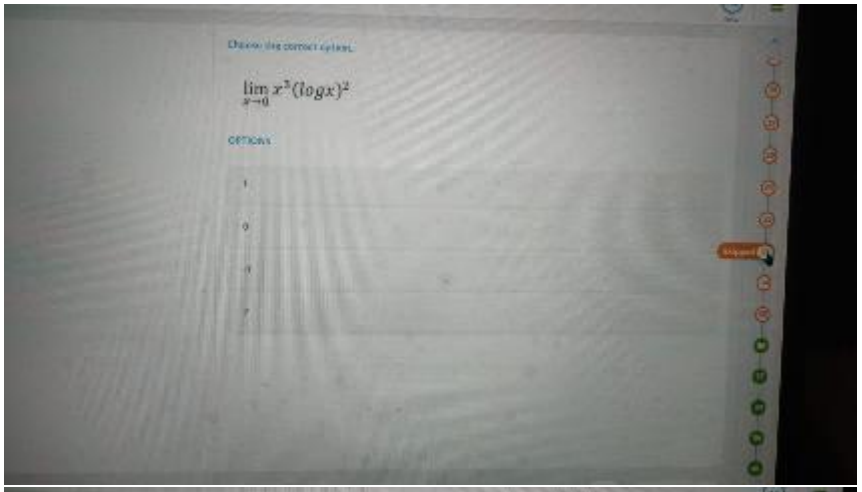
Q25. Is $H_1 \cap H_2$ subgroup of Z_{15}
→ NO.


PASSAGE
OPTIONS

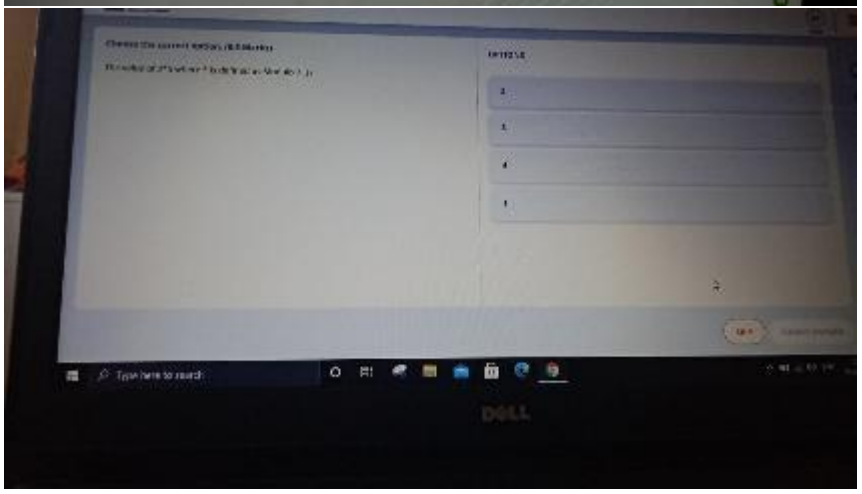

OPTIONS


$\lim_{x\to 0} \frac{e^x - e^{\sin x}}{x - \sin x}$
OPTIONS


$\lim_{x\to 0} \frac{\tan x - x}{x - \sin x}$
OPTIONS


Choose the correct option.
$\lim_{x\to 0} x^3(\log x)^2$
options
1
0
3
7


Choose the correct option.
$\lim_{x\to 0} \frac{x\cos x - \sin x}{x^2 \sin x}$
options
1
1/2
-1/2
0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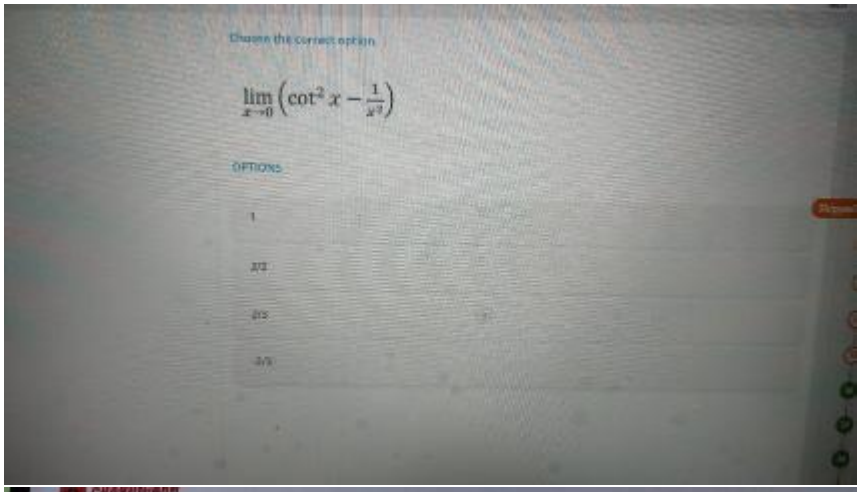
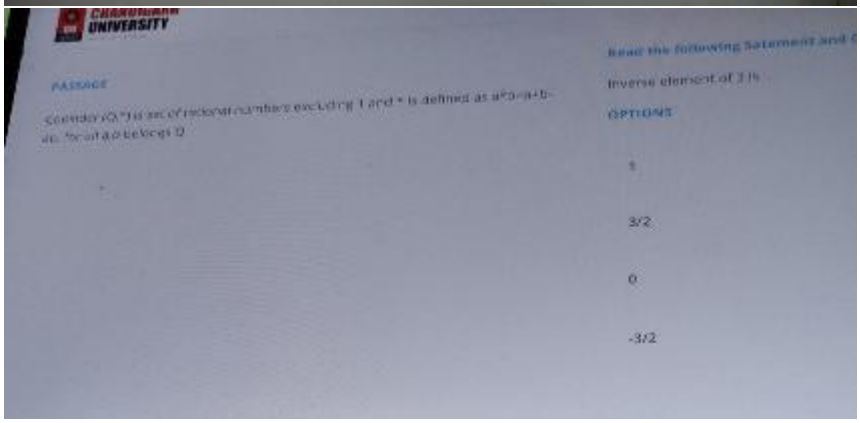
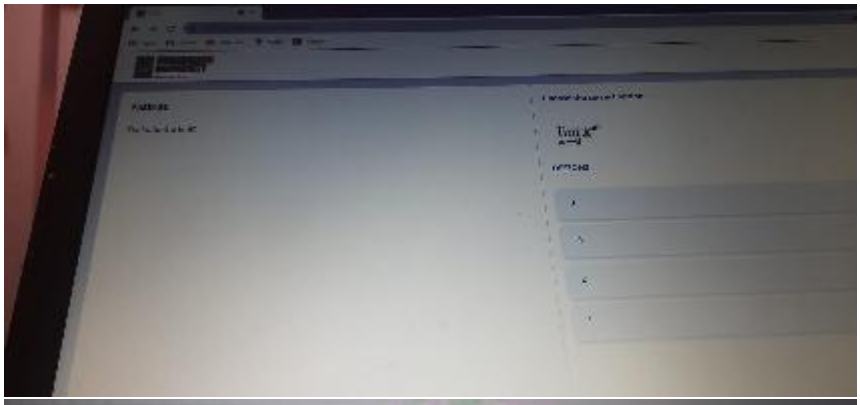
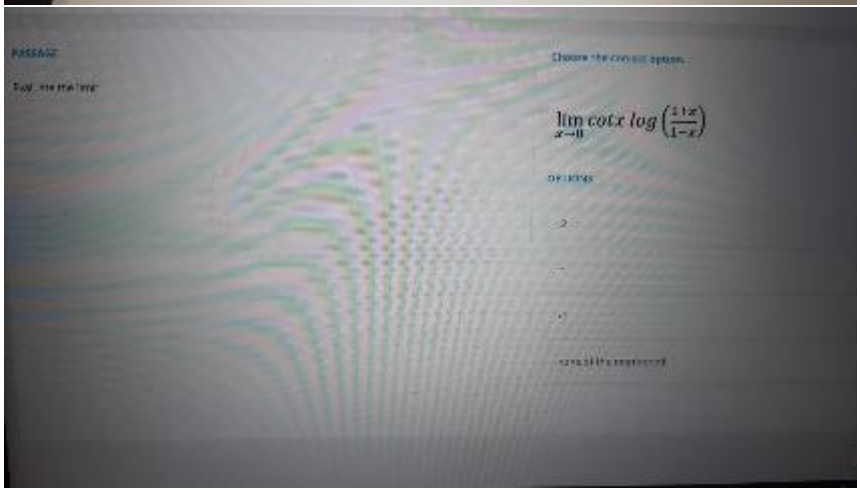
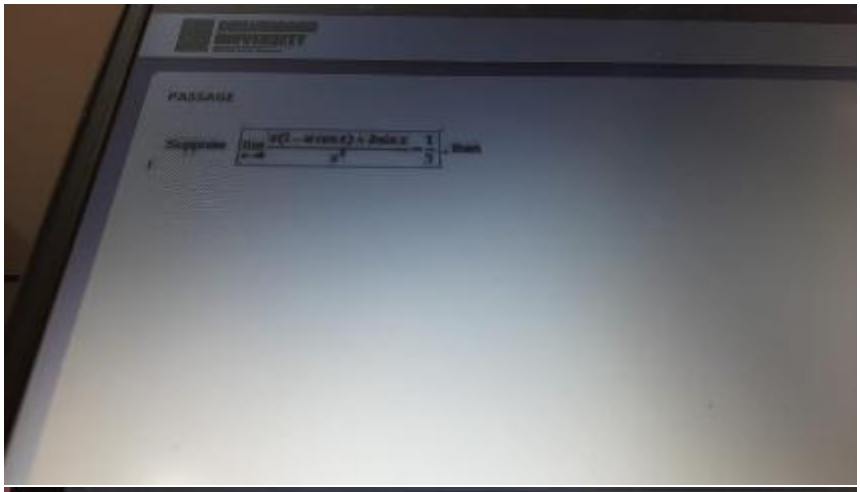

Choose the correct option
$\lim_{x\to 0}\left(\cot^2 x - \frac{1}{x^2}\right)$
OPTIONS
1
2/3
-2/3


UNIVERSITY
PASSAGE
Read the following Statement and
Inverse element of 3 is
OPTIONS
1
3/2
0
-3/2

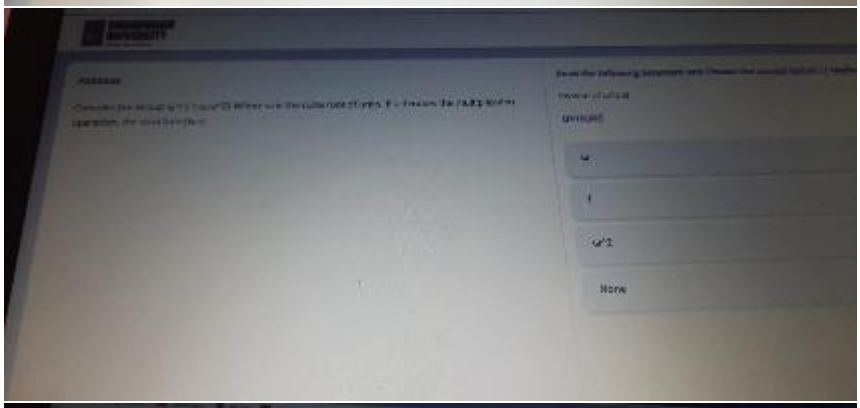



PASSAGE
Choose the correct option
$\lim_{x\to 1} \cot x \log\left(\frac{1+x}{1-x}\right)$
OPTIONS
2



PASSAGE

Suppose $\lim_{x \to 0} \frac{x(\square - \sin x) + 2\sin x}{x^3} = \frac{1}{3}$, then



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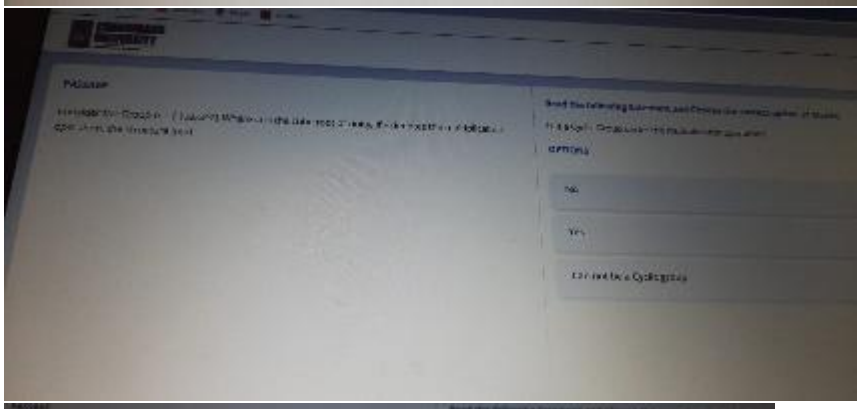

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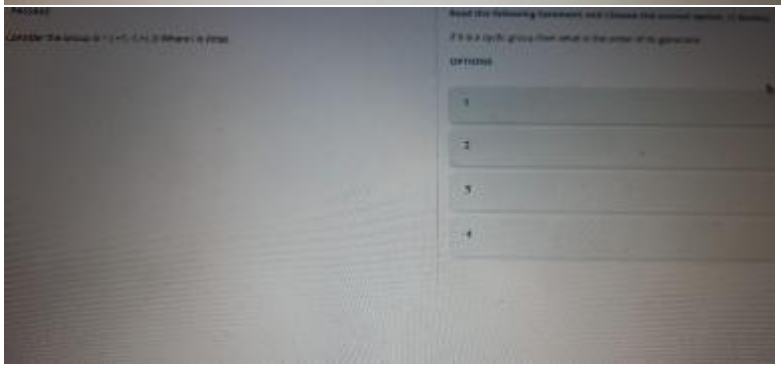

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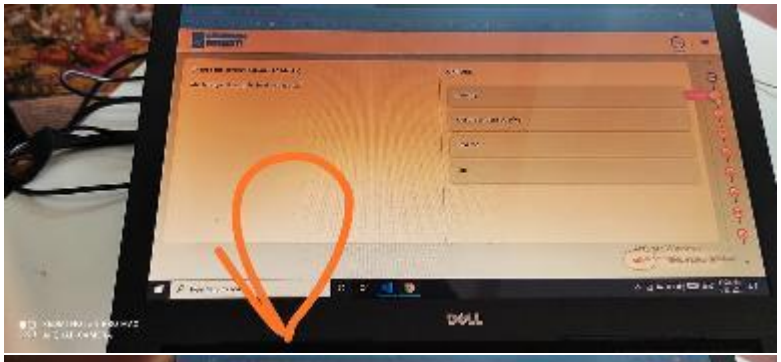

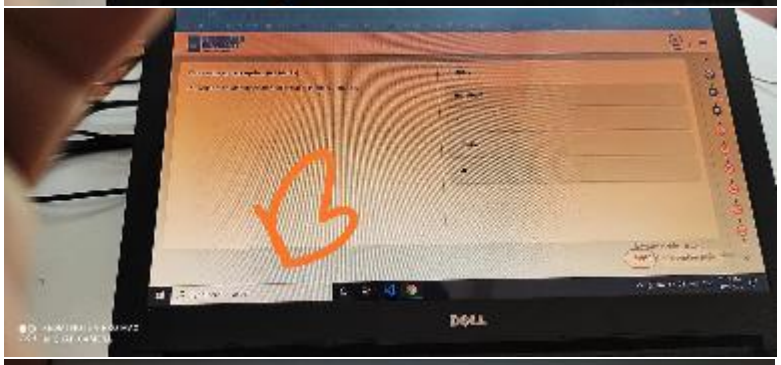

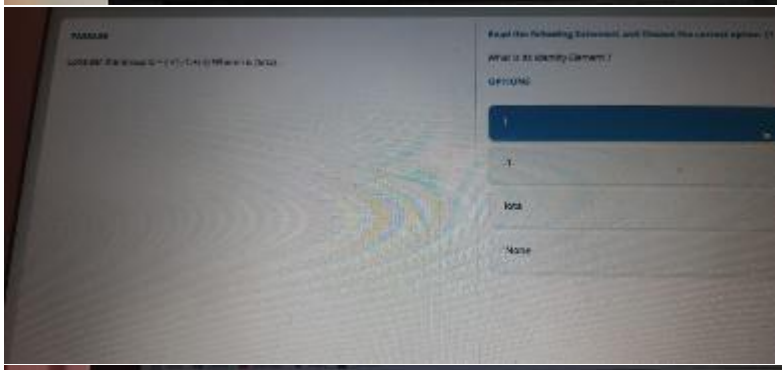

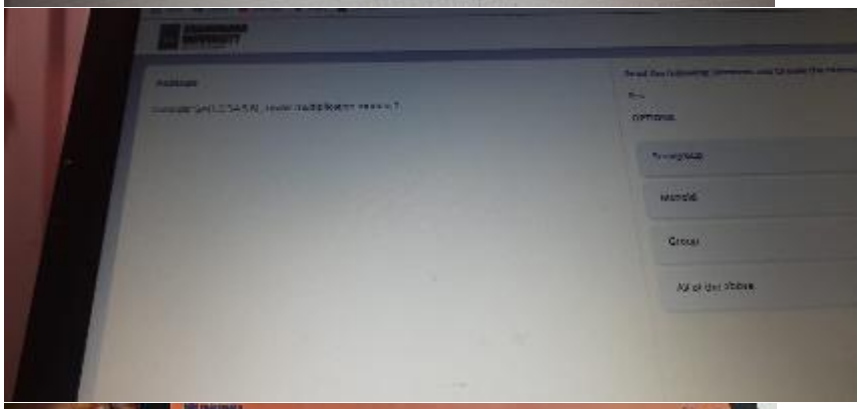

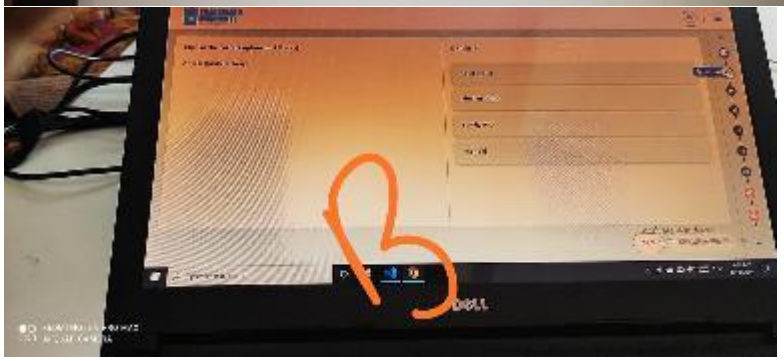

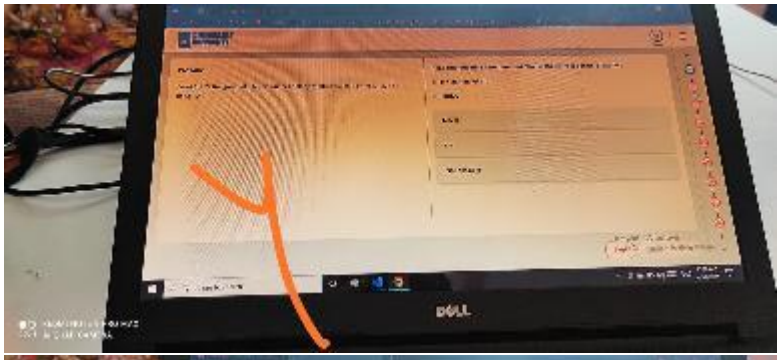
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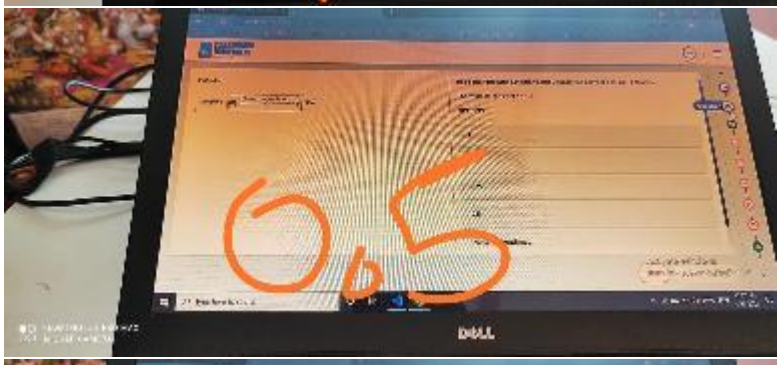
0,5
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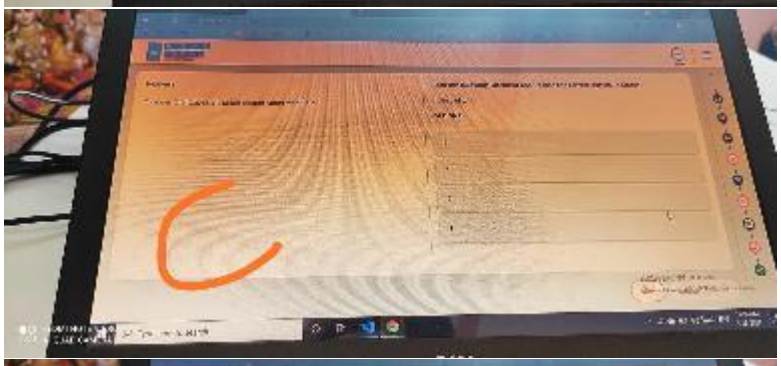
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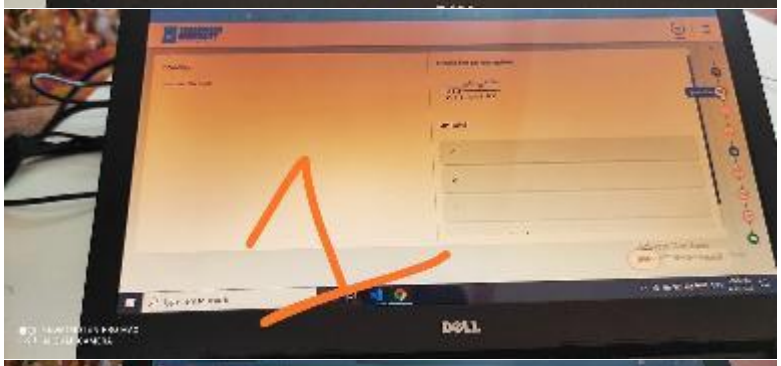
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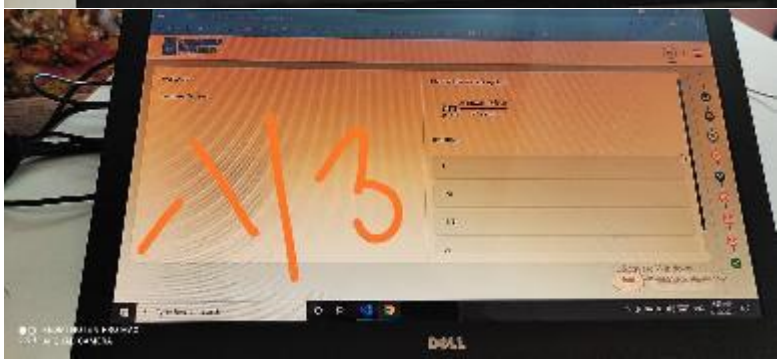
DELL


1/3
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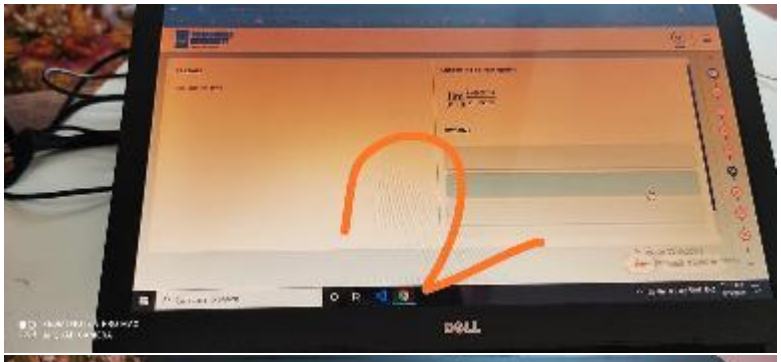
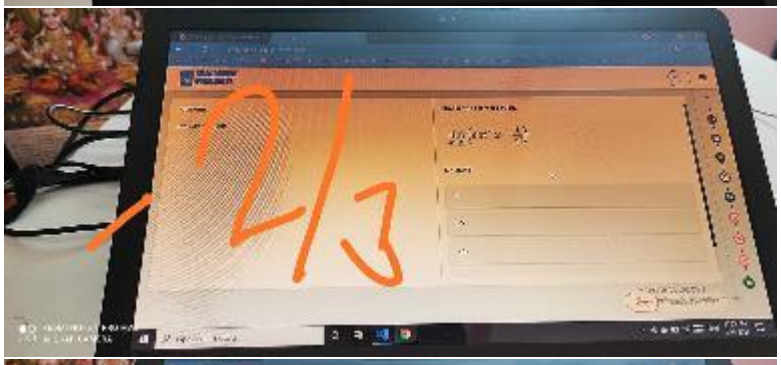
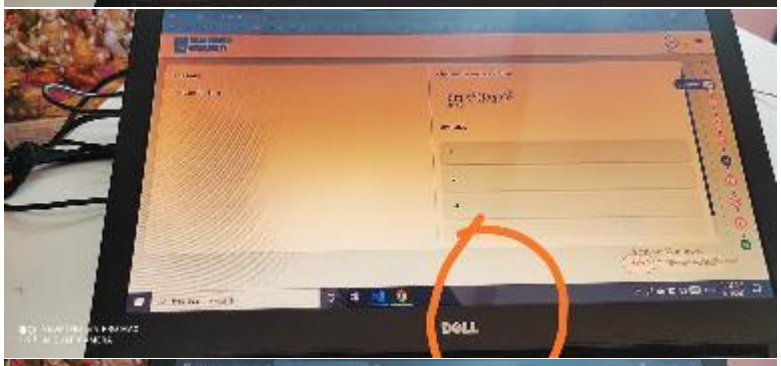
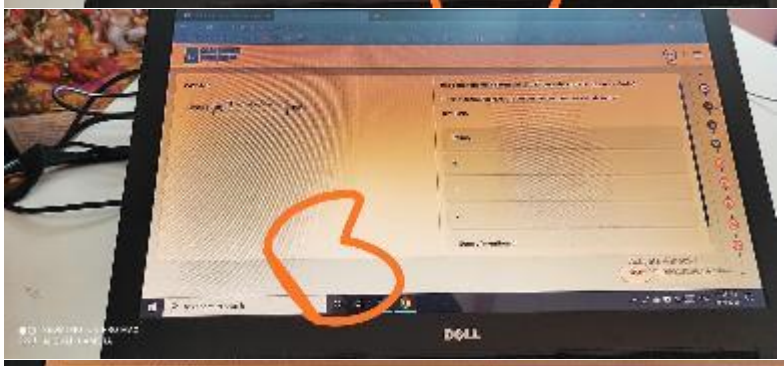
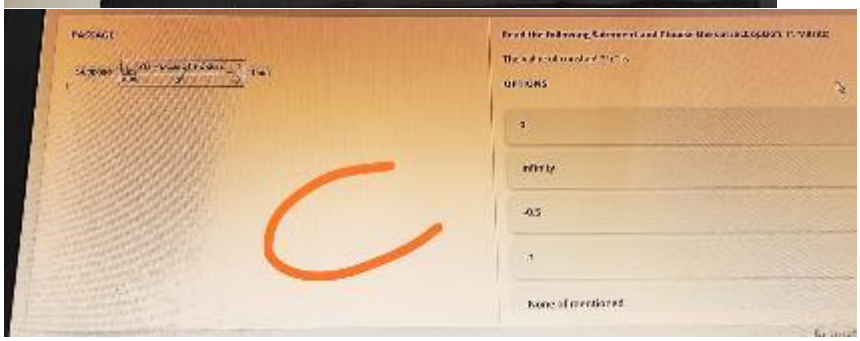
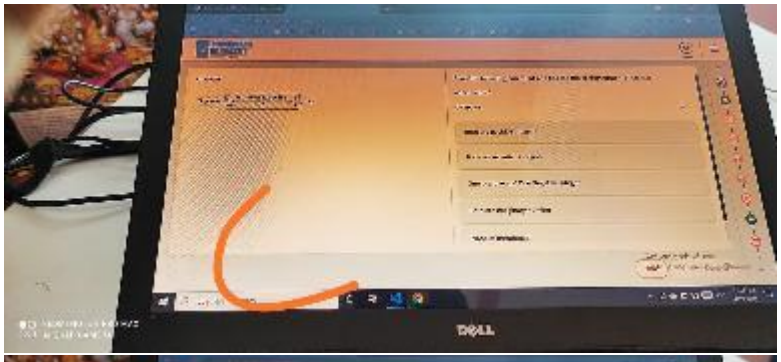


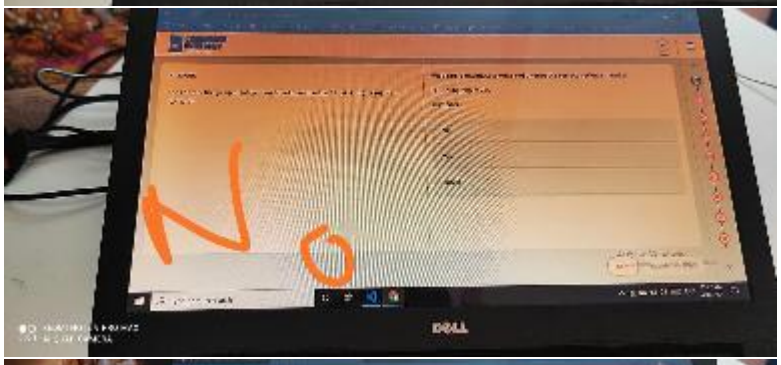


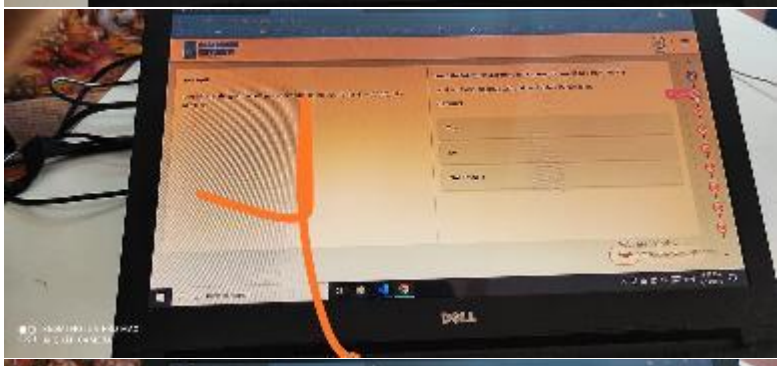


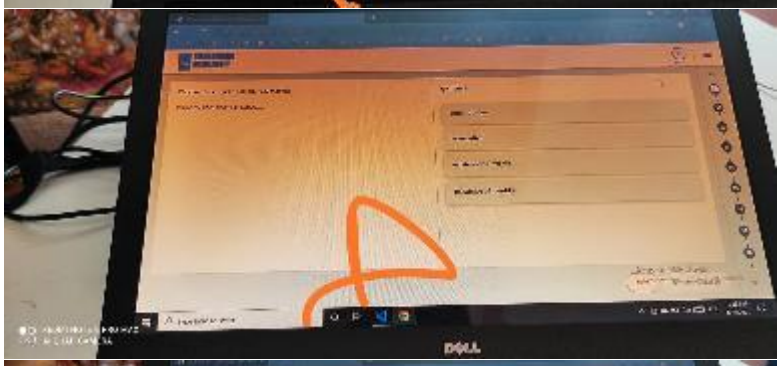


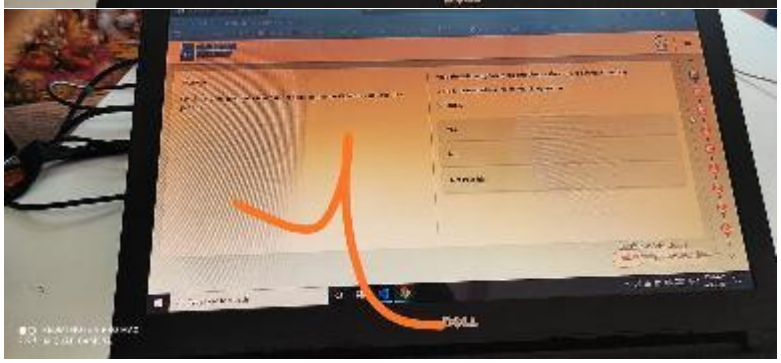


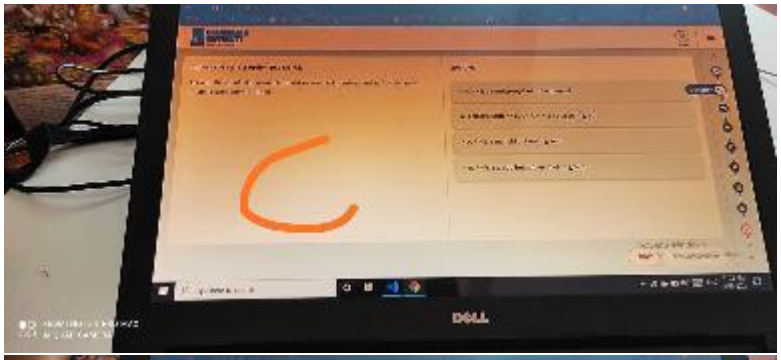
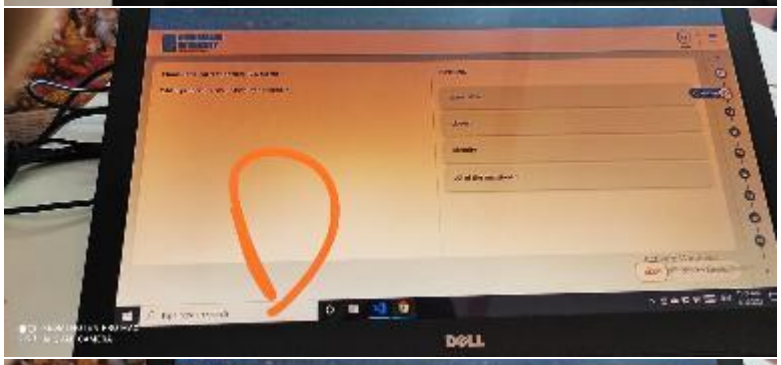
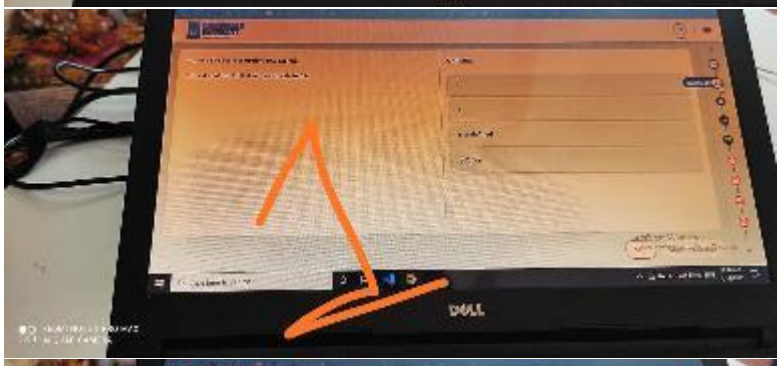
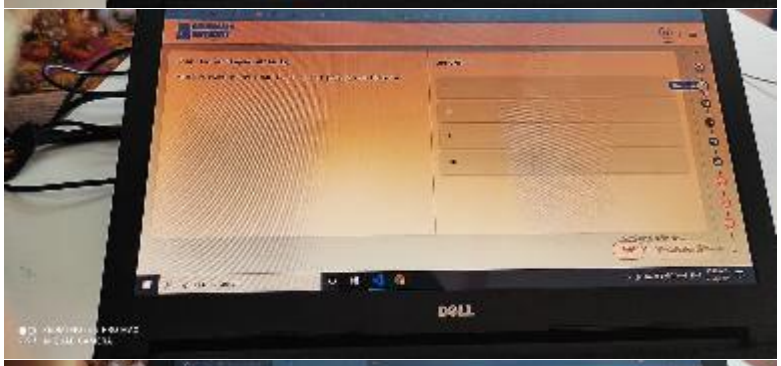
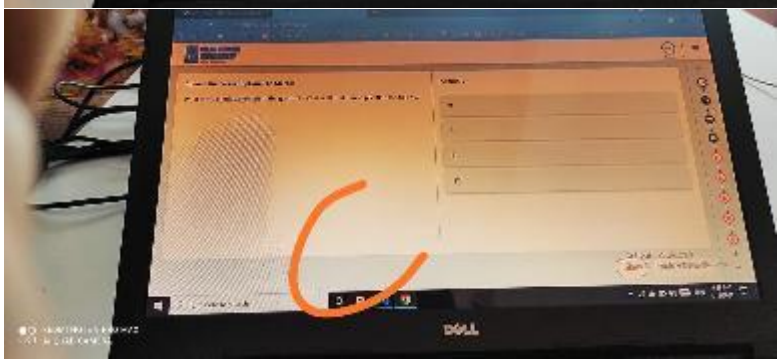


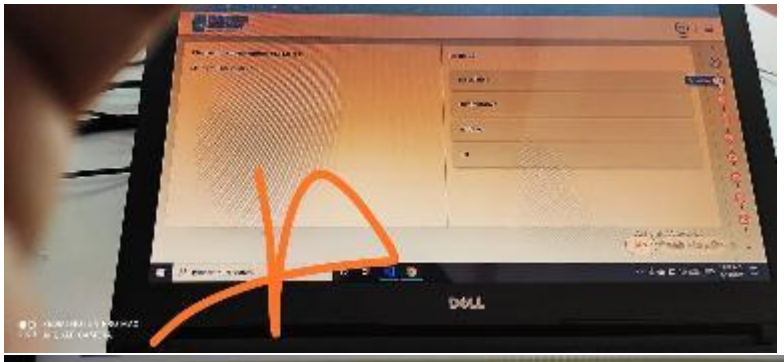










Choose the correct option. (0.5 Marks)

There exist at most ..... subgroups of a group of prime order.

Information | Question | Q33

Choose the correct option.

$$\lim_{x \to 0} \frac{e^x - e^{\sin x}}{x - \sin x}$$

OPTIONS

-1

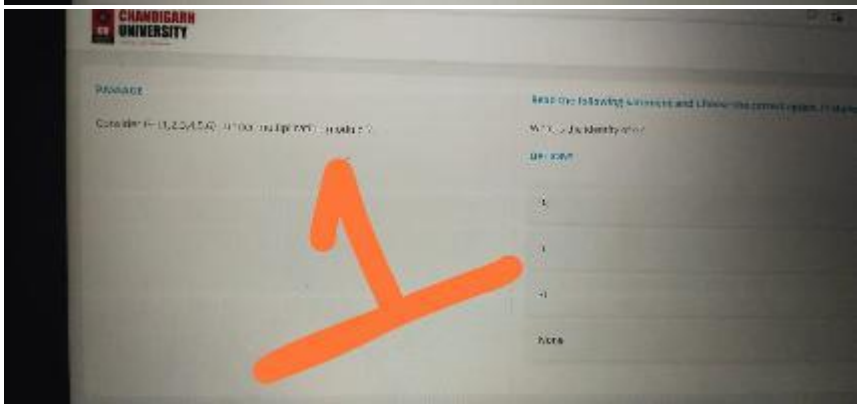
0

1

none of the mentioned

SKIP SUB


CHANDIGARH UNIVERSITY
PASSAGE
4


CHANDIGARH UNIVERSITY
PASSAGE
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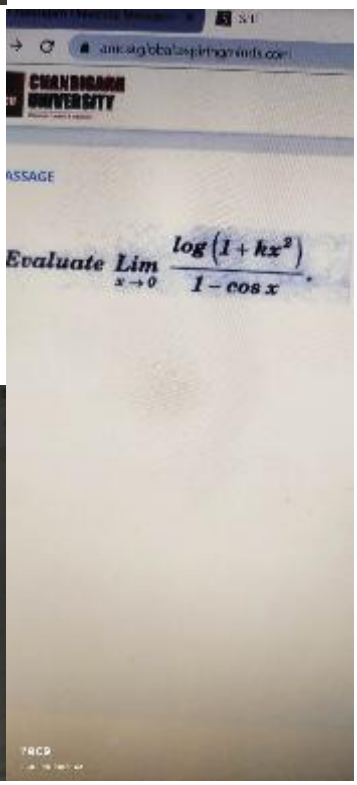
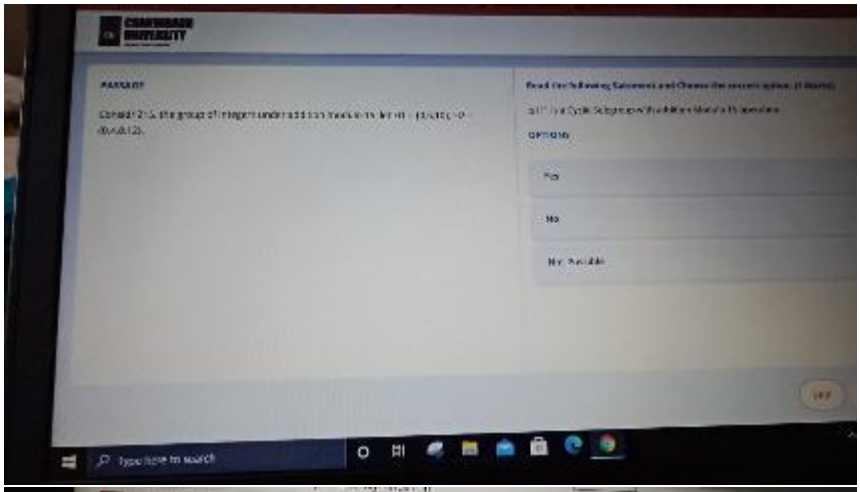
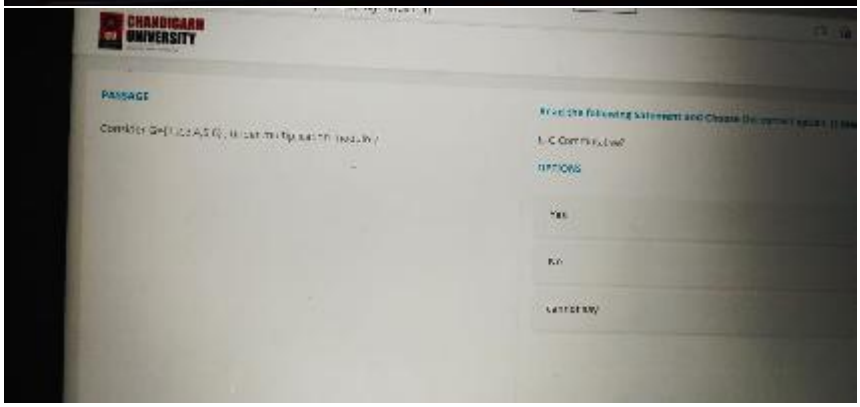
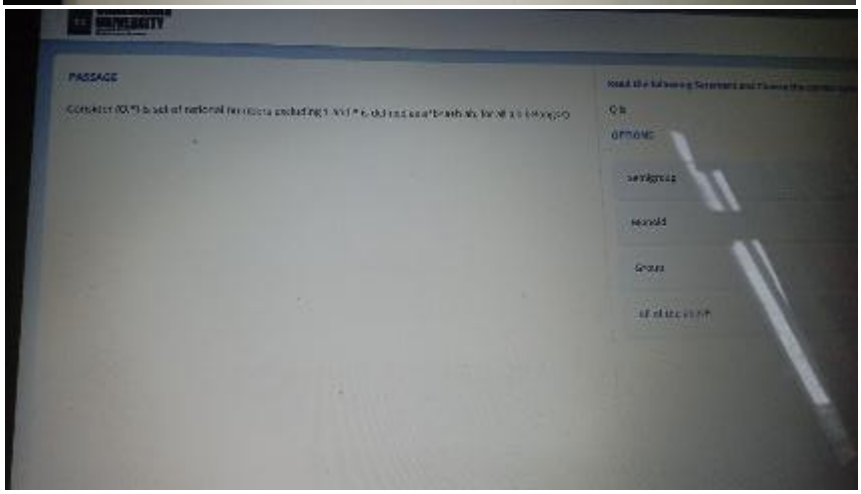

CHANDIGARH UNIVERSITY
ASSAGE
Evaluate $\lim_{x \to 0} \frac{\log(1+kx^2)}{1-\cos x}$.


CHANDIGARH UNIVERSITY
5


PASSAGE
OPTIONS
Yes
No
Type here to search


CHANDIGARH UNIVERSITY
PASSAGE
OPTIONS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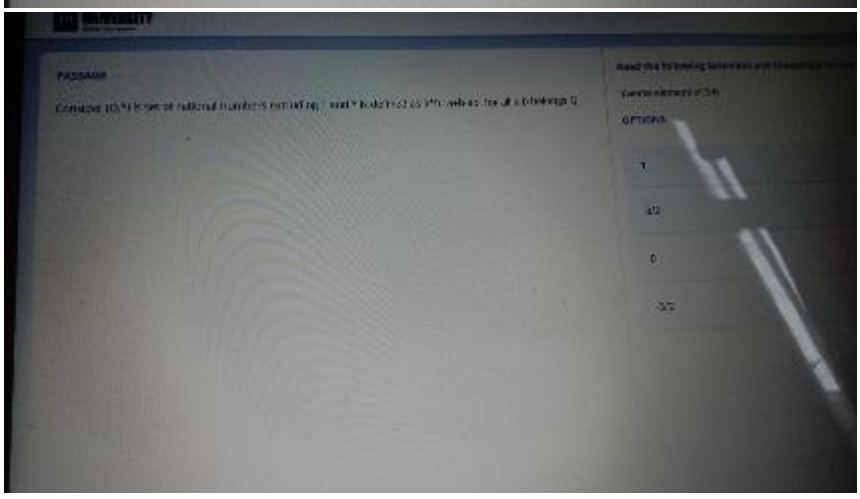
OPTIONS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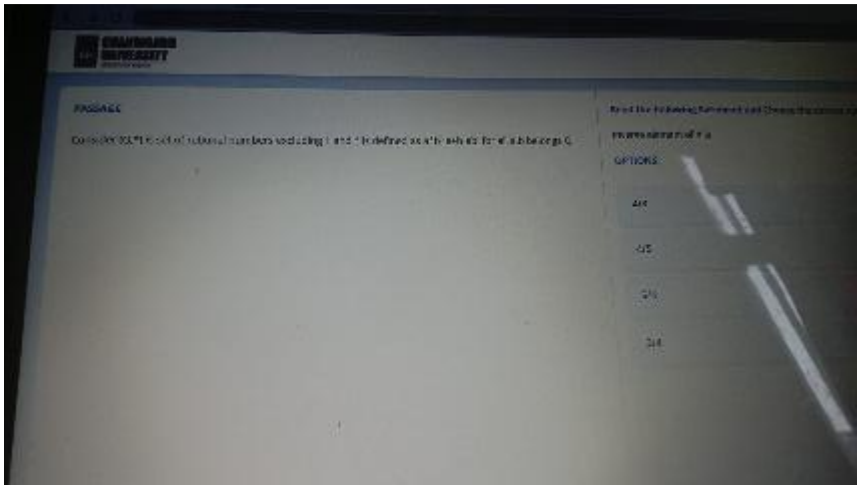
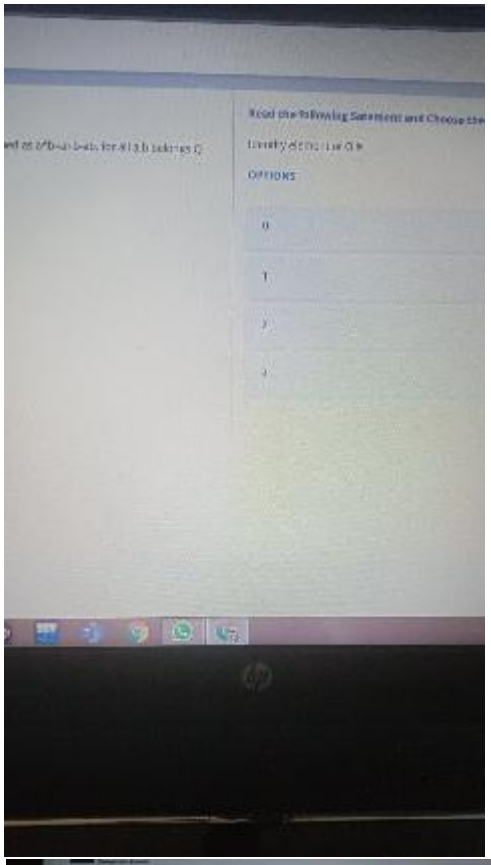
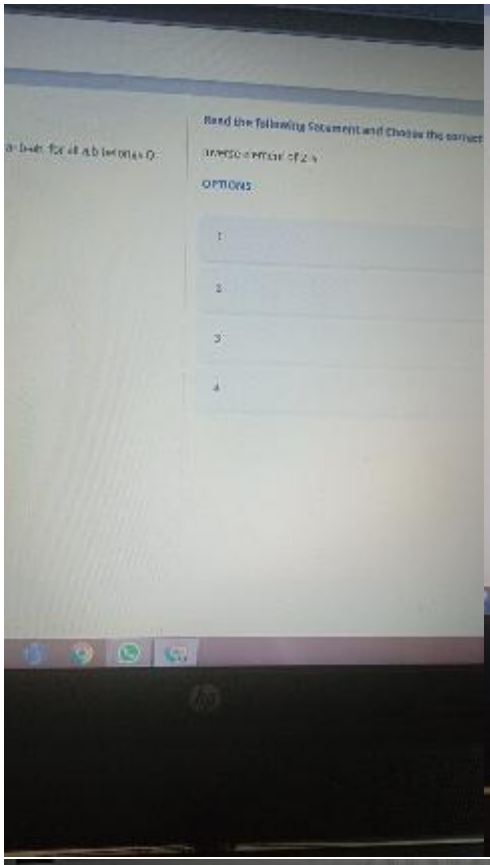
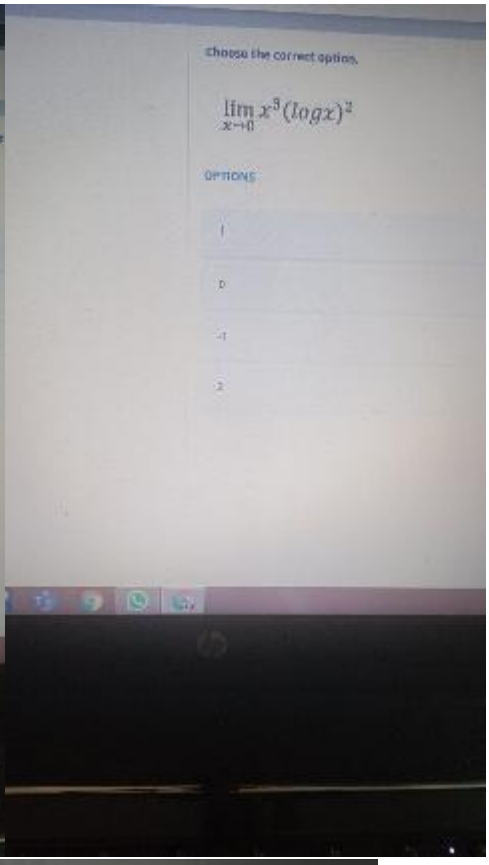
OPTIONS

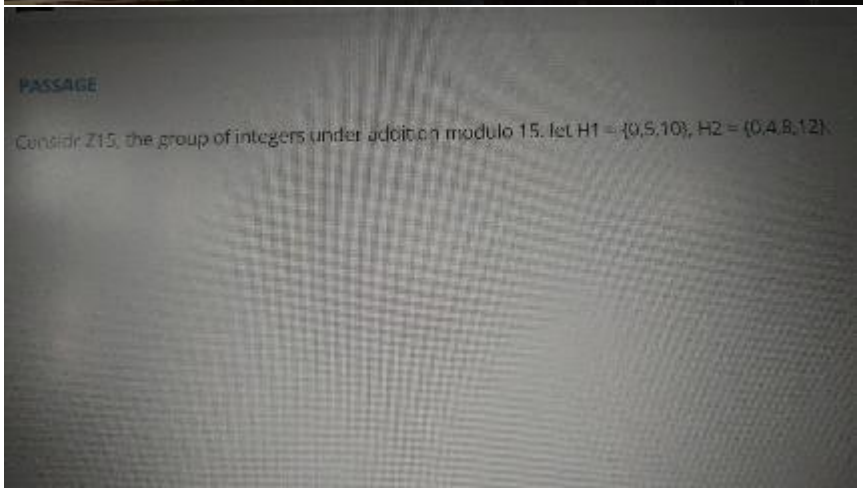

PASSAGE
OPTIONS

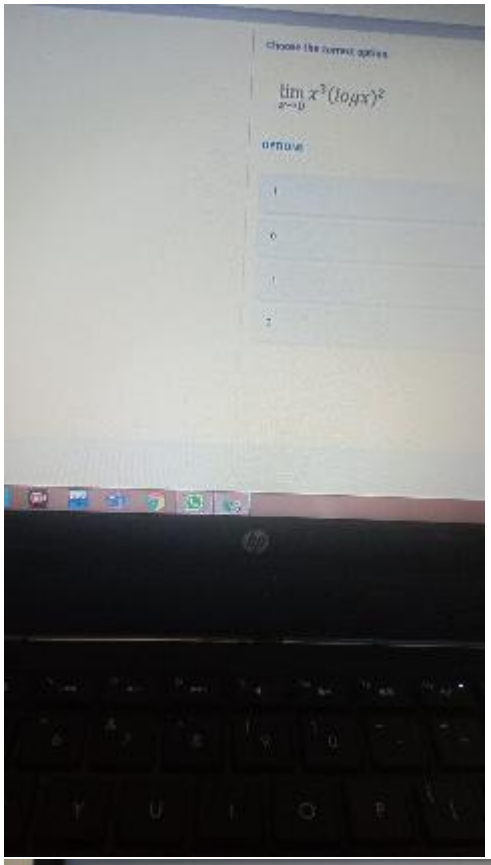

OPTIONS

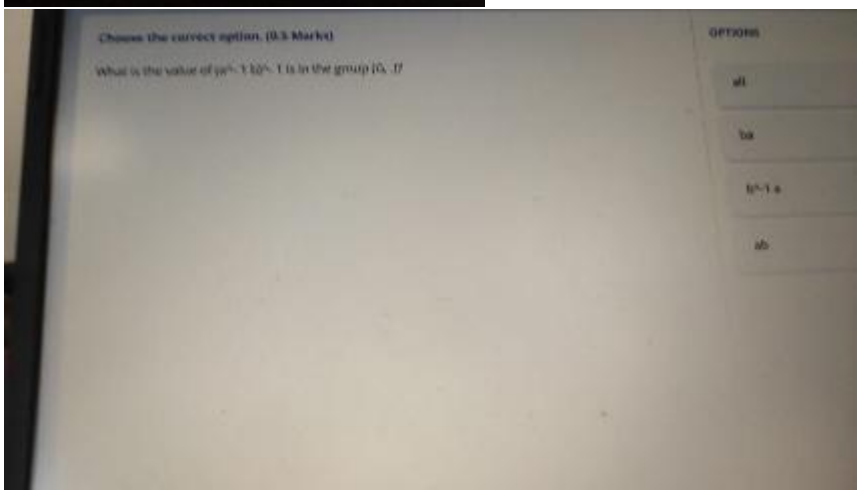

PASSAGE
OPTIONS

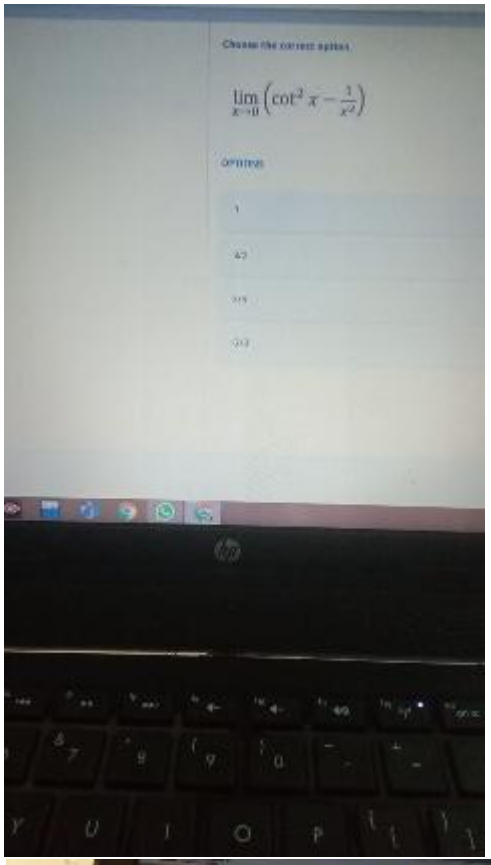

Read the following Statement and Choose the correct
OPTIONS
1
2
3
4

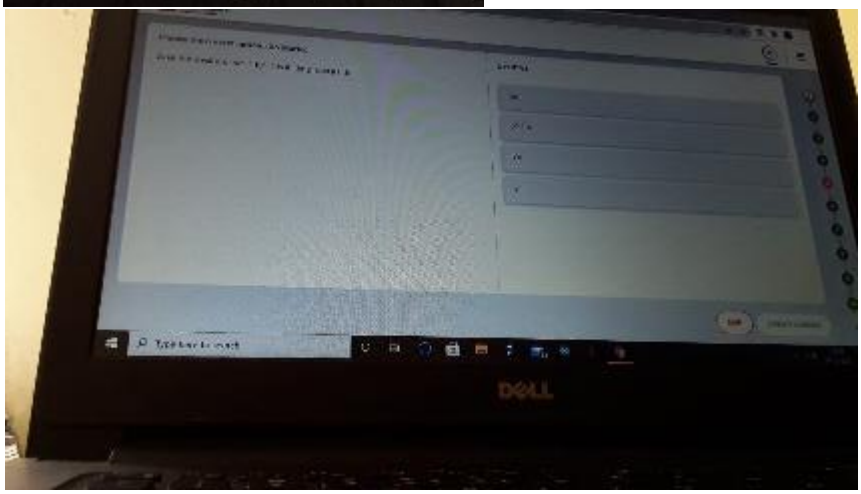

Choose the correct option.
$\lim_{x \to 0} x^3 (\log x)^2$
OPTIONS
1
0
-1
2

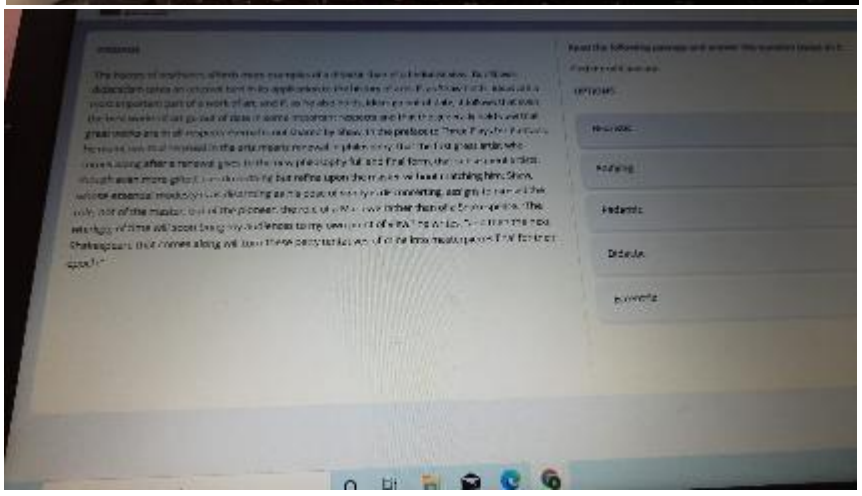

PASSAGE
Consider Z15, the group of integers under addition modulo 15. let H1 = {0,5,10}, H2 = {0,4,8,12}.

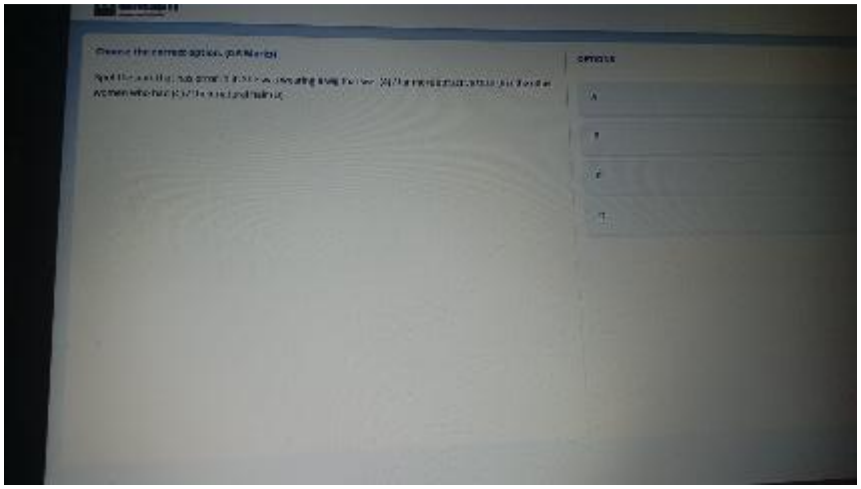

$\lim_{x \to 0} x^3 (\log x)^2$

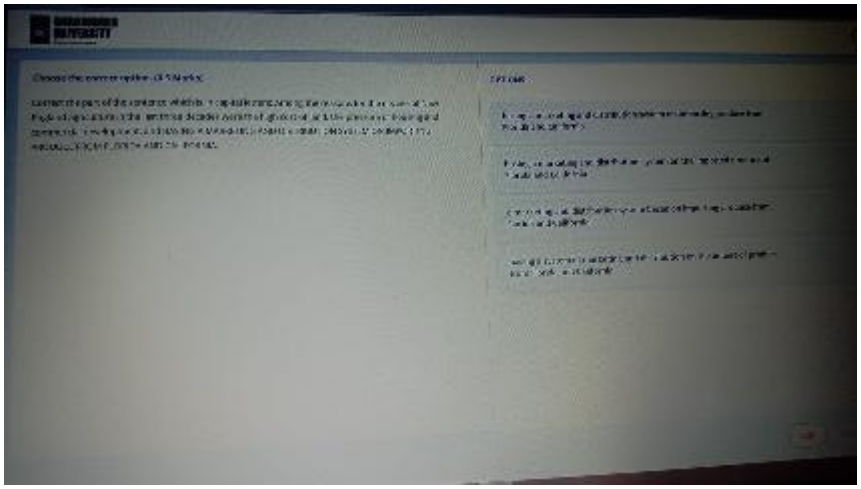

OPTIONS

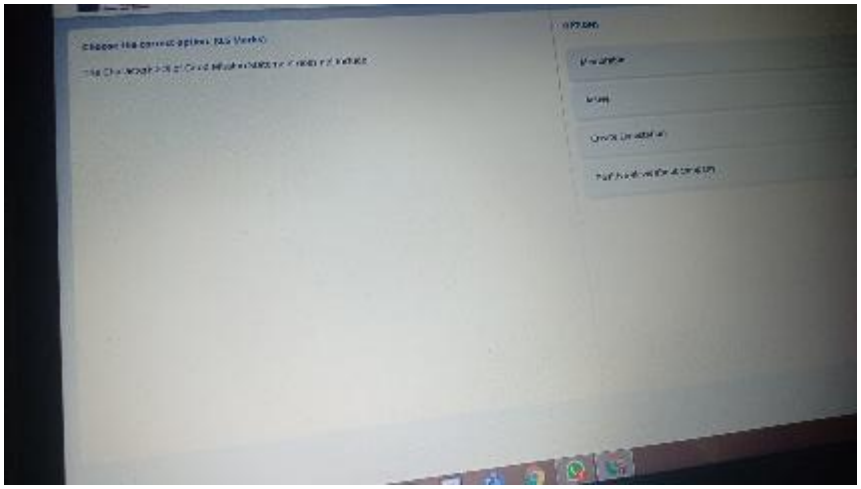

Choose the correct option
$\lim_{x\to 0}\left(\cot^2 x - \frac{1}{x^2}\right)$
Options

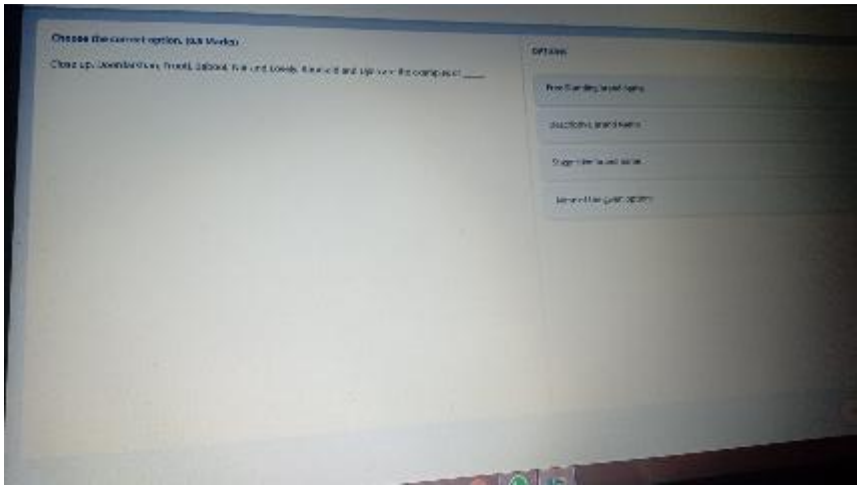


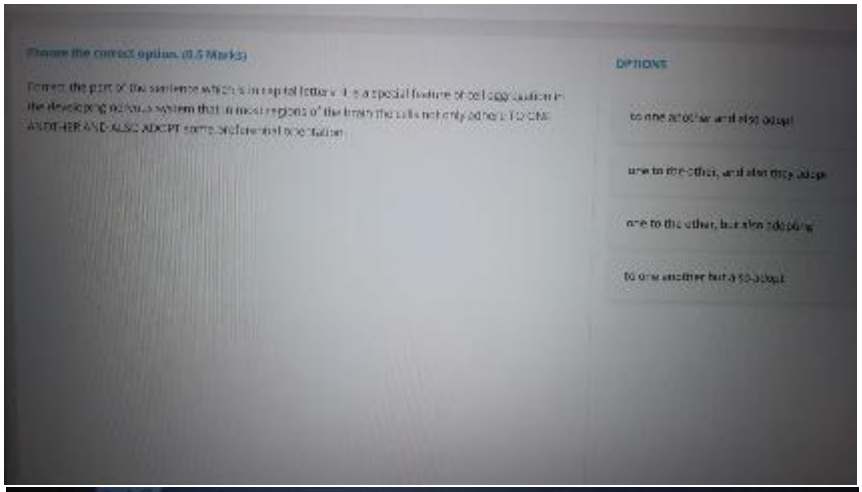


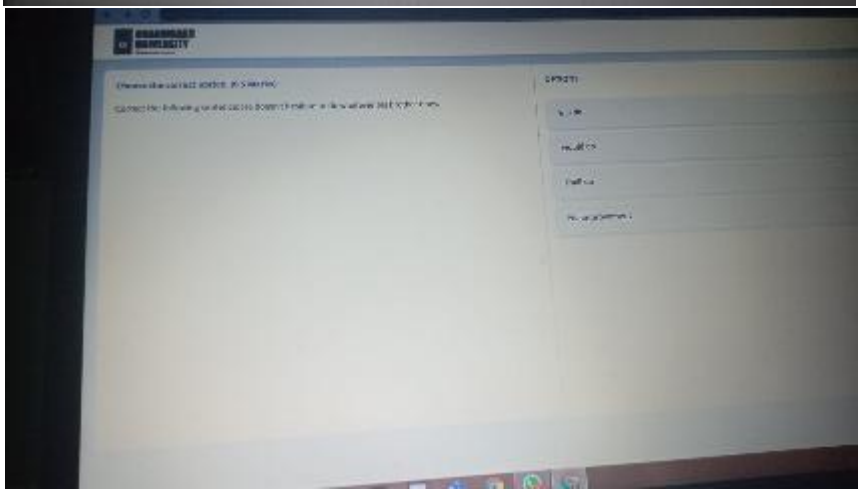


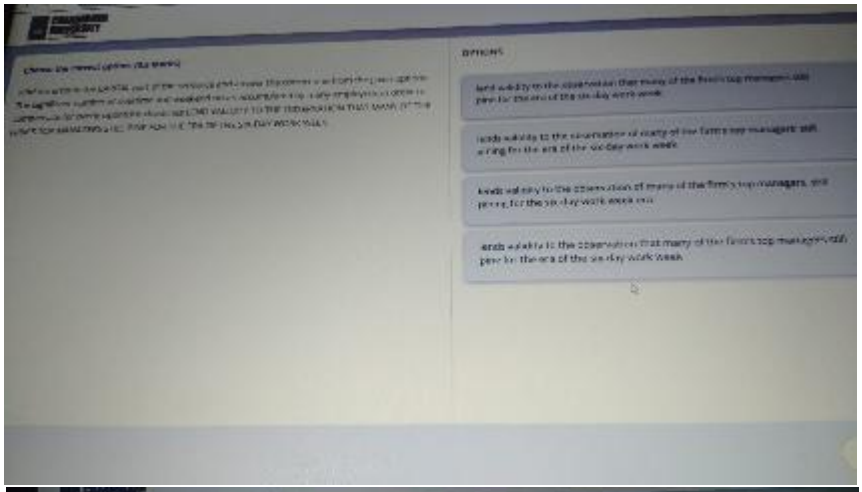


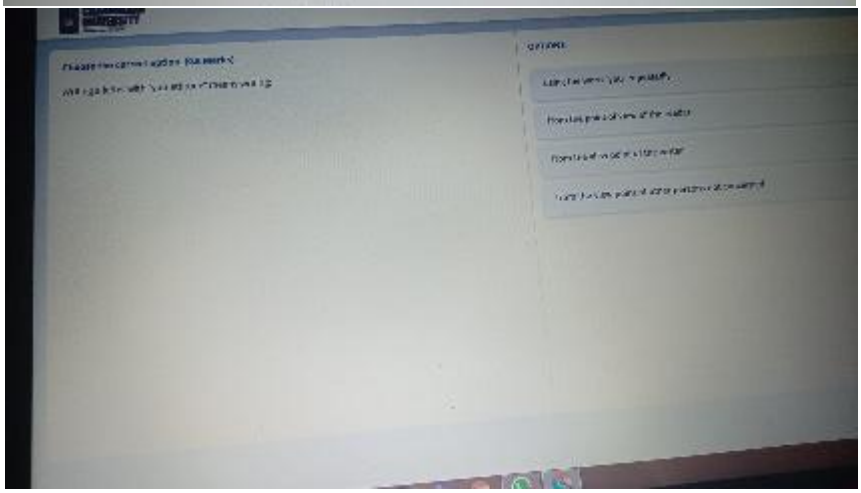


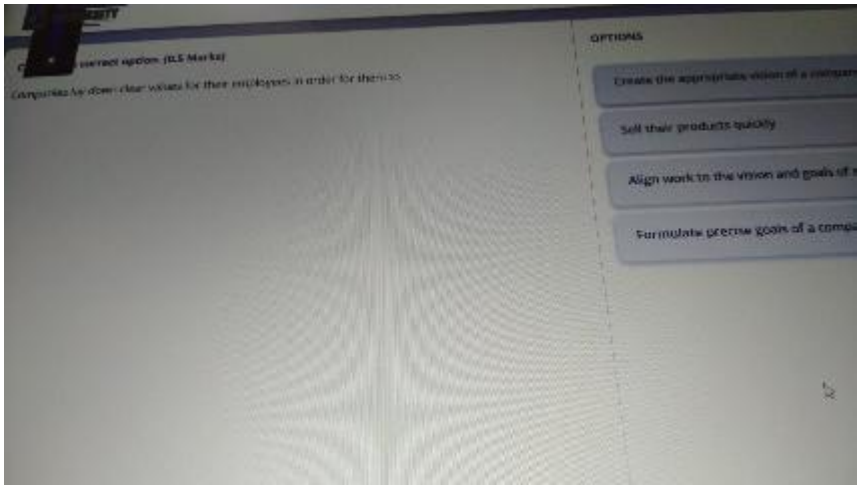


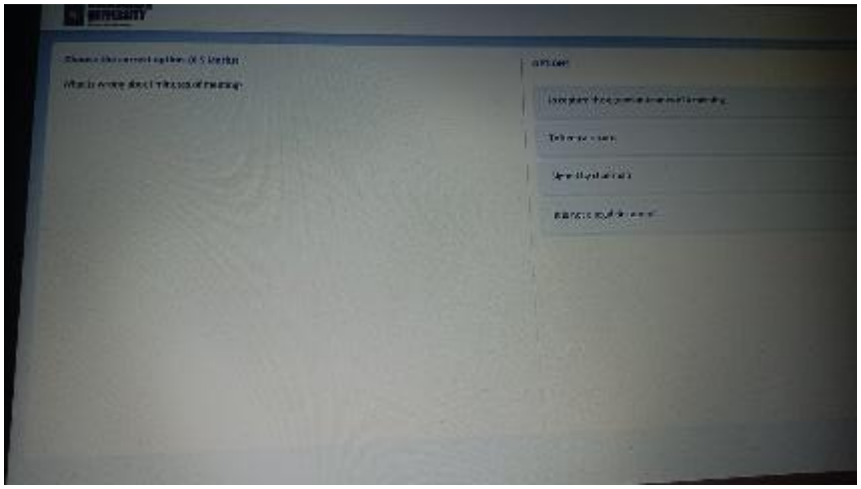

OPTIONS

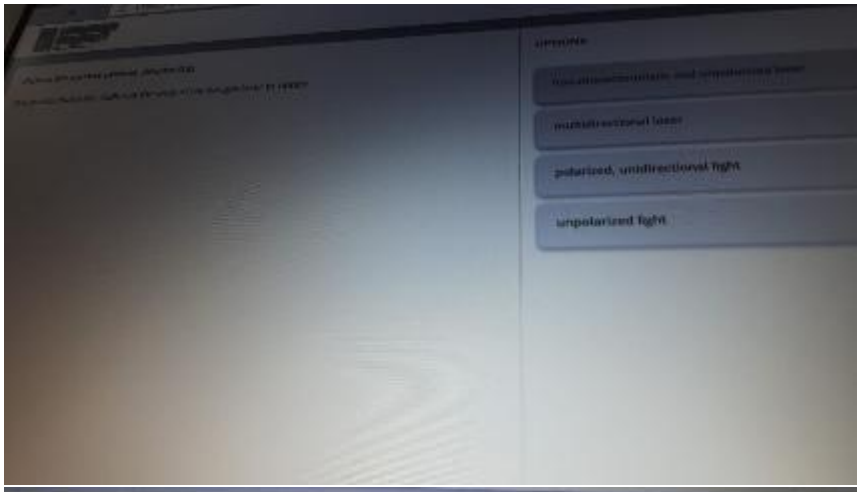


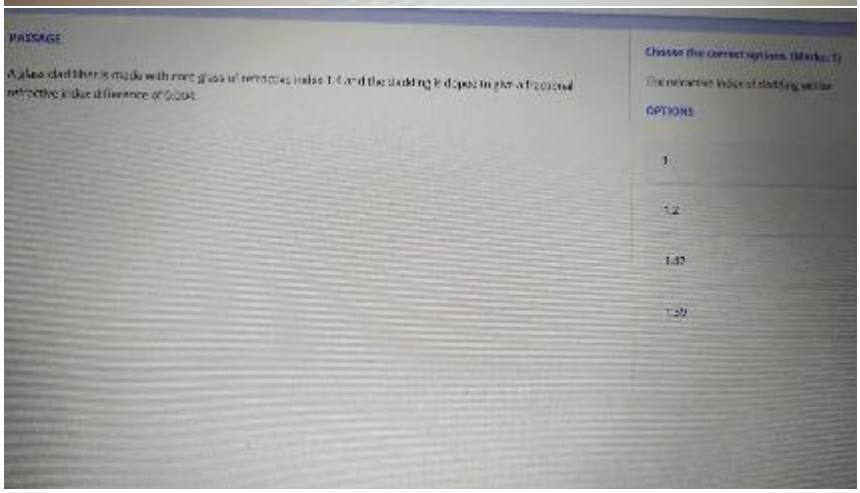


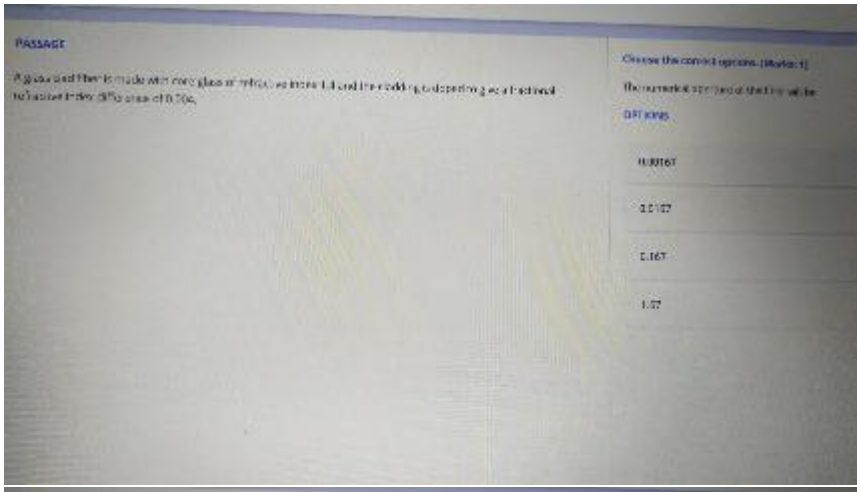


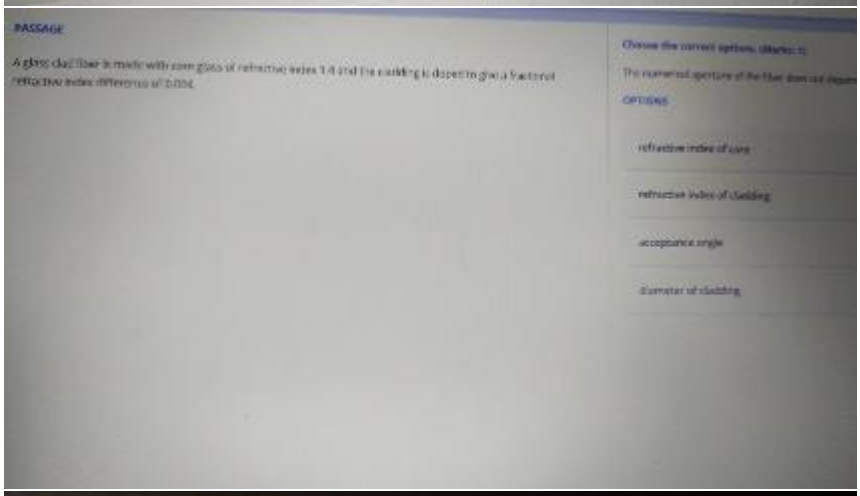

OPTIONS
Sell their products quickly

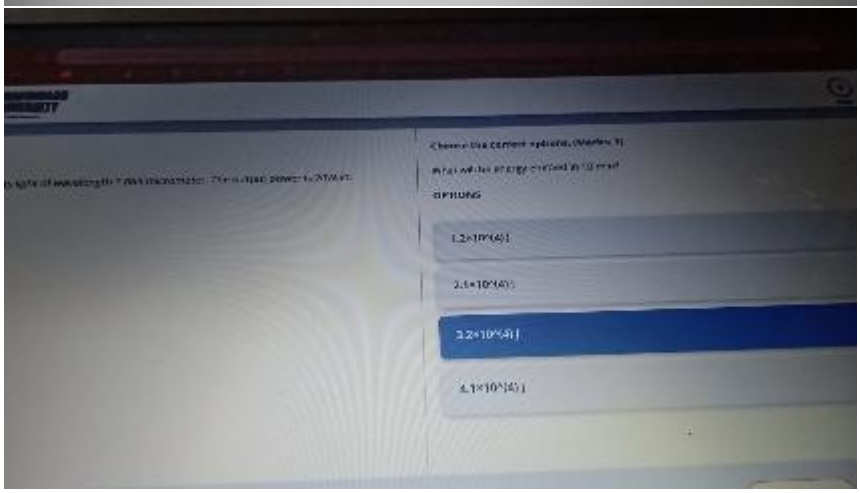


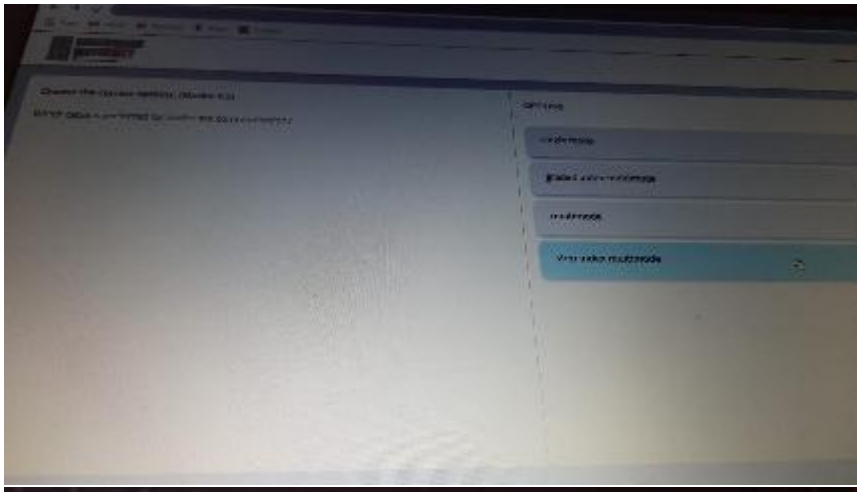

polarised, unidirectional light
unpolarised light

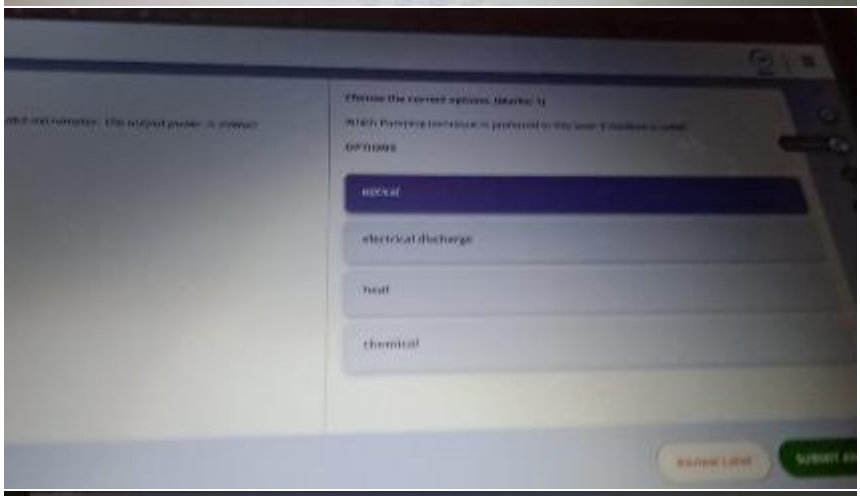

PASSAGE
OPTIONS

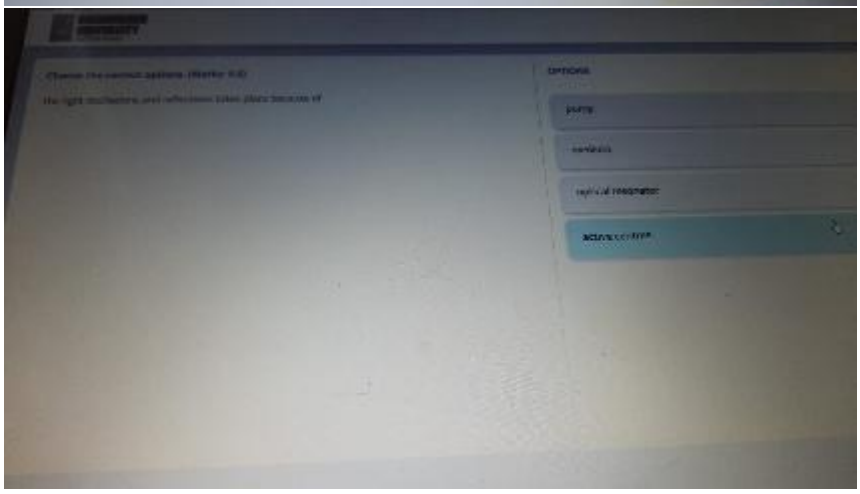

PASSAGE
Choose the correct options. (Marks: 1)
OPTIONS
1.167
1.17

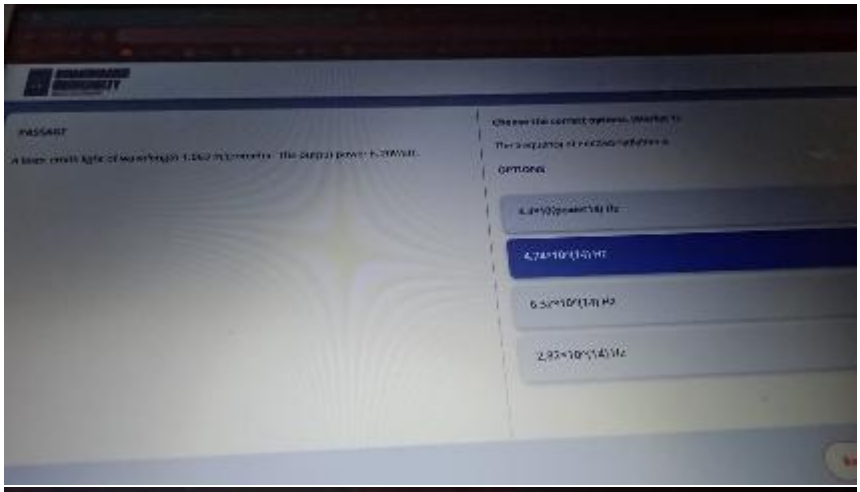

PASSAGE
Choose the correct options. (Marks: 1)
OPTIONS
refractive index of core
refractive index of cladding
acceptance angle
diameter of cladding

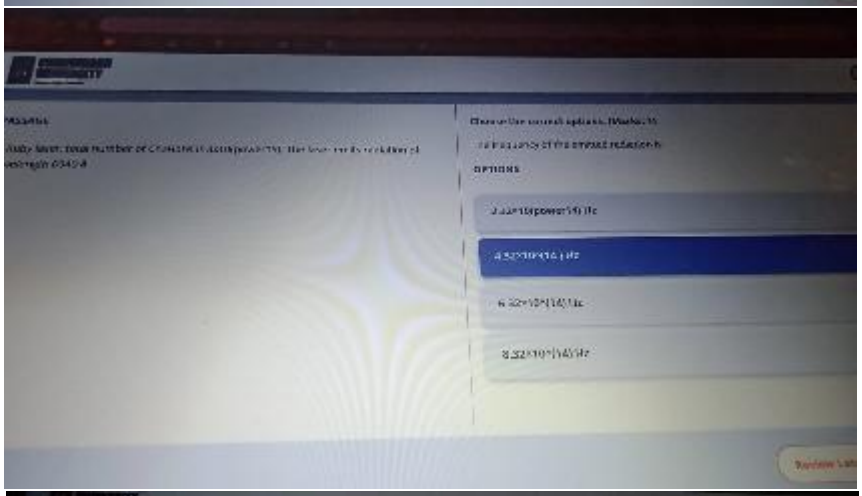

OPTIONS

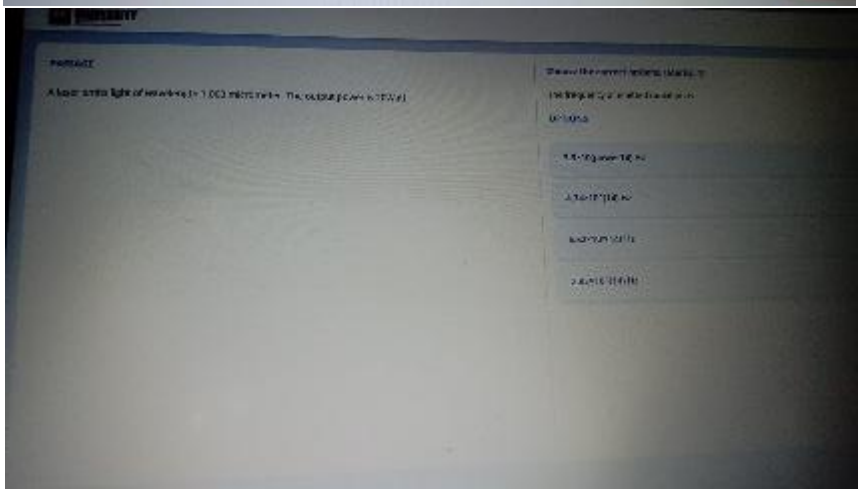


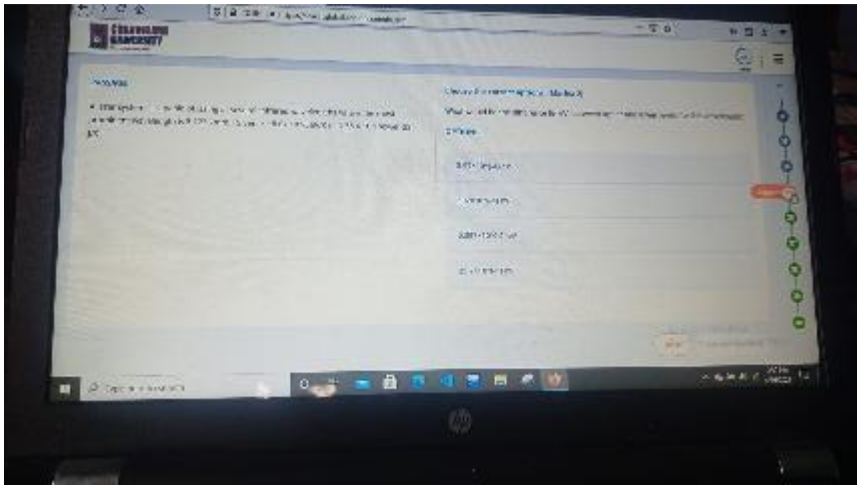

electrical discharge
heat
chemical

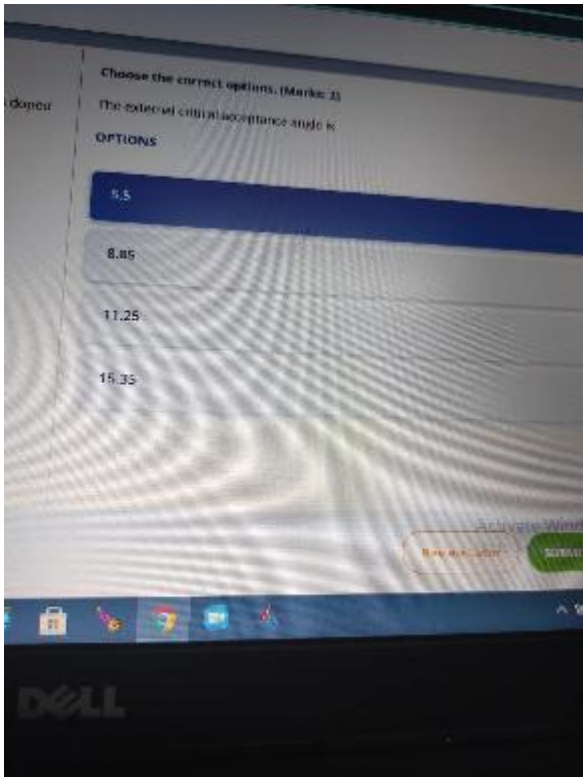


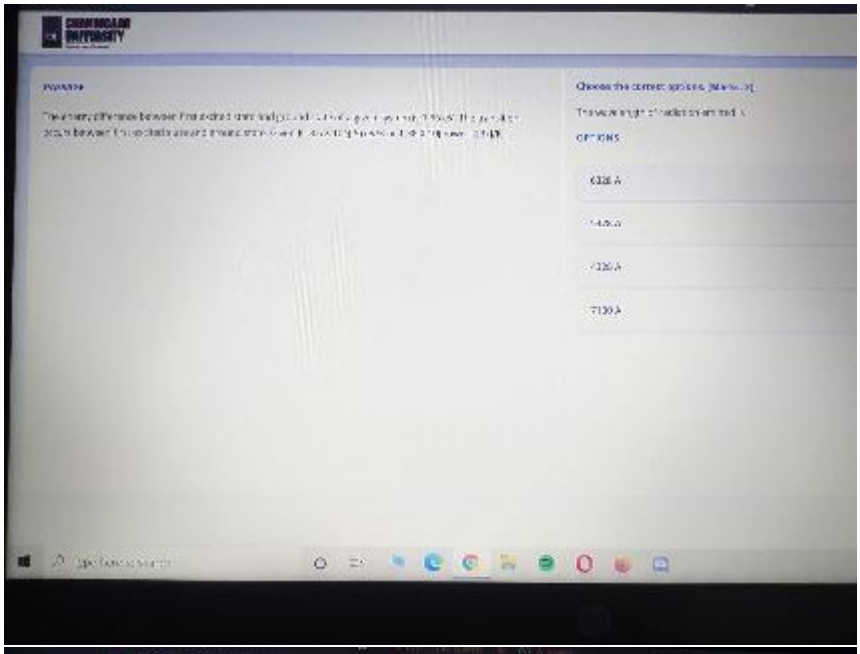

PASSAGE
OPTIONS

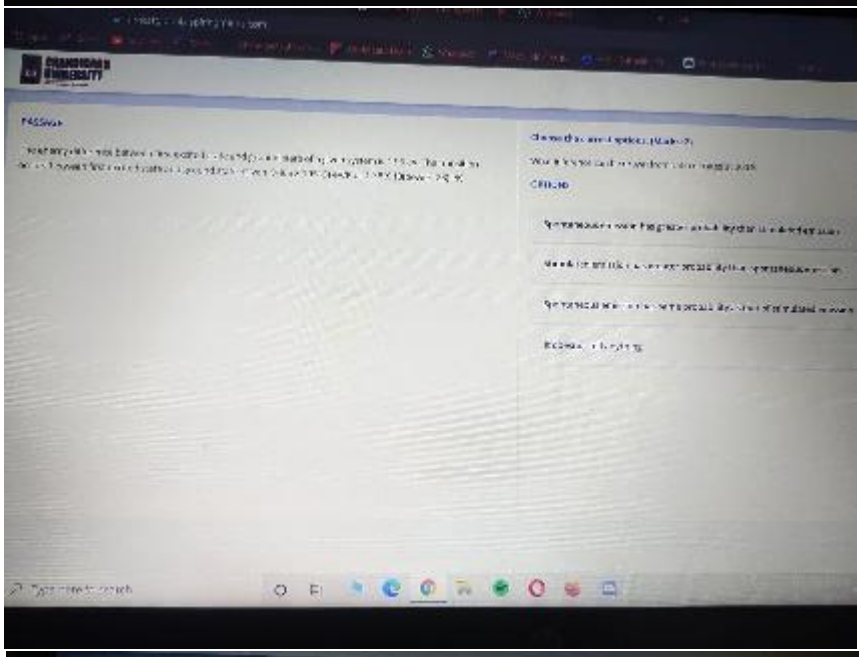

OPTIONS

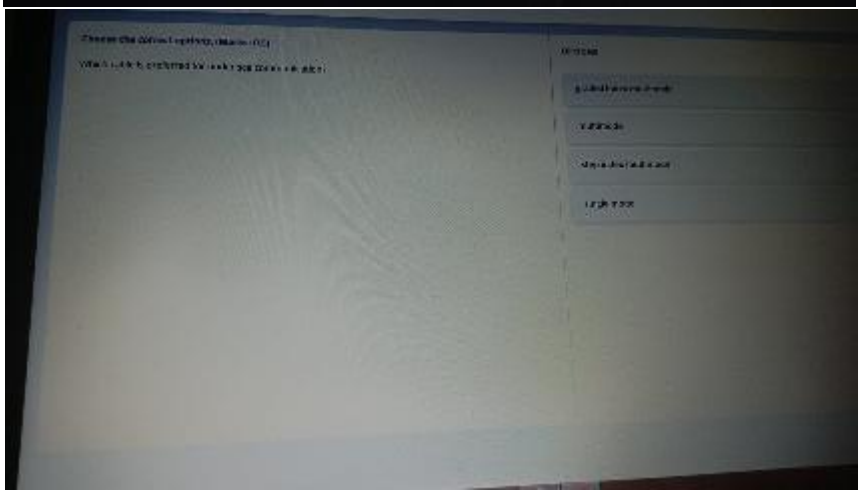

PASSAGE

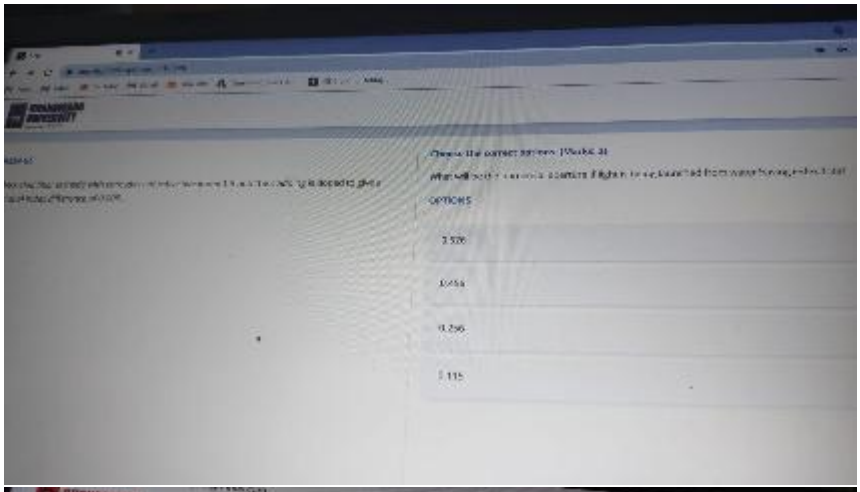


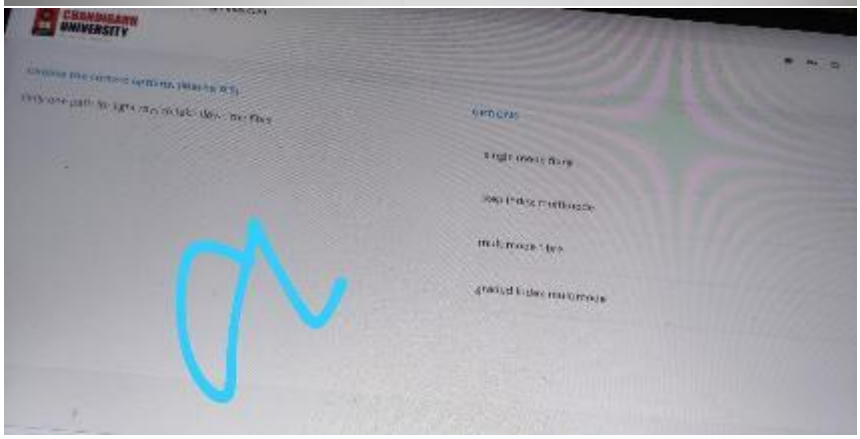

Choose the correct options. (Marks: 1)
OPTIONS
5.5
8.85
11.25
15.35

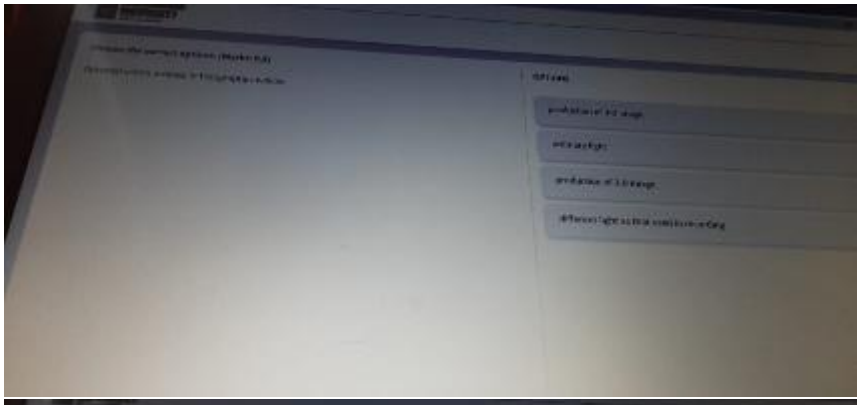


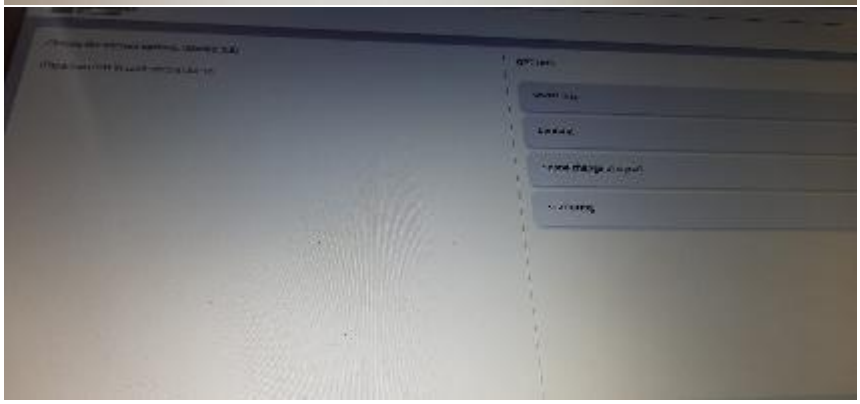


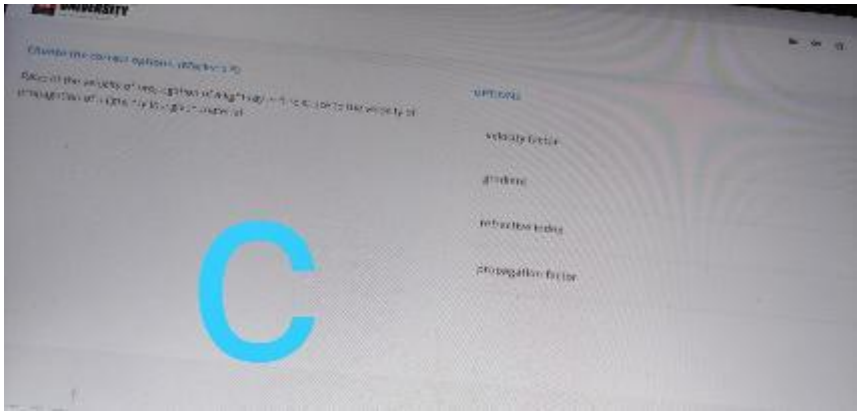


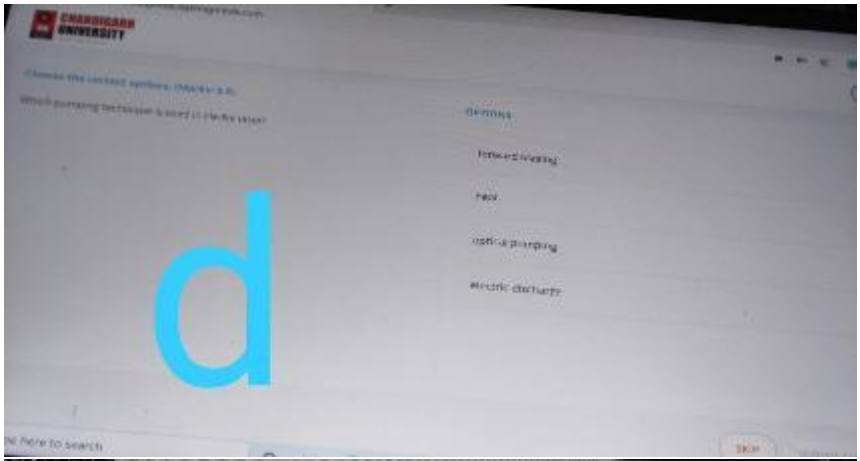


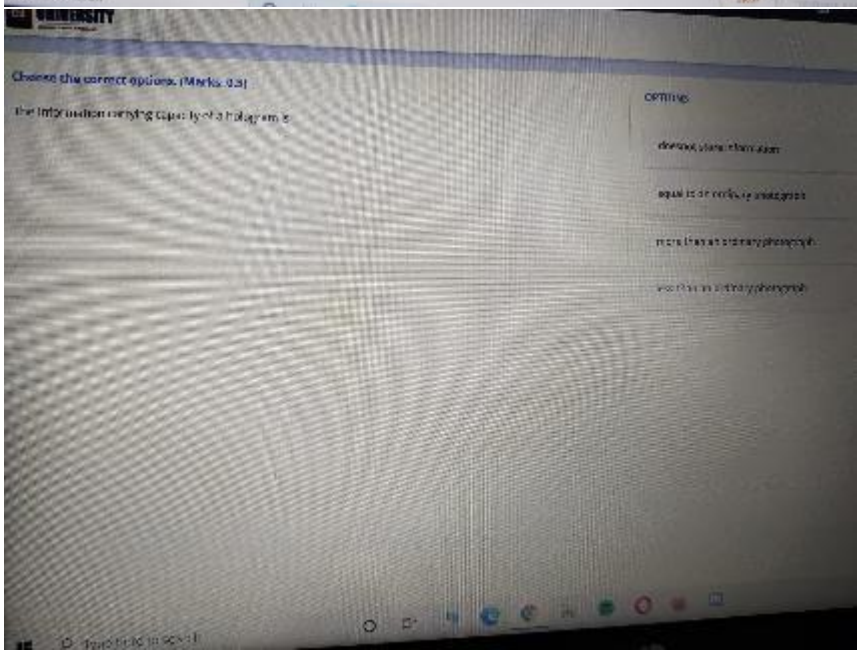


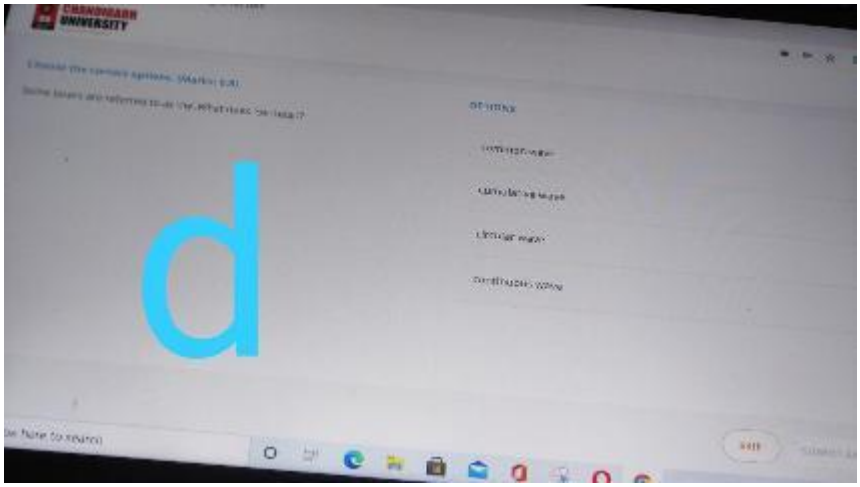


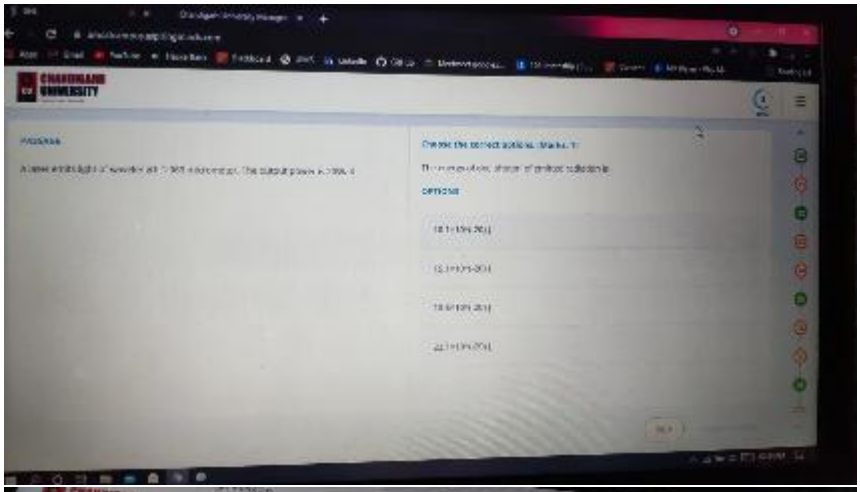


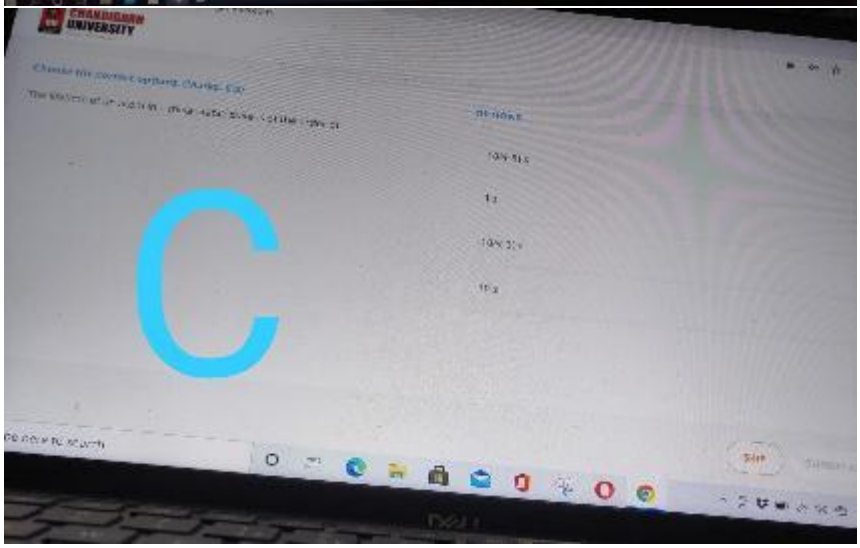

c

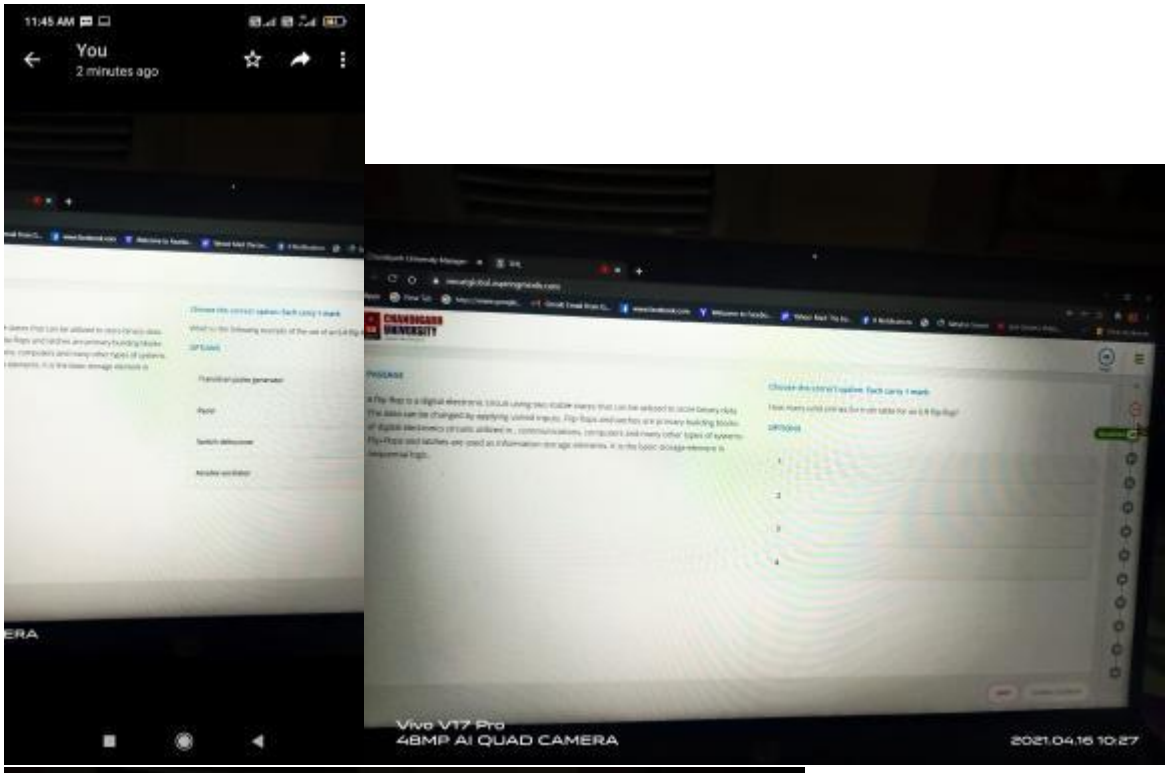

d

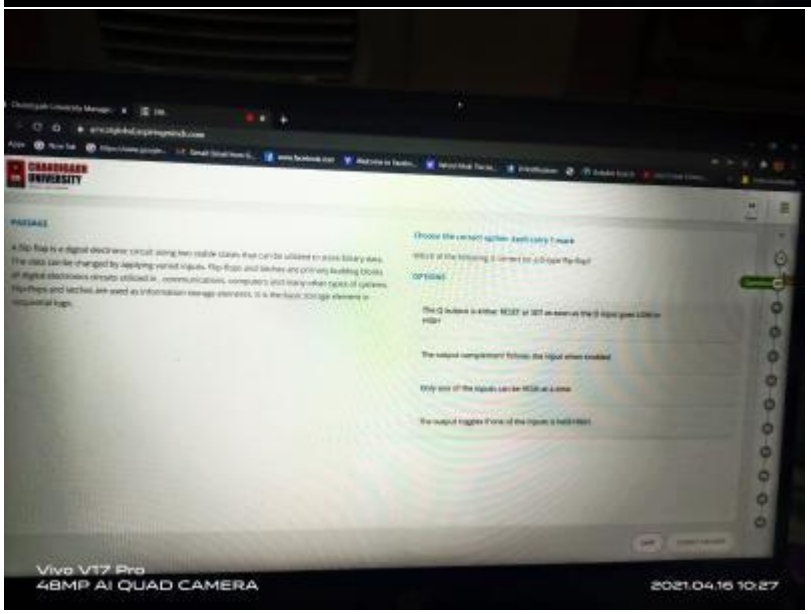

Choose the correct options. (Marks: 0.5)
options


d




C


11:45 AM
You
2 minutes ago
Vivo V17 Pro
48MP AI QUAD CAMERA
2021.04.16 10:27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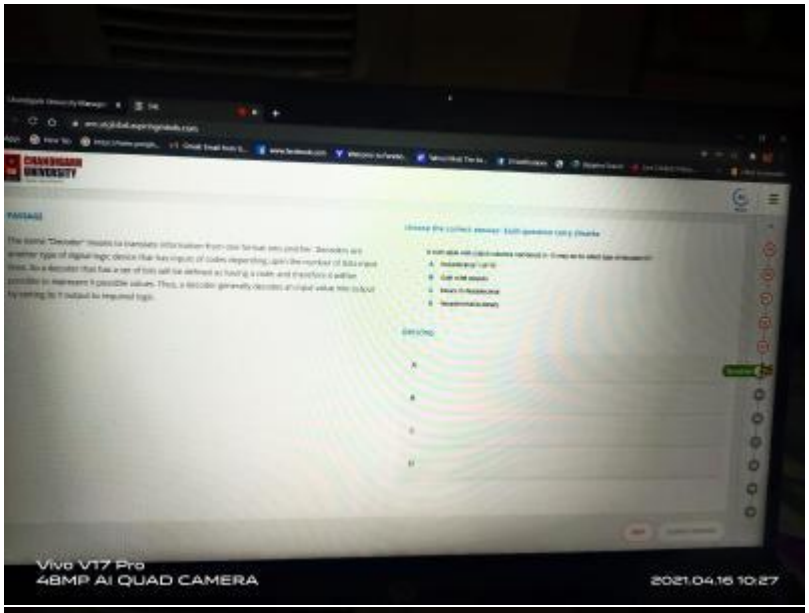
2021.04.16 10:27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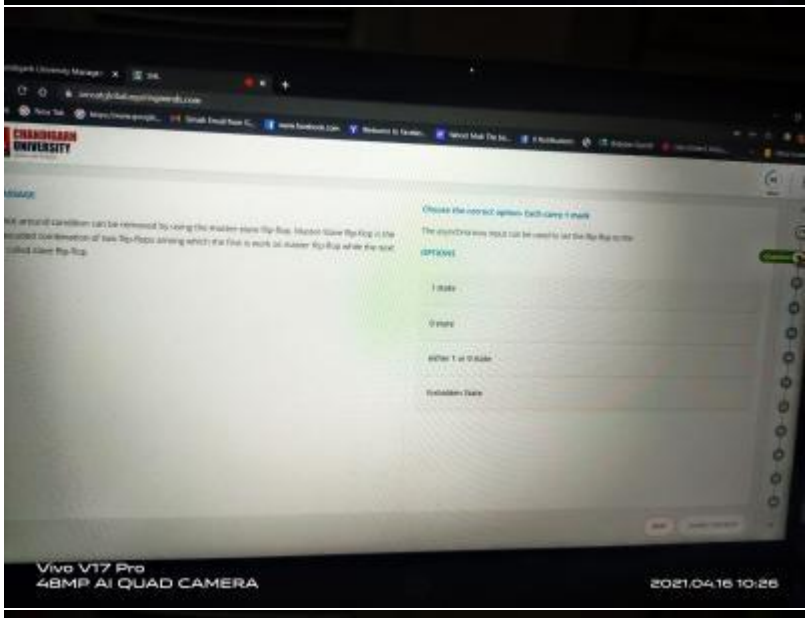
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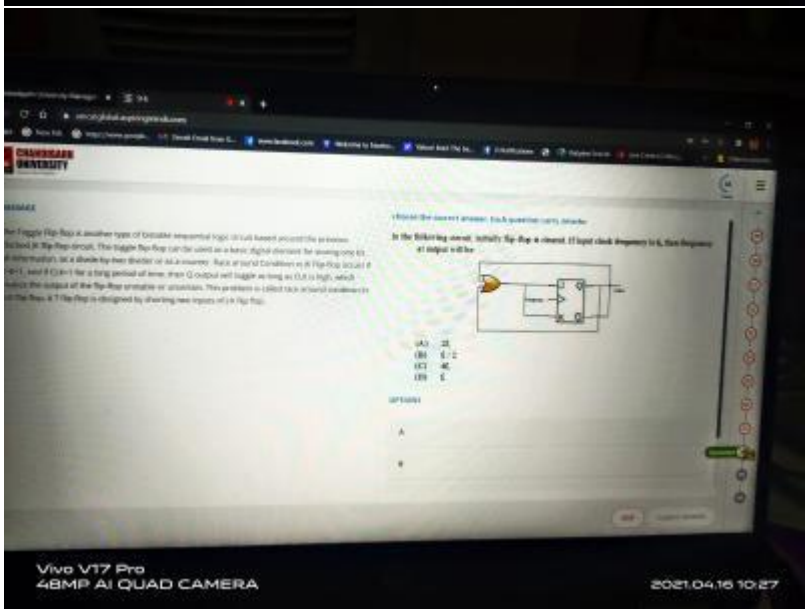
2021.04.16 10:26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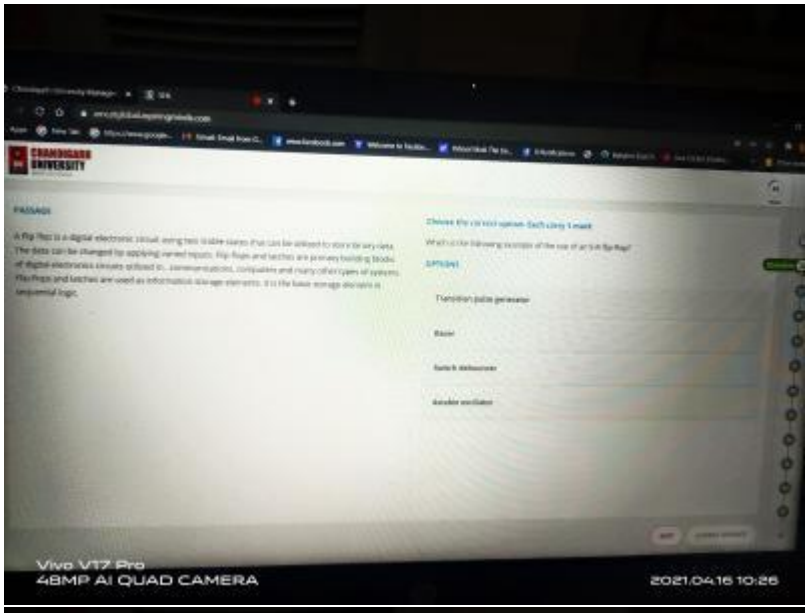
CHANDIGARH UNIVERSITY
Vivo V17 Pro
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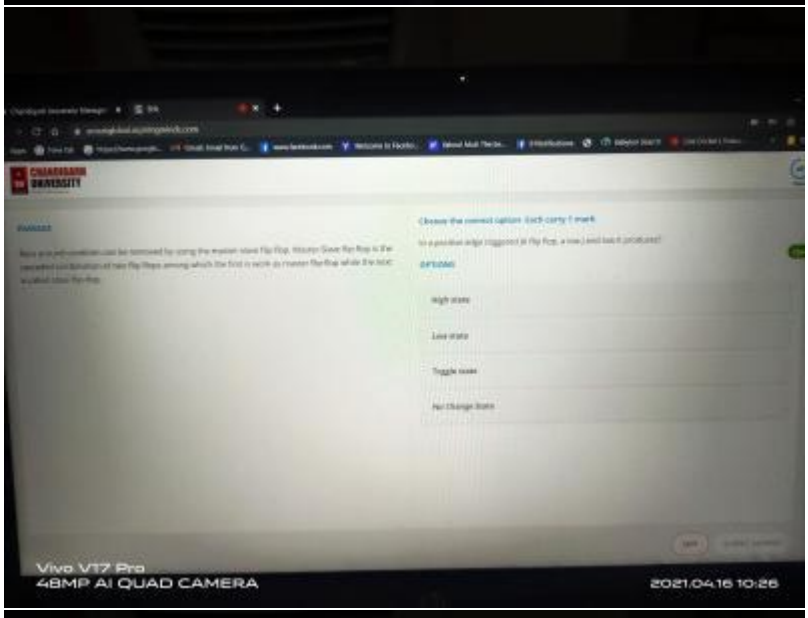
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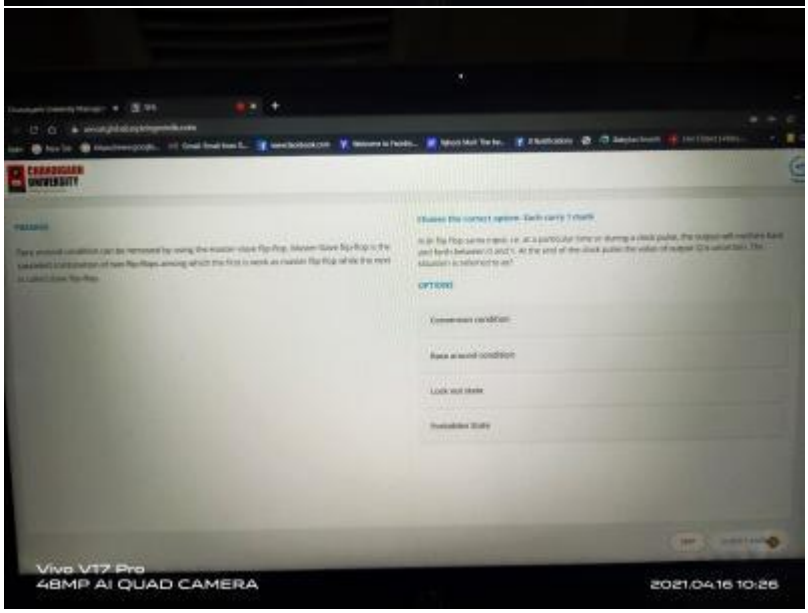
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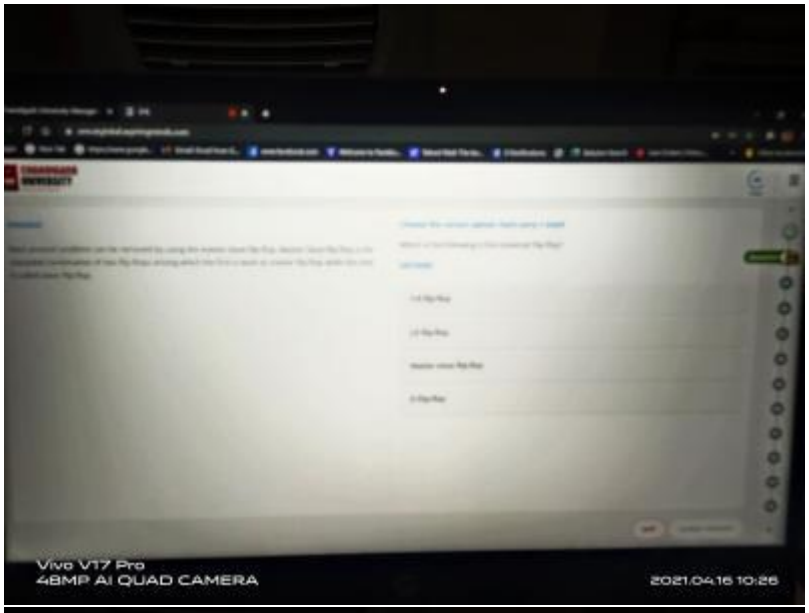
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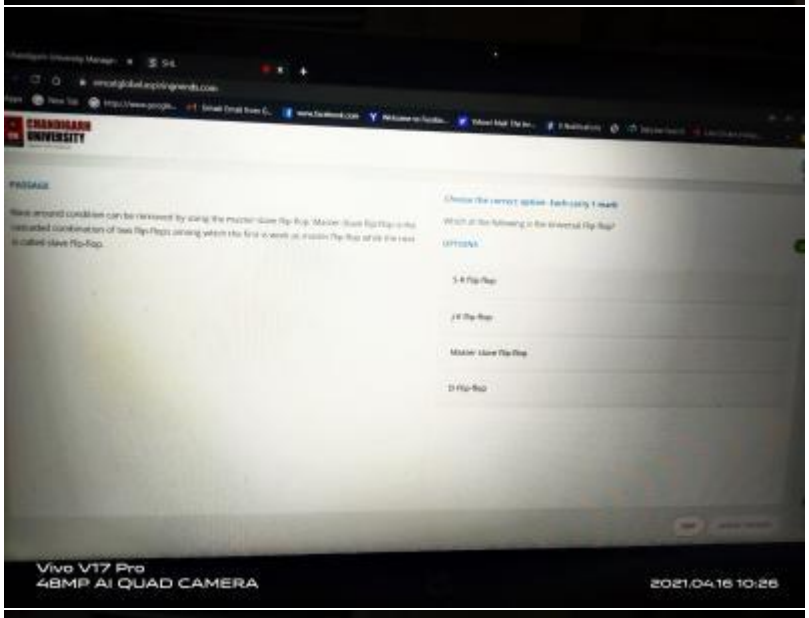
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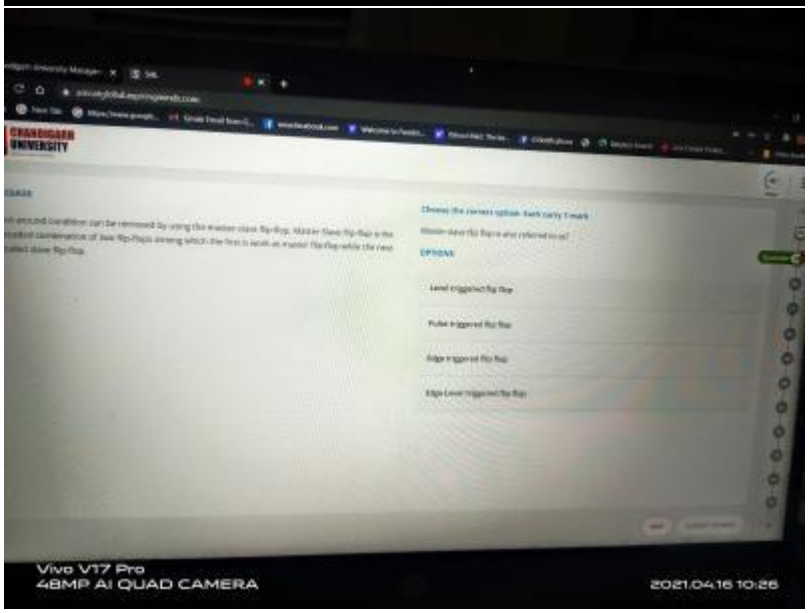
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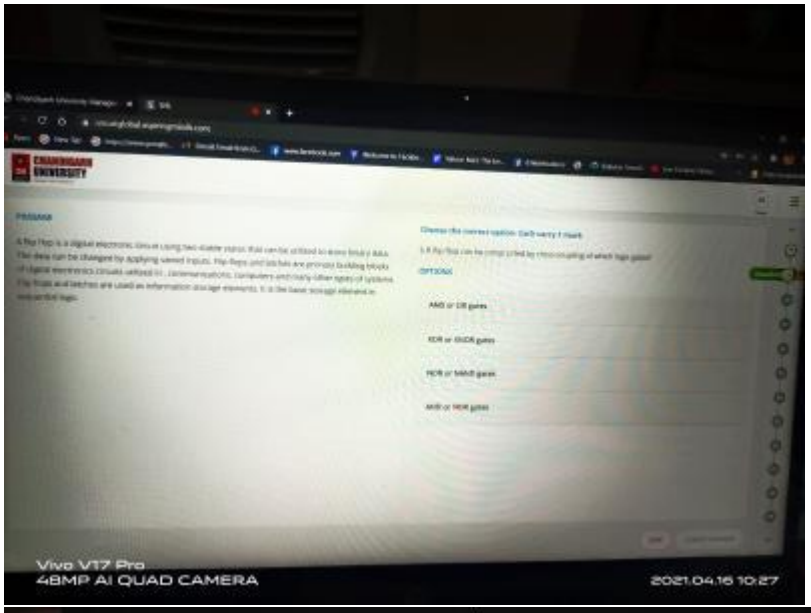
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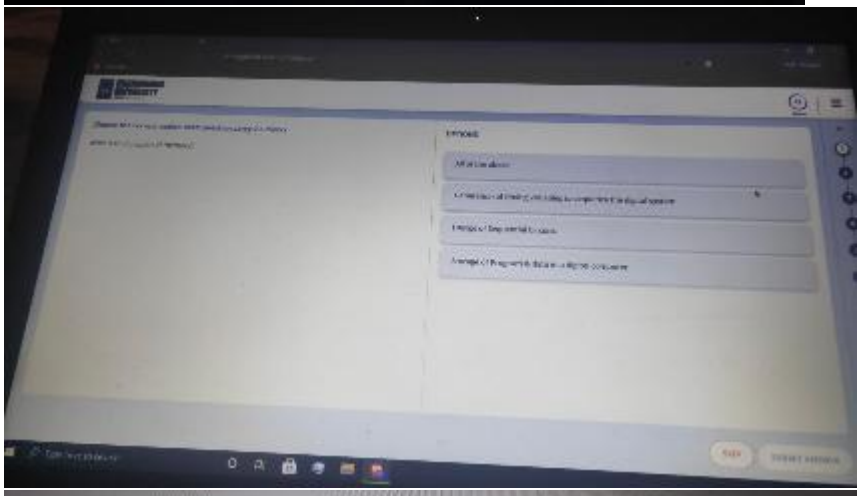
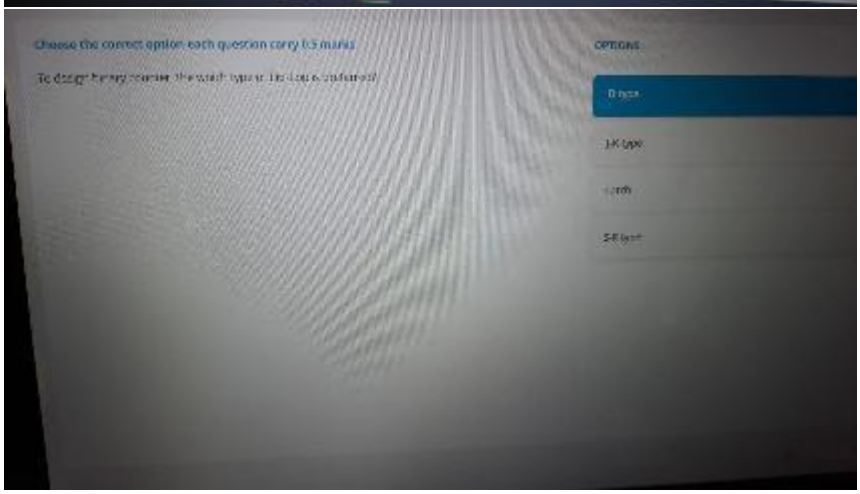
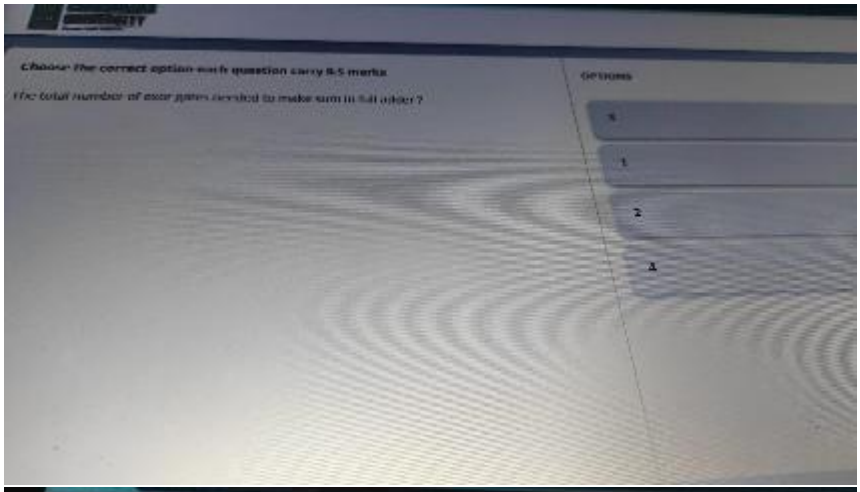
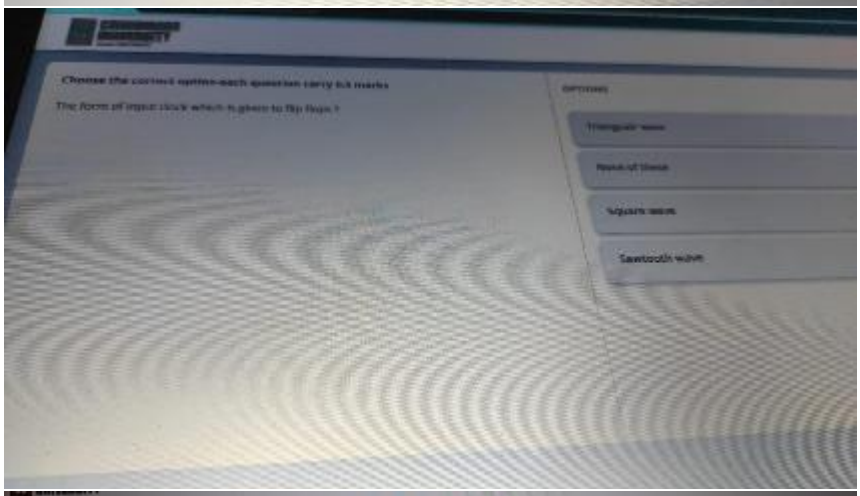
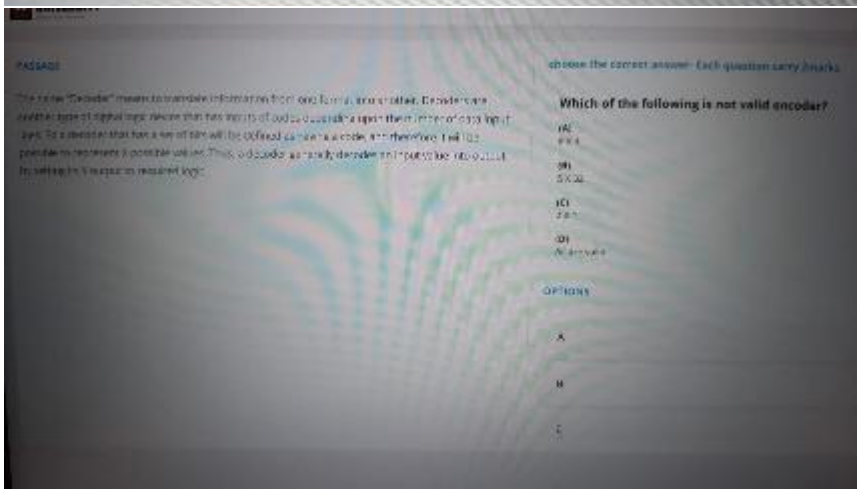
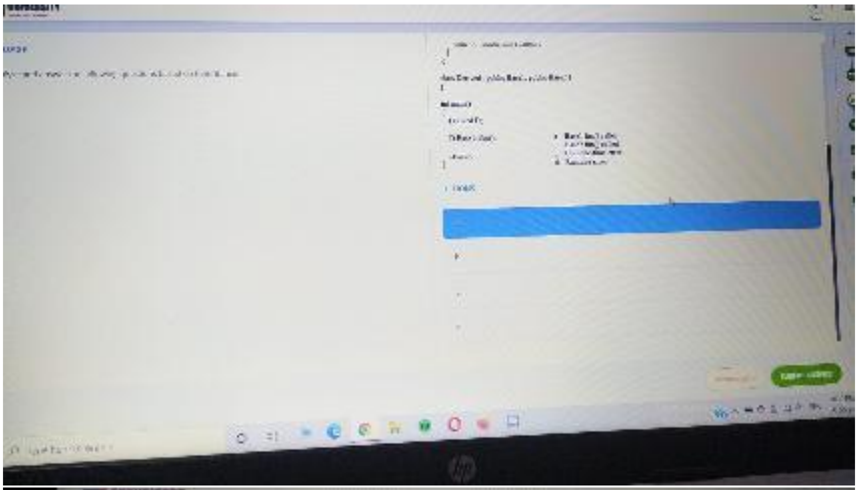


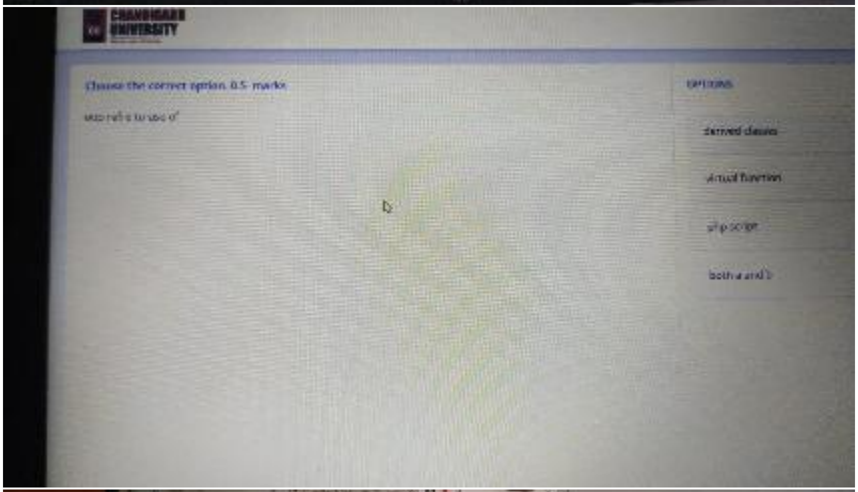

Choose the correct option each question carry 0.5 marks
OPTIONS


Choose the correct option each question carry 0.5 marks
The total number of exor gates needed to make sum in full adder?
Options
0
1
2
3


Choose the correct option each question carry 0.5 marks
The form of input clock which is given to flip flops ?
Options
Triangular wave
Square wave
Sawtooth wave


PASSAGE
choose the correct answer. Each question carry 2 marks
Which of the following is not valid encoder?
Options





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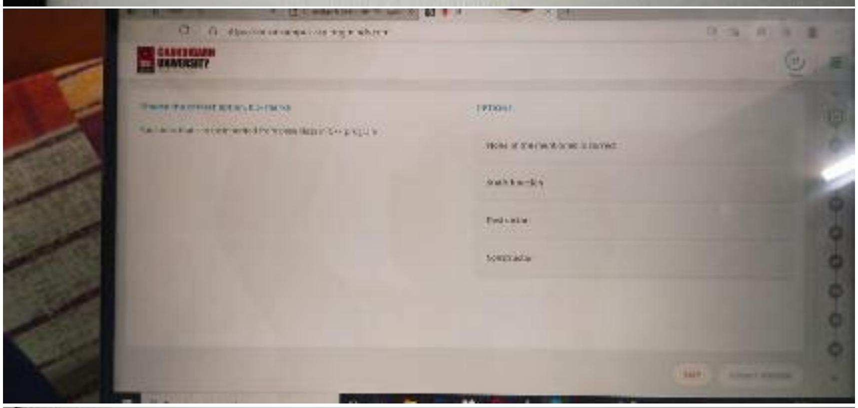
Choose the correct option. 0.5 marks
OPTIONS
derived classes
virtual function
php script
both a and b



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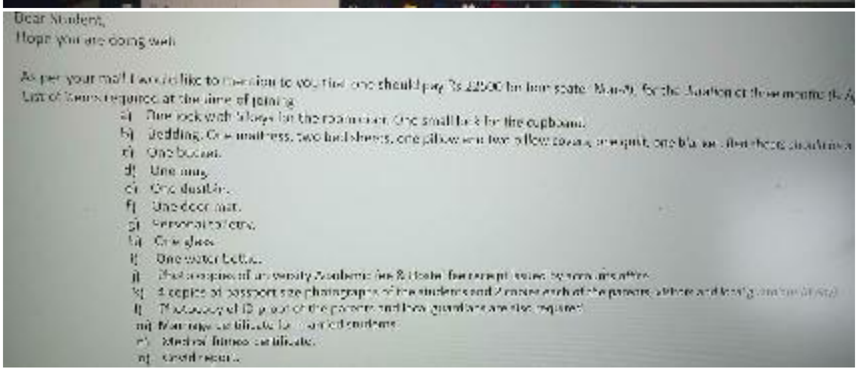
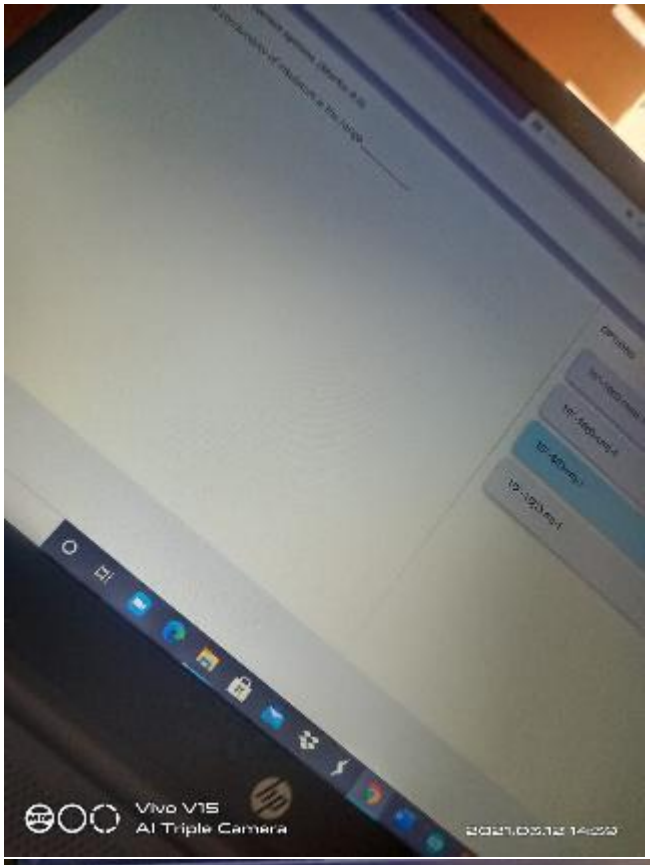
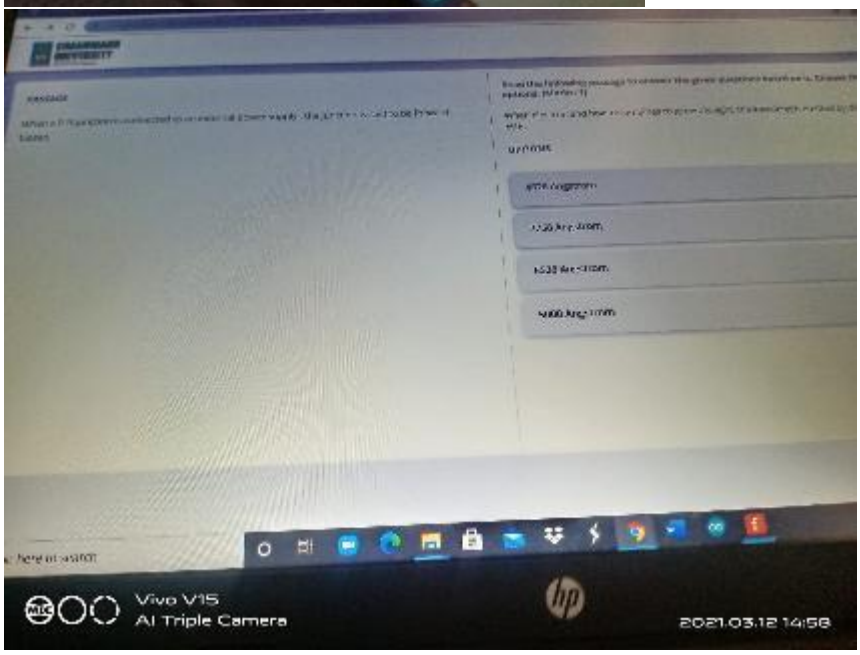


Dear Student,
Hope you are doing well.
List of items required at the time of joining
b) Bedding
c) One bucket.
d) One mug.
f) One door mat.
h) One glass.
i) One water bottle.
n) Medical fitness certificate.


Vivo V15
AI Triple Camera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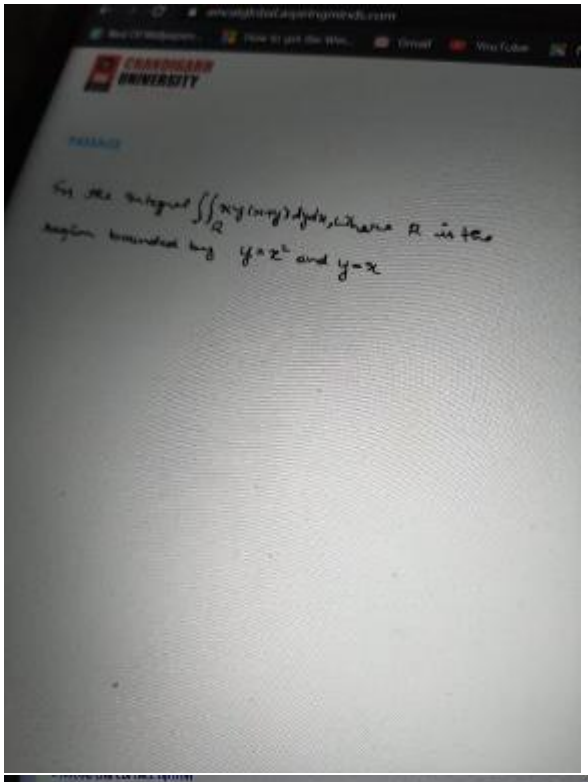
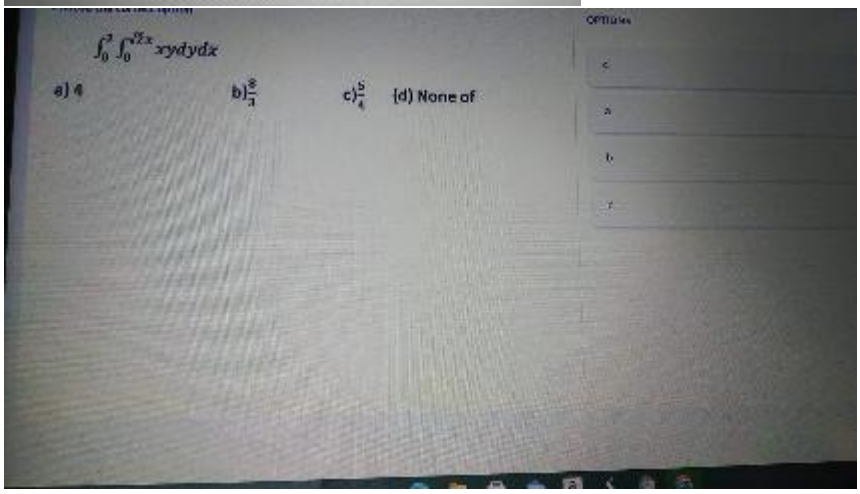
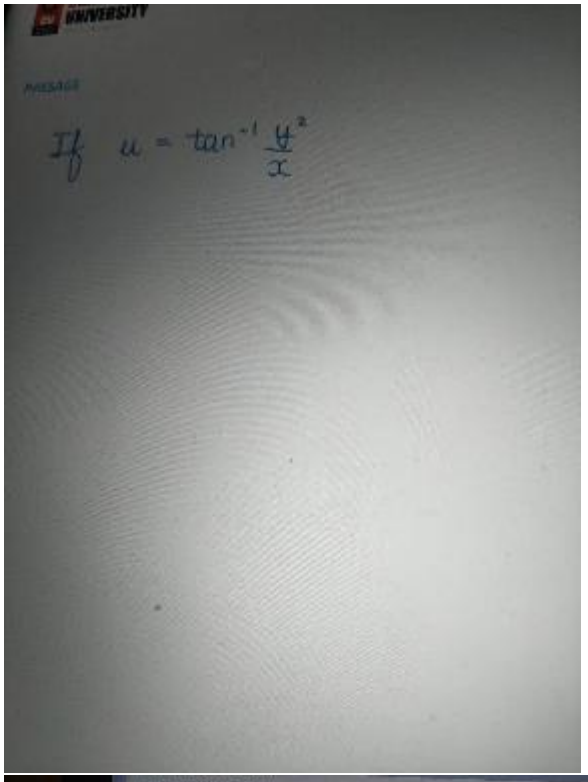
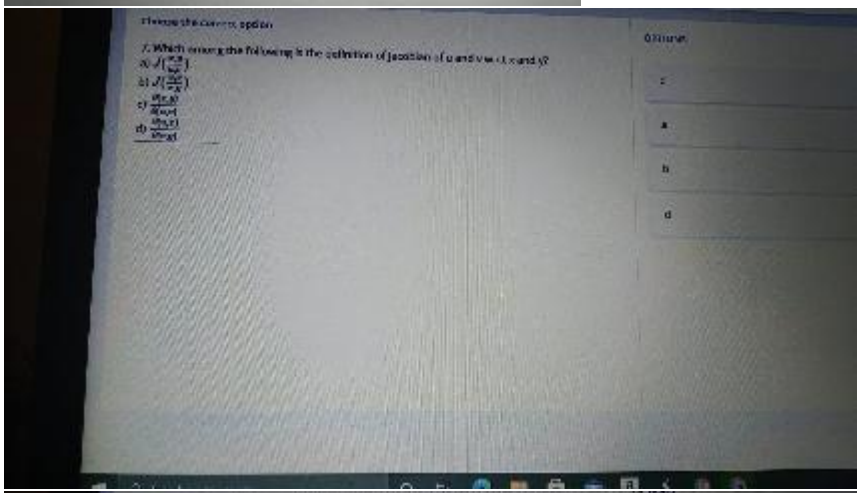
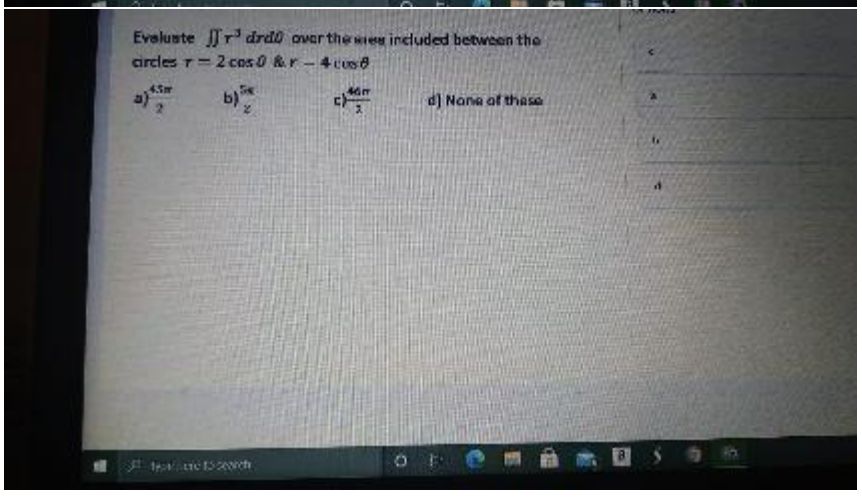
AI Triple Camera
2021.03.12 14:58


For the integral $\iint_R xy(x+y)\,dydx$, where R is the
region bounded by $y=x^2$ and $y=x$


$\int_0^2 \int_0^{2x} xydydx$
a) 4
b) $\frac{8}{3}$
c) $\frac{5}{4}$
(d) None of

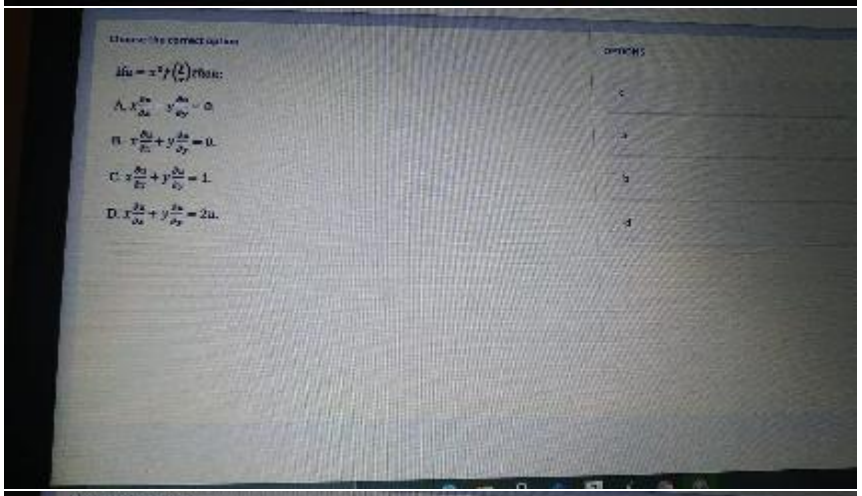

UNIVERSITY
If $u = \tan^{-1}\frac{y^2}{x}$


Which among the following is the collection of Jacobian of u and v w.r.t x and y?


Evaluate $\iint r^3\,dr d\theta$ over the area included between the circles $r = 2\cos\theta$ & $r = 4\cos\theta$
a) $\frac{15\pi}{2}$
b) $\frac{5\pi}{2}$
c) $\frac{45\pi}{2}$
d) None of these

Value of $\int_0^2 \int_0^{\sqrt{8x}} xy\, dydx$ is equal to

a) $\frac{10}{3}$ b) $\frac{8}{3}$ c) 7 d) 8



Choose the correct option

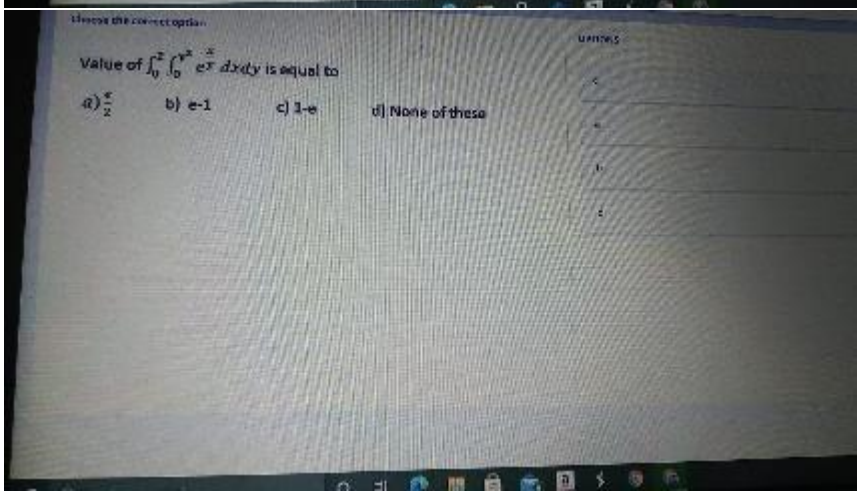
If $u = x^2 f\left(\frac{y}{x}\right)$ then:

A. $x\frac{\partial u}{\partial x} - y\frac{\partial u}{\partial y} = 0$.

B. $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y} = 0$.

C. $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y} = 1$.

D. $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y} = 2u$.



Choose the correct option

Value of $\int_0^2 \int_0^{x^2} e^{\frac{x}{x}}\, dxdy$ is equal to

a) $\frac{e}{2}$ b) e-1 c) 1-e d) None of these

Choose the correct option

Volume bounded by triple integral $x \geq 0$, $y \geq 0$, $z \geq 0$ and $x^2+y^2+z^2=1$ is

a) $\frac{4\pi}{3}$ b) $\frac{4\pi r}{3}$ c) $\frac{4\pi r}{6}$ d) None of these

Choose the correct option

The triple integral $\int\int\int dx\, dy\, dz$ *over* R taken over proper limits gives.....

(a) Volume of the region R
(b) Area of the region R
(c) Surface area of the region R
(d) Density of the region R

Choose the correct option

2. Given $u = \frac{yz}{x}, v = \frac{zx}{y}, w = \frac{xy}{z}$ then the value of $\frac{\partial(u,v,w)}{\partial(x,y,z)}$ is _____

a) 4
b) -4
c) 0
d) 1

Choose the correct option

7. Which among the following is the definition of Jacobian of u and v w.r.t x and y?

a) $J(\frac{x,y}{u,v})$

b) $J(\frac{u,v}{x,y})$

c) $\frac{\partial(x,y)}{\partial(u,v)}$

d) $\frac{\partial(u,x)}{\partial(v,y)}$

hoose the correct option

Evaluate $\iint r^3\, drd\theta$ over the area included between the circles $r = 2\cos\theta$ & $r = 4\cos\theta$

a) $\frac{45\pi}{2}$ b) $\frac{5\pi}{2}$ c) $\frac{46\pi}{2}$ d) None of these

Choose the correct option

Value of $\int_0^2 \int_0^{\sqrt{2x}} xy\, dydx$ is equal to

a) $\frac{10}{3}$ b) $\frac{8}{3}$ c) 7 d) 8

Choose the correct option

If $u = x^2 + y^2 + z^2$ be such that $x\,u_x + y\,u_y + z\,u_z = \lambda u$, then λ is equal to

A. 1

B. 2

C. 0

D. none of above

Choose the correct option

Value of $\int_0^2 \int_0^{y^2} e^{\frac{x}{y}}\,dxdy$ is equal to

a) $\frac{e}{2}$ b) e-1 c) 1-e d) None of these

Choose the correct option

4. If x=rcosθ, y=rsinθ then the value of $\frac{\partial(x,y)}{\partial(r,\theta)}$ is _____

a) 1

b) 0

c) r

d) $\frac{1}{r}$

Choose the correct option

If $x = r\cos\varphi\sin\theta$, $y = r\sin\varphi\sin\theta$, $z = r\cos\theta$,then the value of $\frac{\partial(x,y,z)}{\partial(r,\theta,\varphi)}$ is :

A. 0

B. r

C. $r^2\sin\theta$

D. $r^2\cos\theta$

Choose the correct option

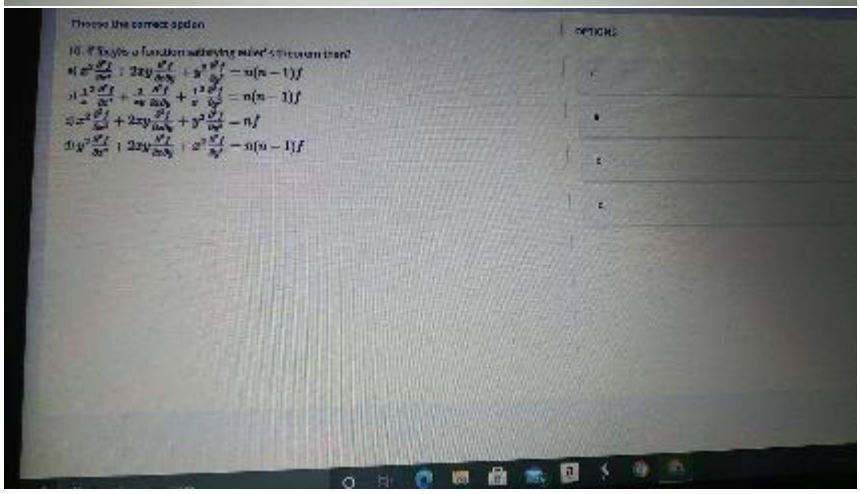
Linear Taylor series polynomial approximation to function $f(x,y) = x^2y - 2$ about point (1,-2) is :

A. $y - 4x + 2$

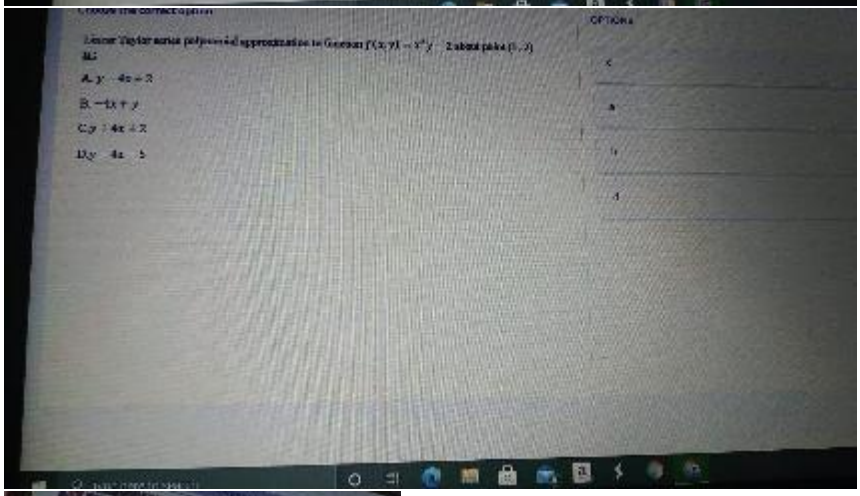
B. $-4x + y$

C. $y + 4x + 2$

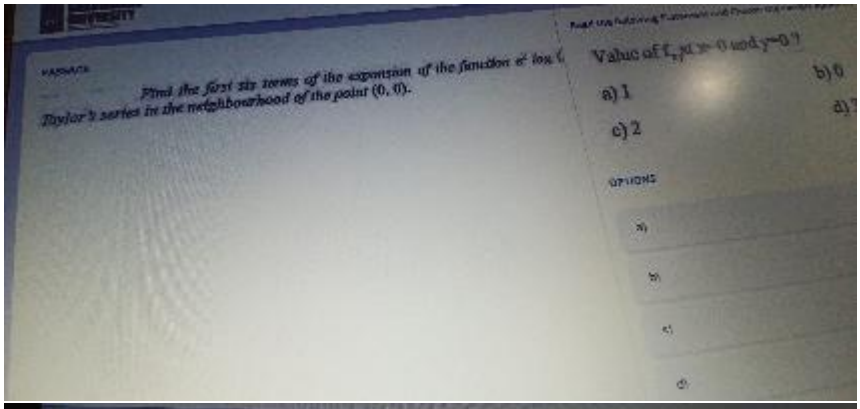
D. $y - 4x - 5$

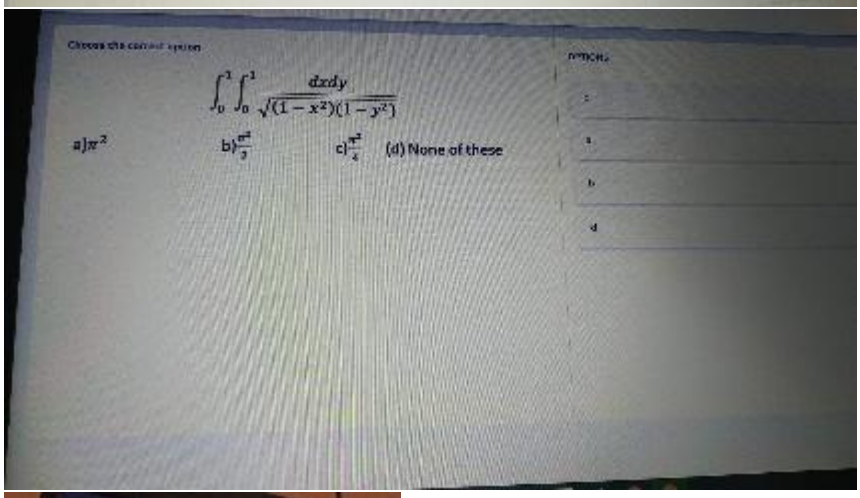


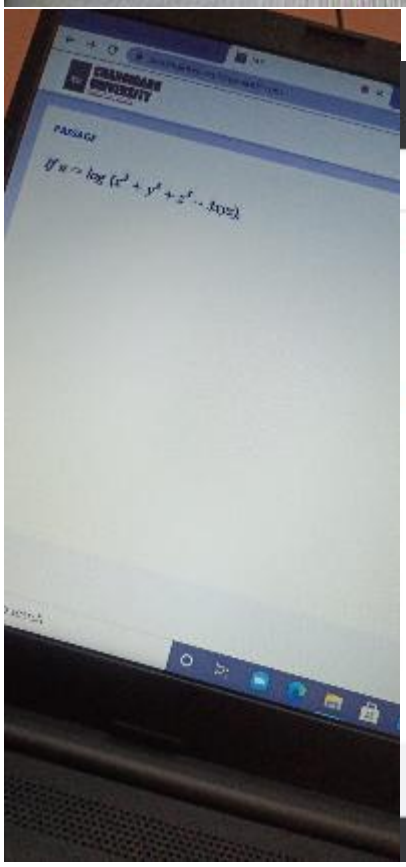

Choose the correct option
OPTIONS
A. 0
B. r
C. r² sin θ
D. r² cos θ

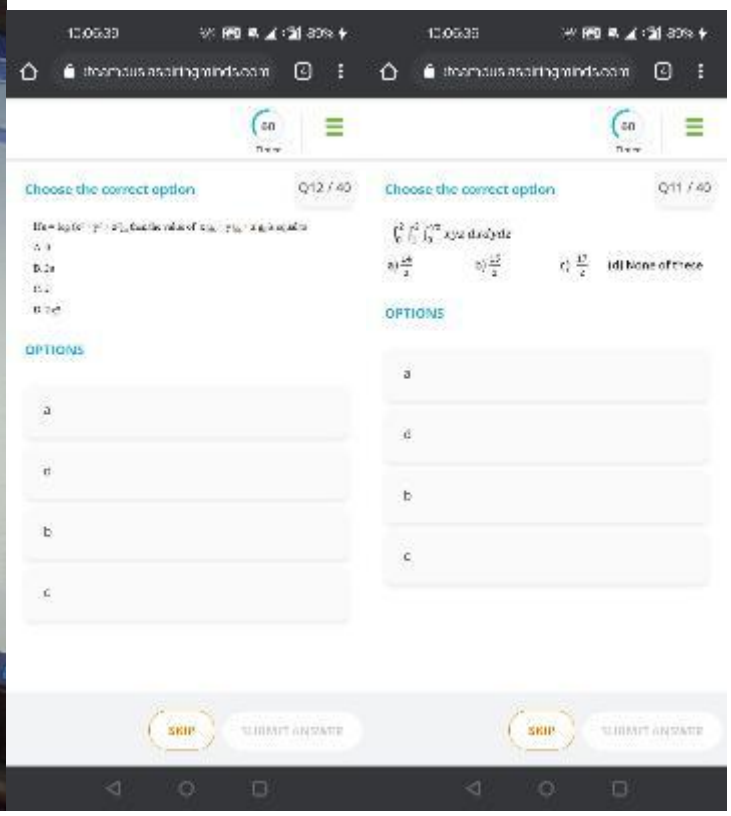

OPTIONS
A. y − 4x = 3
B. −4x + y
C. y + 4x + 2
D. y − 4x − 5


PASSAGE


Find the first six terms of the expansion of the function e^x log(
Taylor's series in the neighbourhood of the point (0, 0).
Value of f_xy at x=0 and y=0 ?
a) 1
b) 0
c) 2
OPTIONS


$\int_0^1 \int_0^1 \frac{dxdy}{\sqrt{(1-x^2)(1-y^2)}}$
a) π^2
b) $\frac{\pi^2}{2}$
c) $\frac{\pi^2}{4}$
(d) None of these




Choose the correct option
Q12 / 40
OPTIONS
a
d
b
c
SKIP
Choose the correct option
Q11 / 40
OPTIONS
a
d
b
c
SKIP

Choose the correct option Q13 / 40

Value of $\int_0^{\infty}\int_0^{\infty}\frac{e^{-(x+y)}}{x+y}\,dx\,dy$ is equal to

OPTIONS

a

d

b

c

Choose the correct option Q15 / 40

OPTIONS

d

c

b

c

Choose the correct option Q14 / 40

If $u=3xy^2$ then $\frac{\partial u}{\partial y}=$ .....

(a)6 (b)6x (c)6xy (d)3y²

OPTIONS

a

d

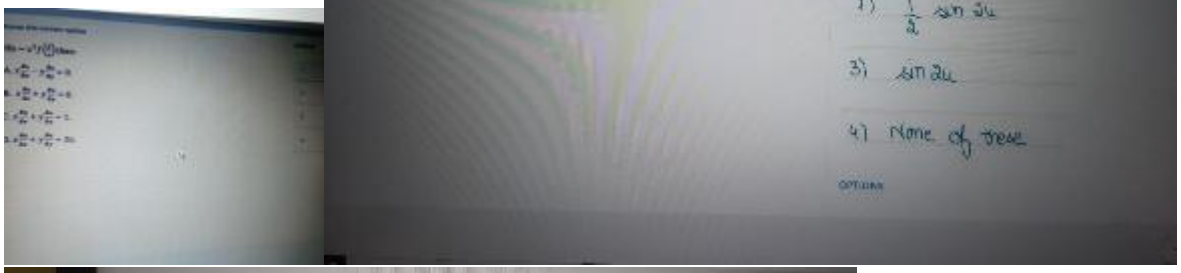
b

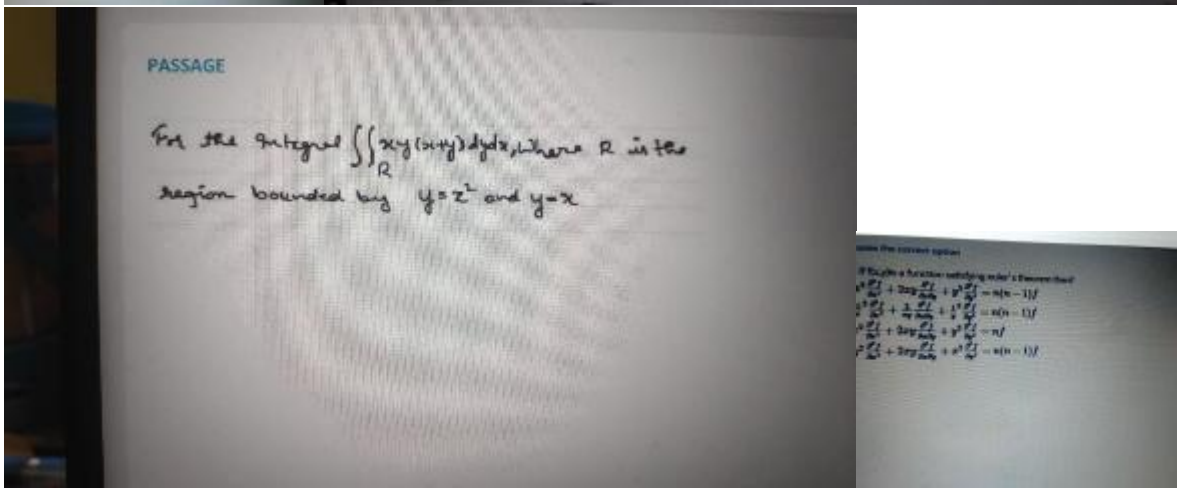
c

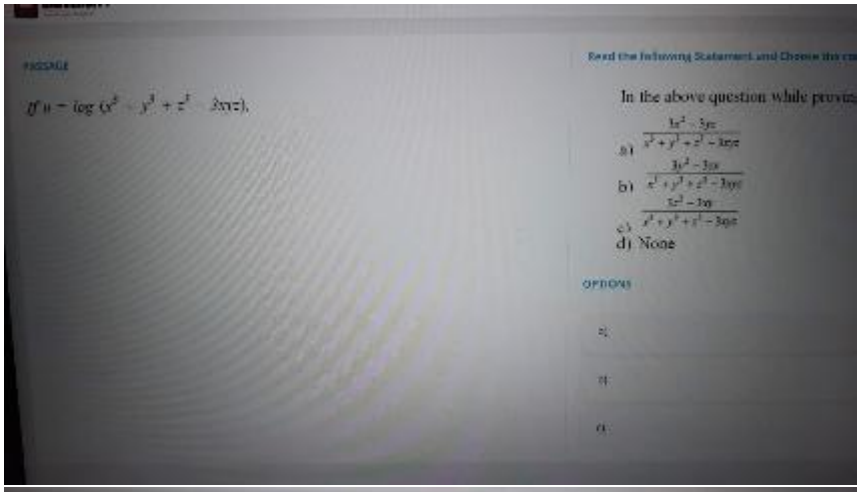
SKIP SUBMIT ANSWER

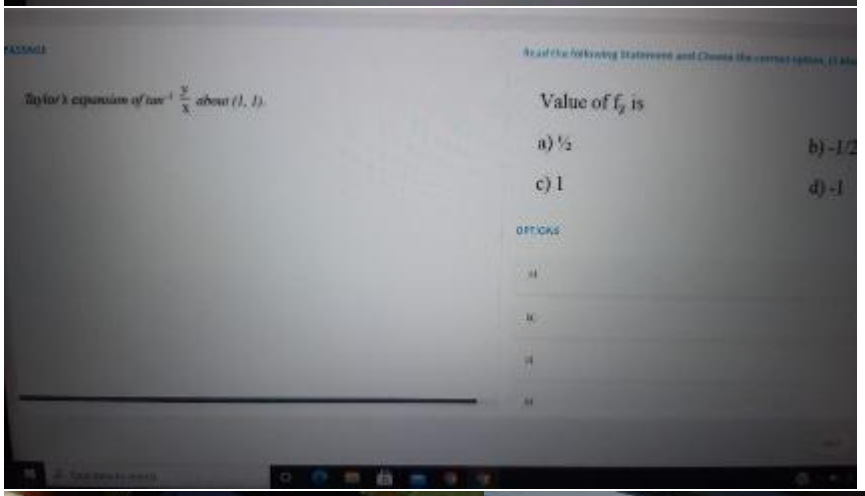
SKIP SUBMIT ANSWER

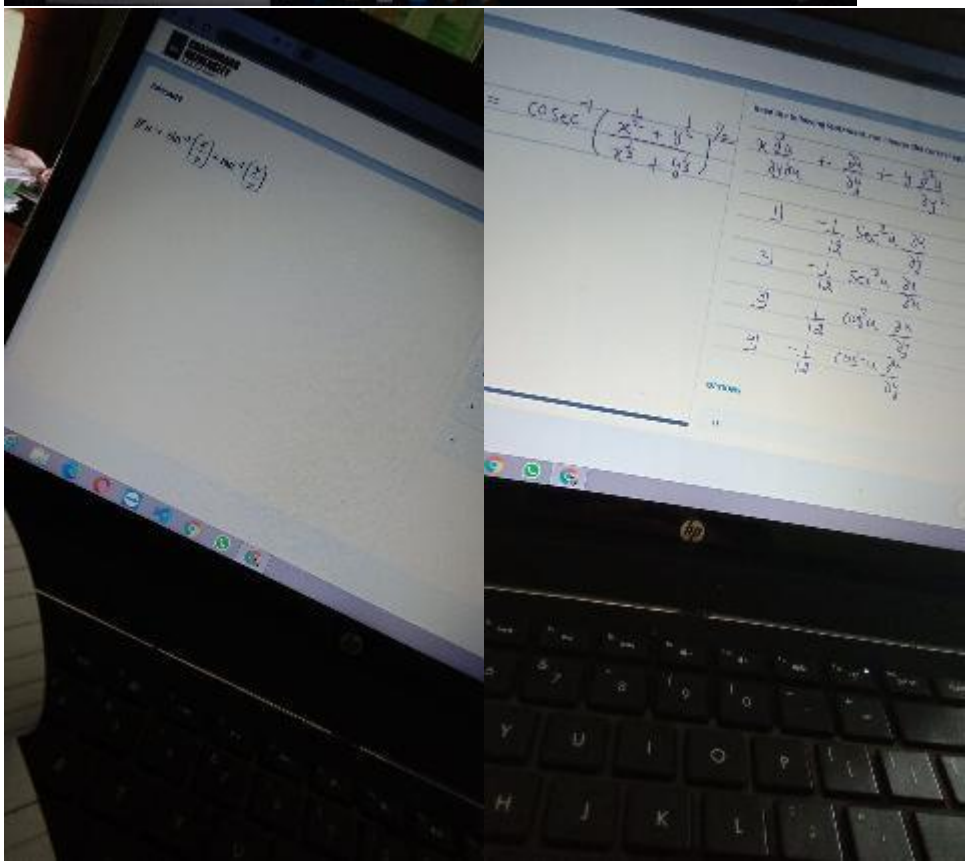
SKIP SUBMIT ANSWER

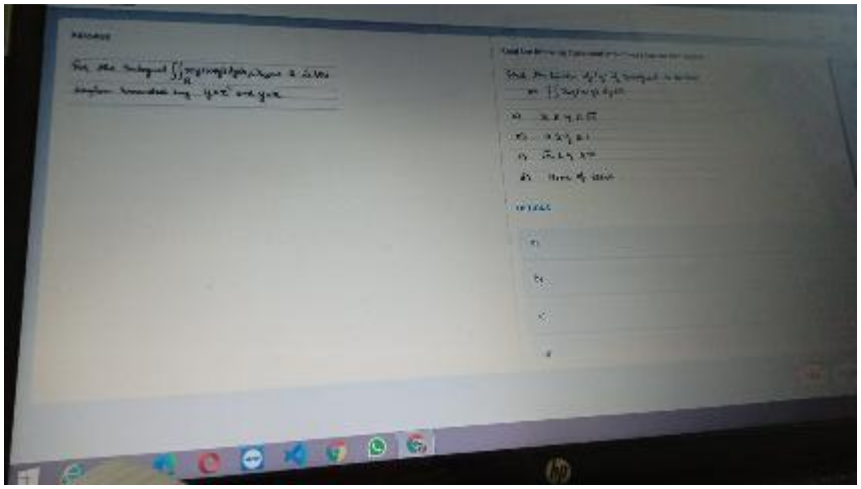


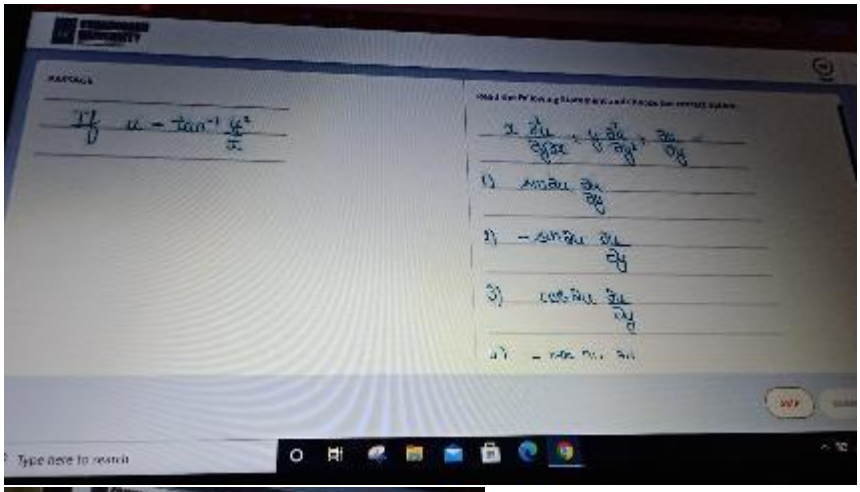


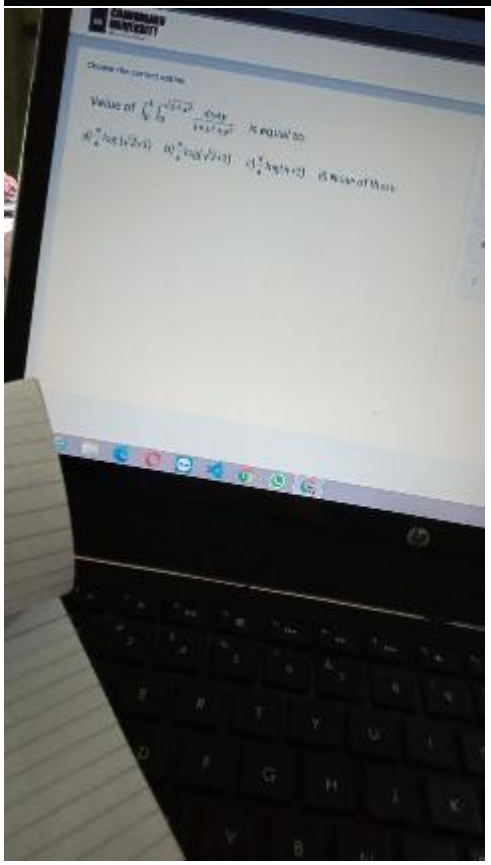

PASSAGE
Read the following Statement and Choose the co
In the above question while provin
a)
b)
c)
d) None
OPTIONS

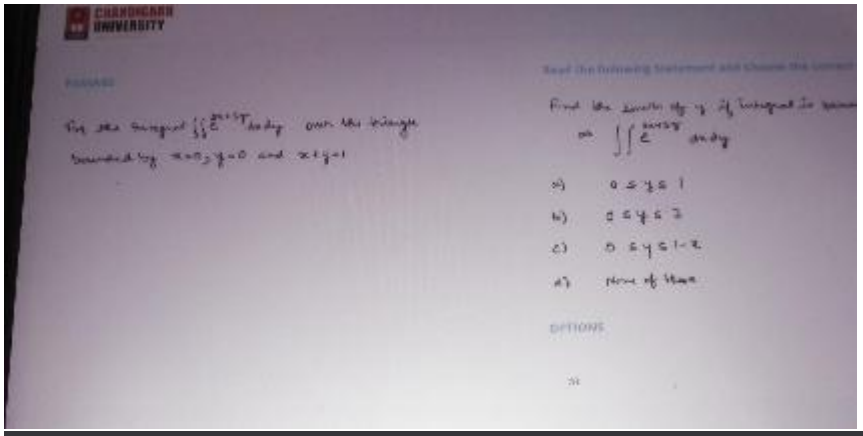

Taylor's expansion of
about (1, 1).
Value of
a) ½
b) -1/2
c) 1
d) -1
OPTIONS

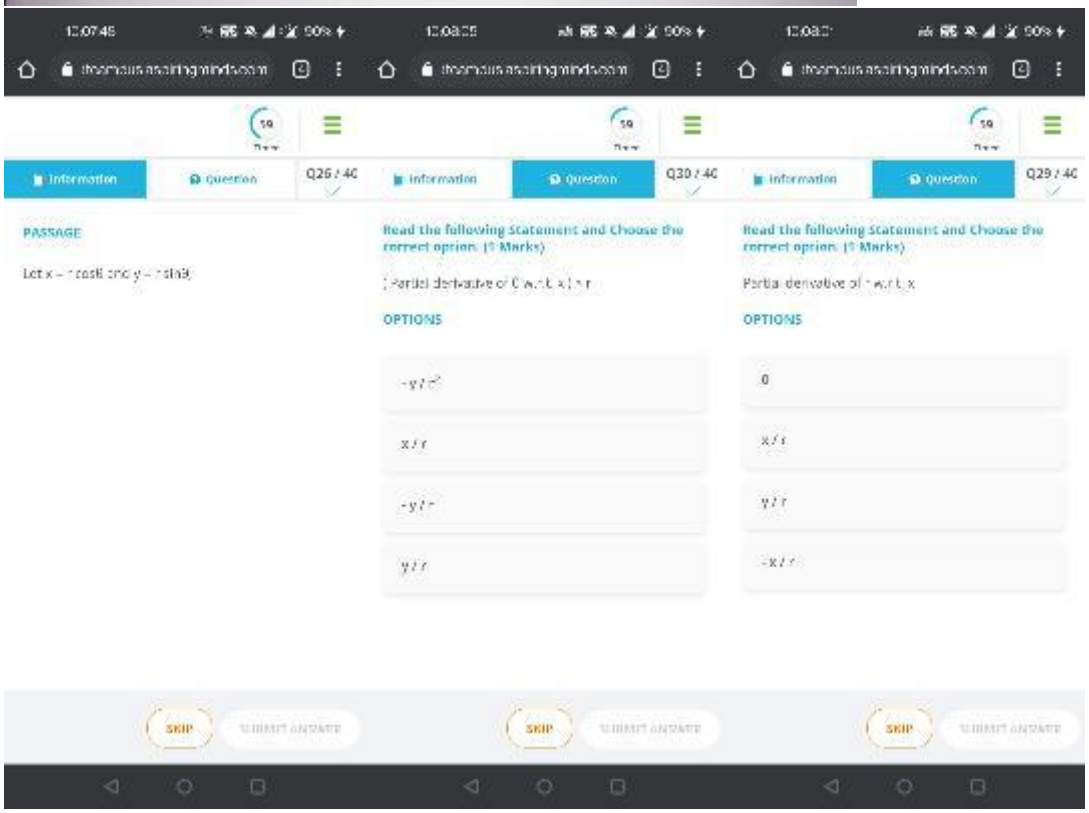


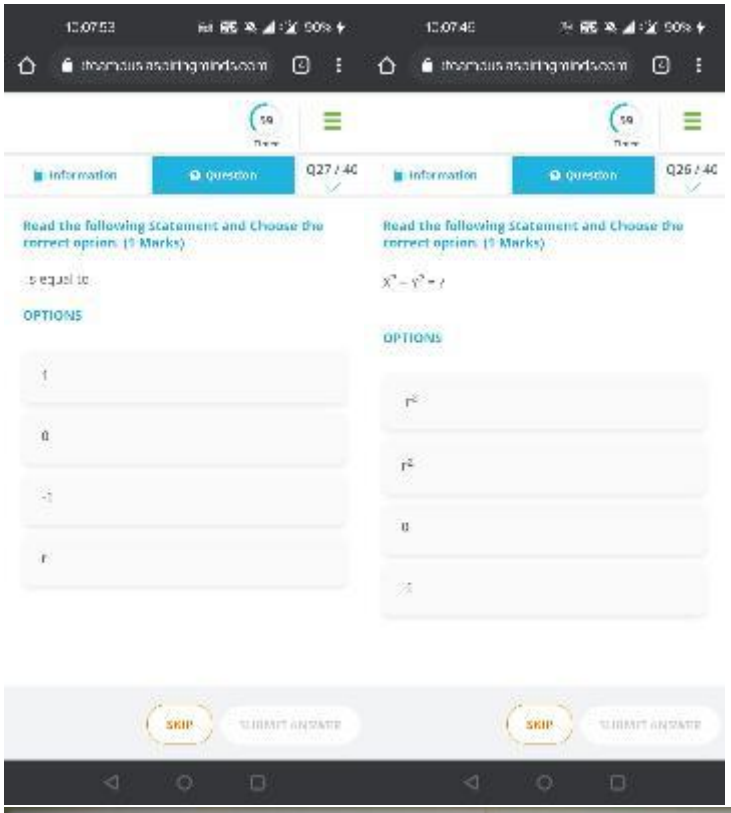


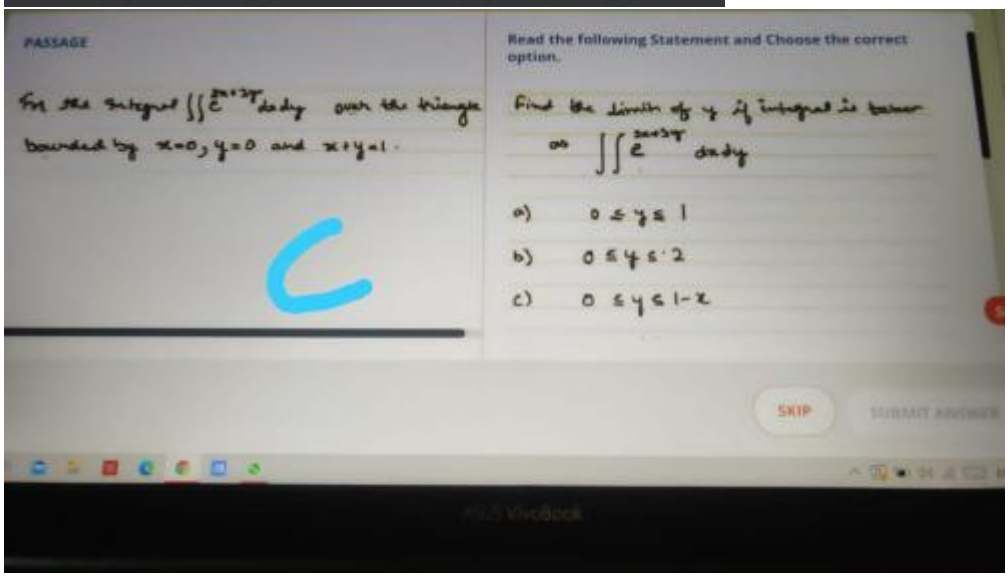


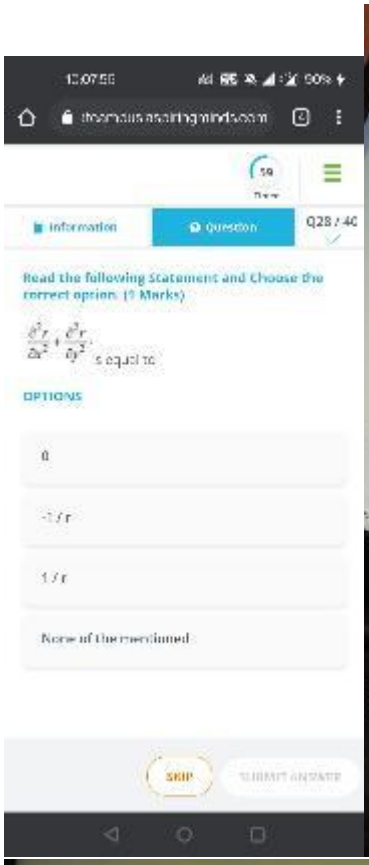


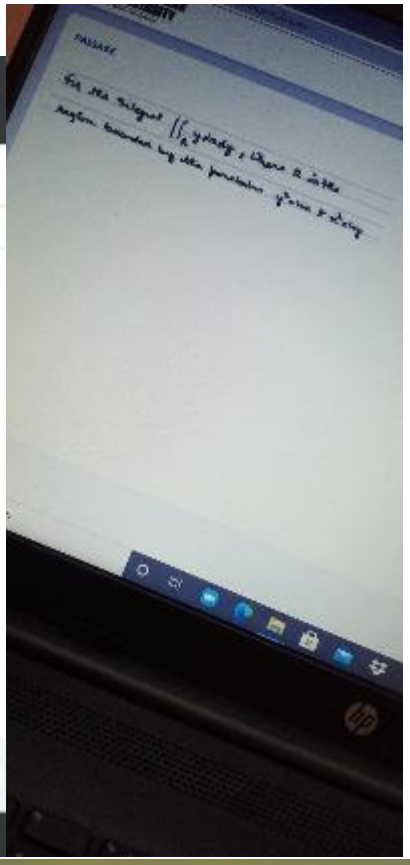

CHANDIGARH UNIVERSITY
PASSAGE
OPTIONS

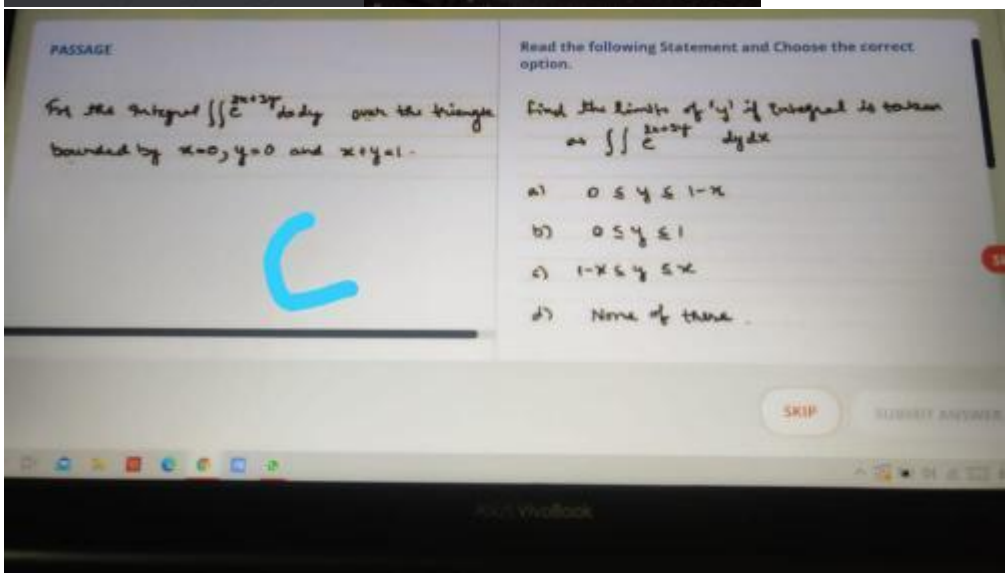

Information
Question
Q26 / 40
PASSAGE
Information
Question
Q30 / 40
Read the following Statement and Choose the correct option. (1 Marks)
OPTIONS
-y / r²
x / r
-y / r
y / r
Information
Question
Q29 / 40
Read the following Statement and Choose the correct option. (1 Marks)
OPTIONS
0
x / r
y / r
-x / r
SKIP
SKIP
SKIP

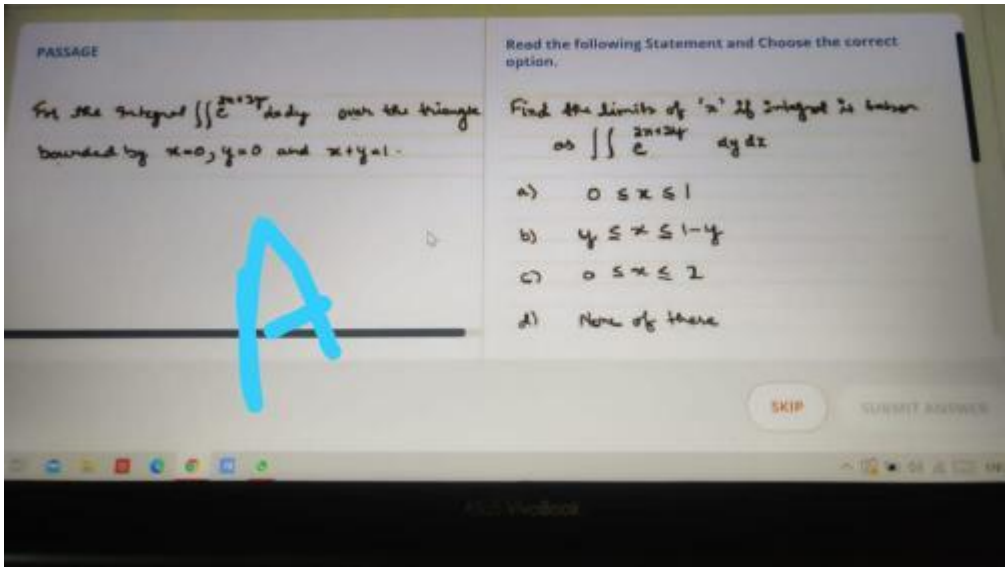

Information
Question
Q27 / 40
Read the following Statement and Choose the correct option. (1 Marks)
OPTIONS
Information
Question
Q26 / 40
Read the following Statement and Choose the correct option. (1 Marks)
OPTIONS
SKIP
SKIP

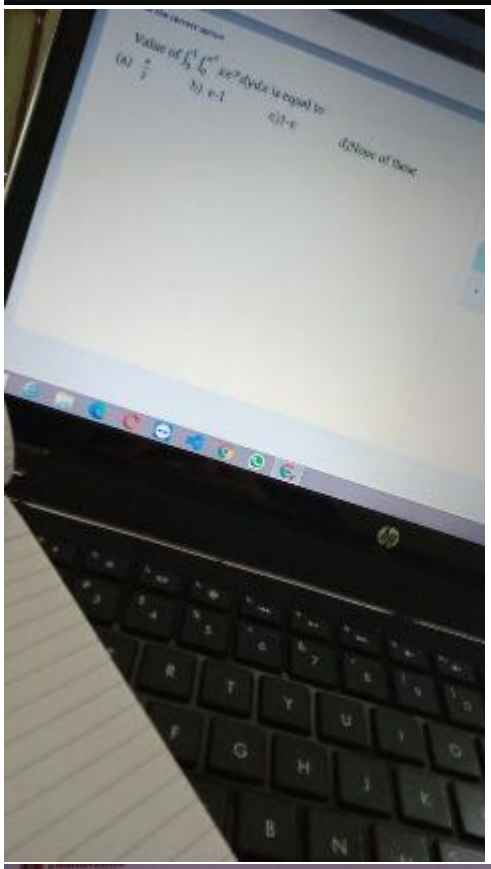

PASSAGE
Read the following Statement and Choose the correct option.
a) 0 ≤ y ≤ 1
b) 0 ≤ y ≤ 2
c) 0 ≤ y ≤ 1-x
SKIP

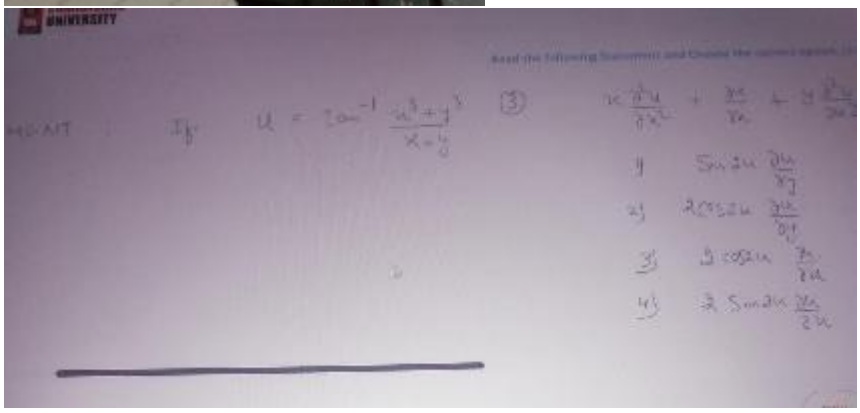

Information
Question
Q28 / 40
Read the following Statement and Choose the correct option. (1 Marks)
$\frac{\partial^2 r}{\partial x^2} + \frac{\partial^2 r}{\partial y^2}$ is equal to
OPTIONS
0
-1 / r
1 / r
None of the mentioned
SKIP

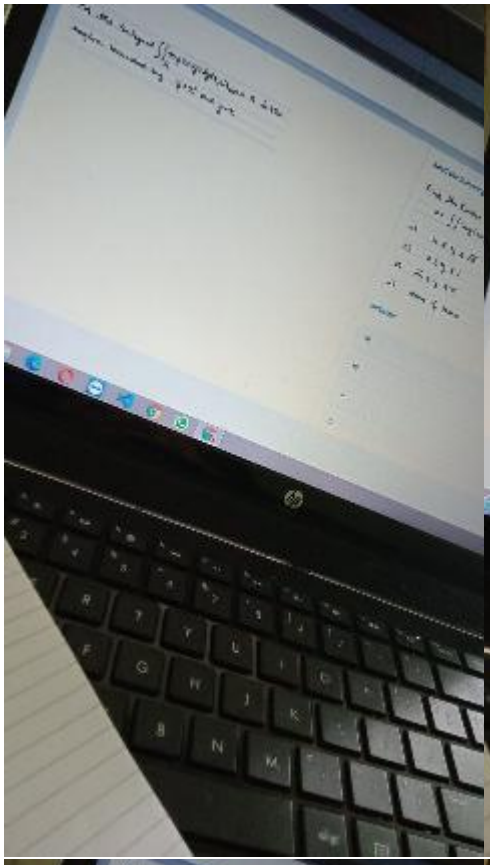


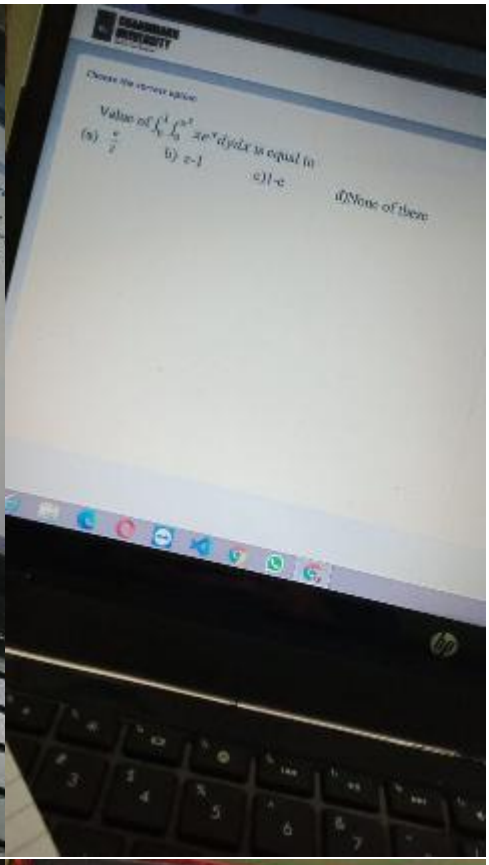

PASSAGE
For the integral $\iint e^{2x+3y} dx dy$ over the triangle bounded by $x=0, y=0$ and $x+y=1$.
Read the following Statement and Choose the correct option.
Find the limits of 'y' if integral is taken as $\iint e^{2x+3y} dy dx$
a) $0 \le y \le 1-x$
b) $0 \le y \le 1$
c) $1-x \le y \le x$
d) None of these
SKIP

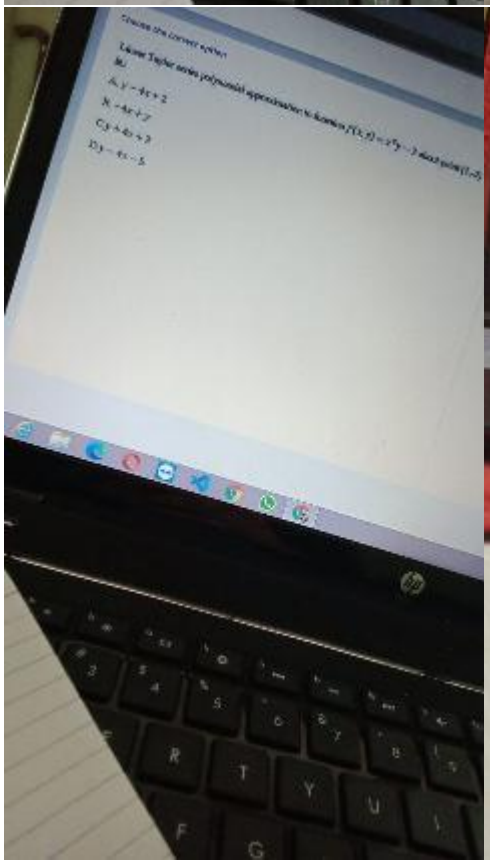

PASSAGE
For the integral $\iint e^{2x+3y} dx dy$ over the triangle bounded by $x=0, y=0$ and $x+y=1$.
Read the following Statement and Choose the correct option.
Find the limits of 'x' if integral is taken as $\int\int e^{2x+3y} dy dx$
a) $0 \le x \le 1$
b) $y \le x \le 1-y$
c) $0 \le x \le 2$
d) None of these
SKIP

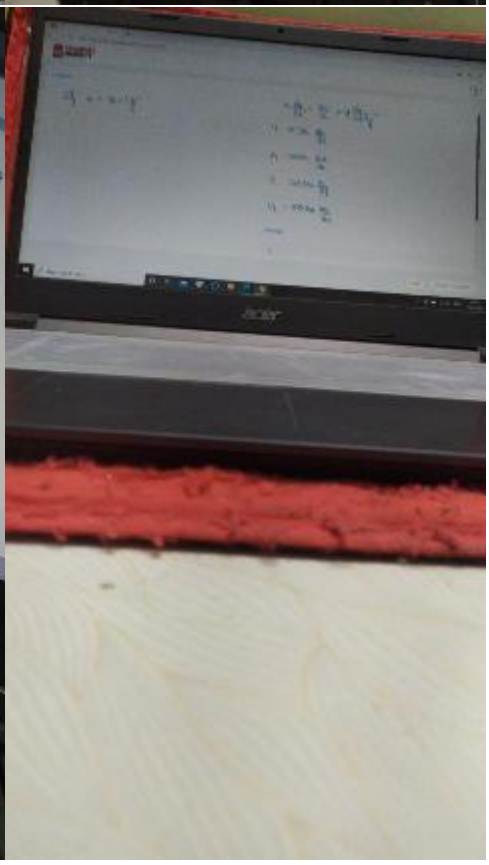

Value of $\int_0^1 \int_0^{x^2} xe^y dy dx$ is equal to
(a) $\frac{e}{2}$
b) e-1
c)1-e
d)None of these

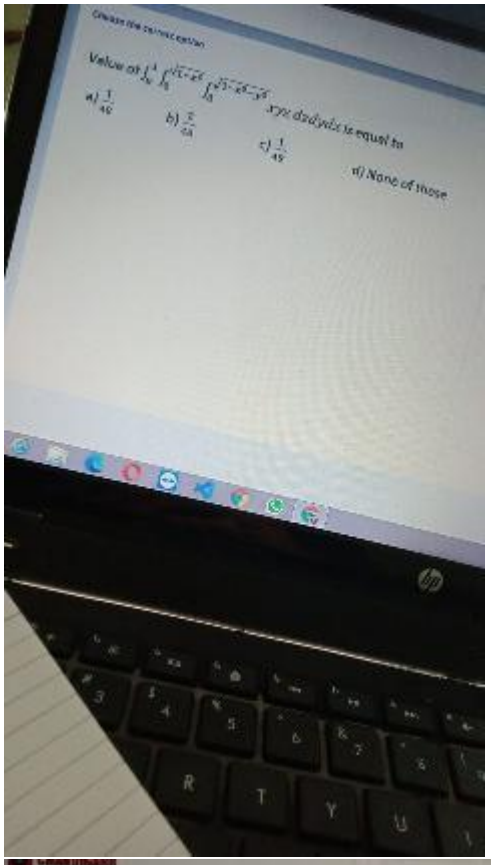

UNIVERSITY
If $u = \tan^{-1}\frac{x^3+y^3}{x-y}$ (3)
$x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y}$
1) $\sin 2u \frac{\partial u}{\partial x}$
2) $2\cos 2u \frac{\partial u}{\partial y}$
3) $3\cos 2u \frac{\partial u}{\partial u}$
4) $2\sin 2u \frac{\partial u}{\partial u}$

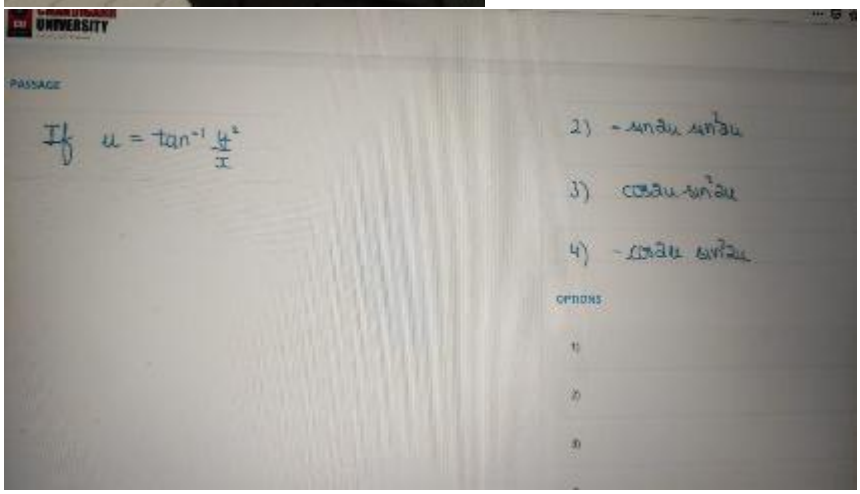


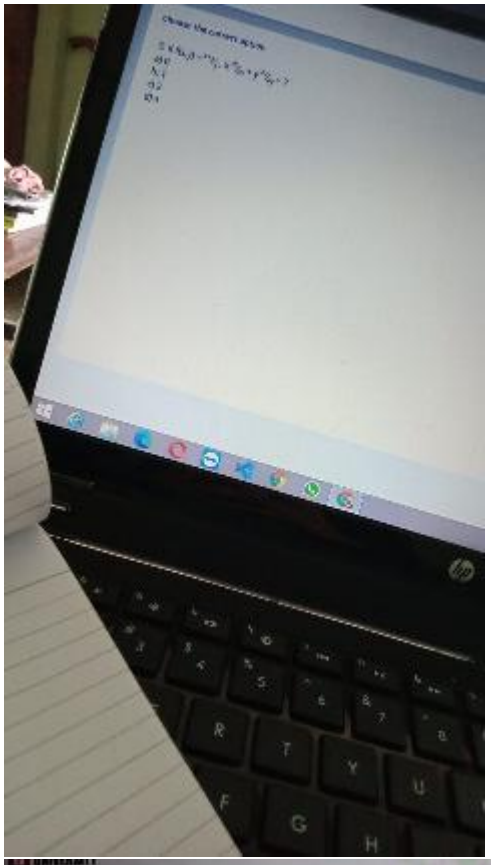

Choose the correct option
Value of $\int_0^1 \int_0^x xe^y dy dx$ is equal to
(a) $\frac{e}{2}$
b) e-1
c)1-e
d)None of these

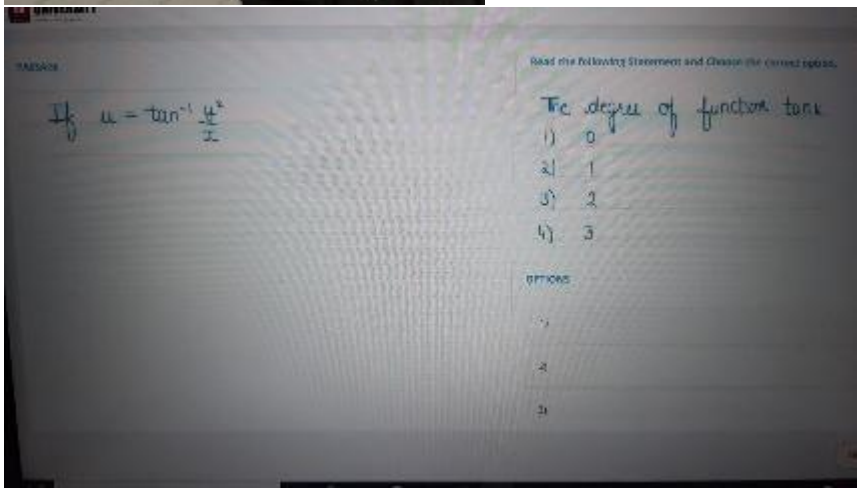


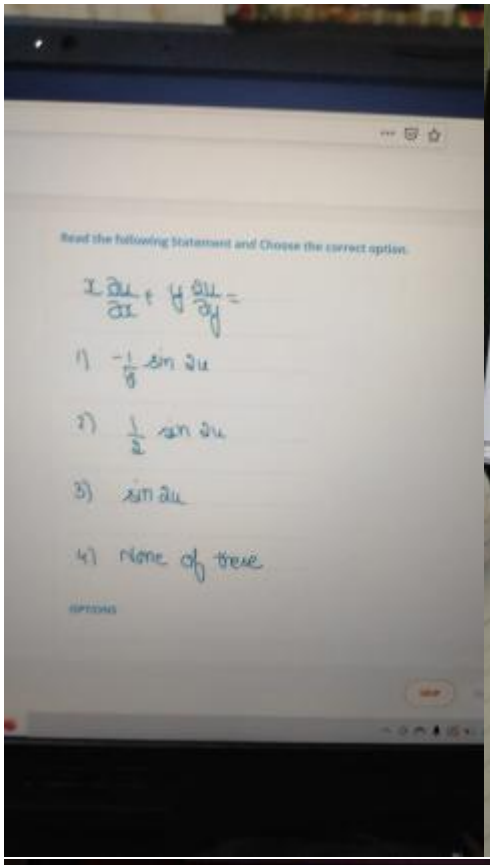


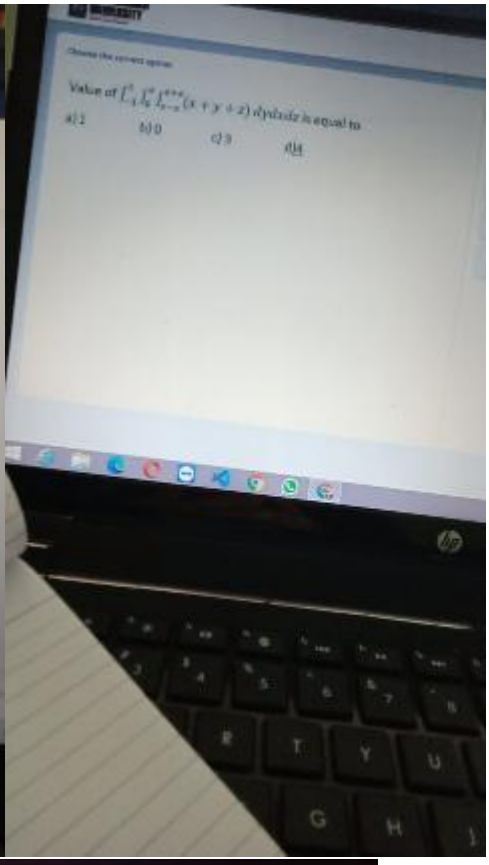

Choose the correct option
Value of $\int_0^1 \int_0^{\sqrt{1-x^2}} \int_0^{\sqrt{1-x^2-y^2}} xyz\,dxdydz$ is equal to
a) $\frac{1}{48}$
b) $\frac{1}{24}$
c) $\frac{1}{48}$
d) None of these

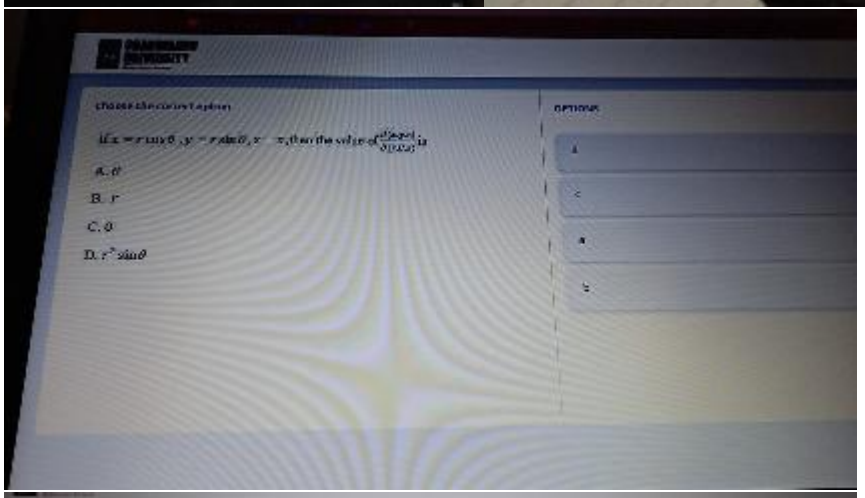

UNIVERSITY
PASSAGE
If $u = \tan^{-1}\frac{y^2}{x}$
2) -sin2u sin3u
3) cos3u sin2u
4) -cos3u sin2u
OPTIONS

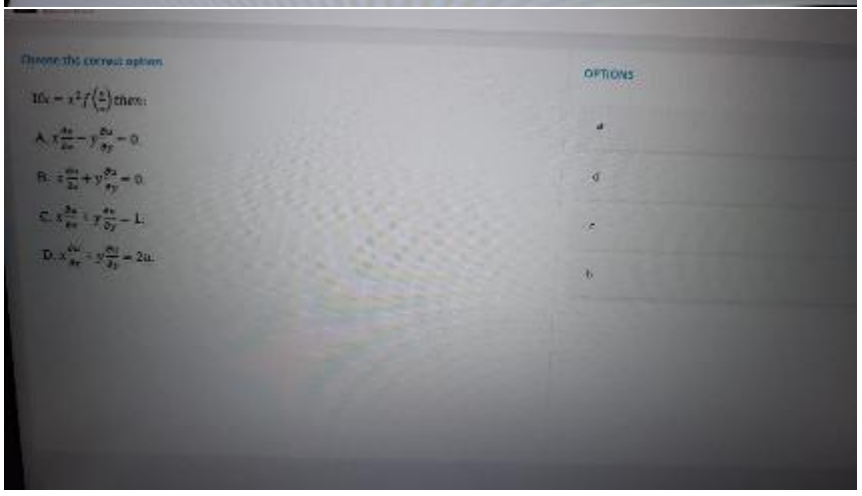


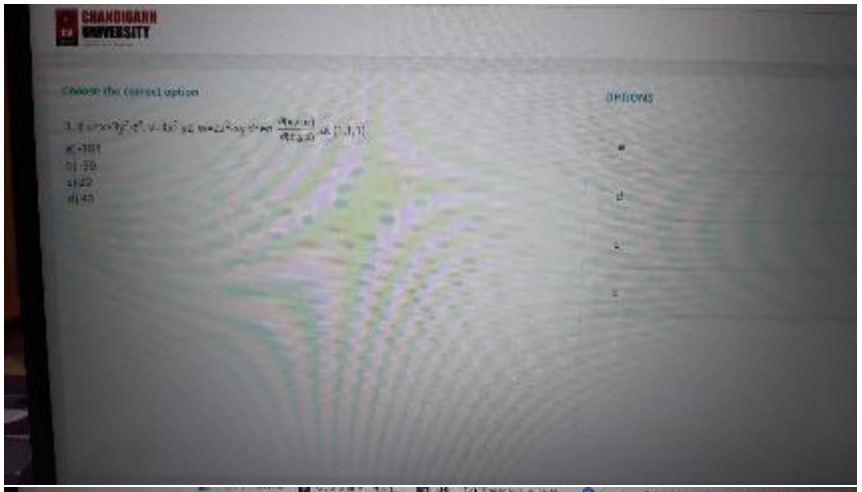

If $u = \tan^{-1}\frac{y^2}{x}$
Read the following Statement and Choose the correct option.
The degree of function tan
1) 0
2) 1
3) 2
4) 3
options


Read the following Statement and Choose the correct option.
$x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y} =$
1) $-\frac{1}{2}\sin 2u$
2) $\frac{1}{2}\sin 2u$
3) $\sin 2u$
4) none of these
OPTIONS


Value of $\int_{-1}^{1}\int_{0}^{2}\int_{x-z}^{x+z}(x+y+z)\,dy\,dx\,dz$ is equal to
a) 1
b) 0
c) 3
d) 4


OPTIONS
A. 0
B. r
C. 0
D. $r^2\sin\theta$


Choose the correct option
If $u = x^2 f\left(\frac{y}{x}\right)$ then:
A. $x\frac{\partial u}{\partial x} - y\frac{\partial u}{\partial y} = 0$
B. $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y} = 0$
C. $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y} = 1$
D. $x\frac{\partial u}{\partial x} - y\frac{\partial u}{\partial y} = 2u$
OPTIONS


CHANDIGARH UNIVERSITY
Choose the correct option
OPTIONS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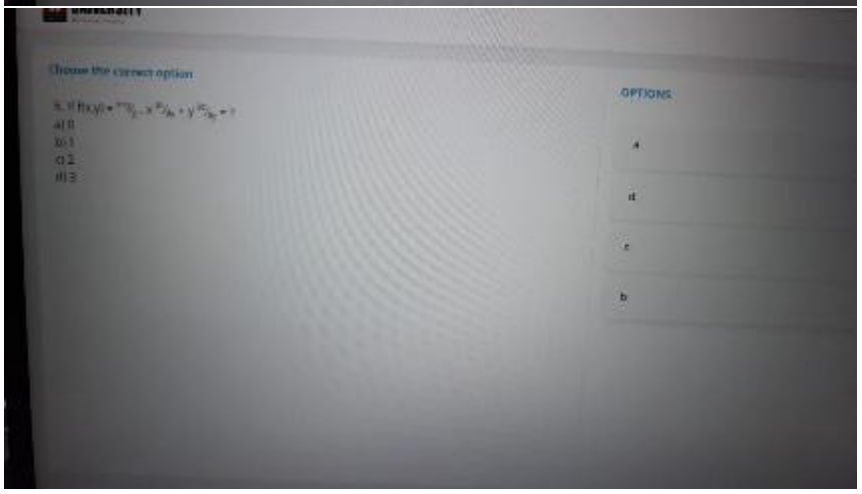
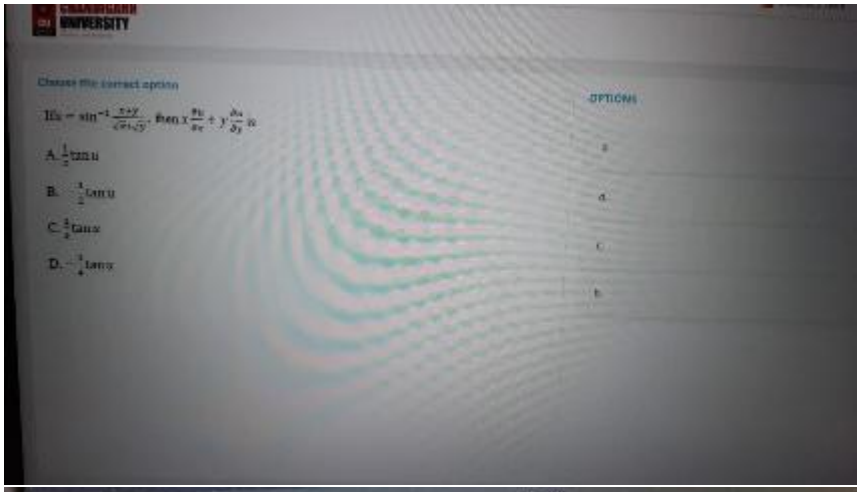
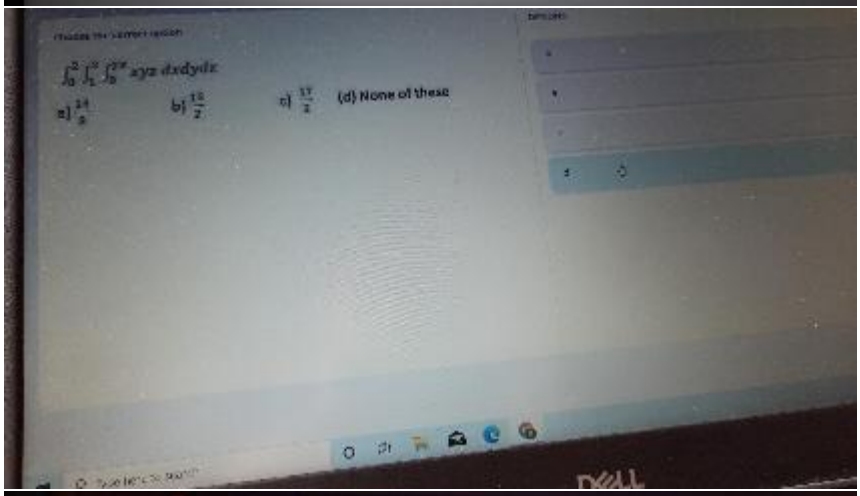
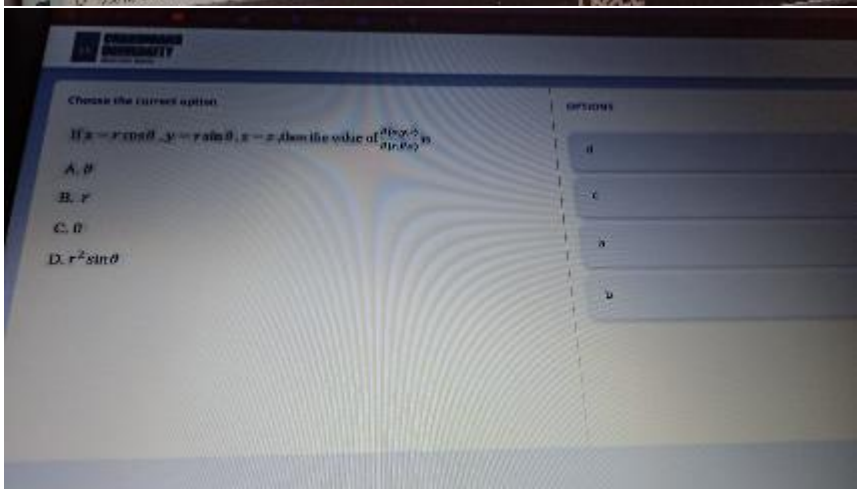
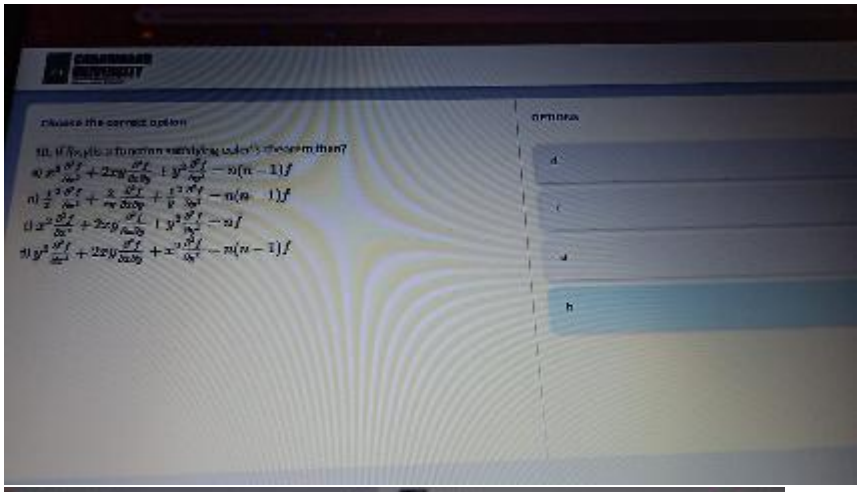
OPTIONS


Choose the correct option
OPTIONS


UNIVERSITY
Choose the correct option
OPTIONS
If $u = \sin^{-1}\frac{x+y}{\sqrt{x}+\sqrt{y}}$, then $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y}$ is
A. $\frac{1}{2}\tan u$
B. $\frac{1}{2}\cot u$
C. $\frac{1}{2}\sin u$
D. $-\frac{1}{4}\tan u$


$\int_0^2 \int_1^2 \int_0^{\sqrt{y}} xyz\, dxdydz$
a) $\frac{24}{5}$
b) $\frac{15}{2}$
c) $\frac{17}{2}$
(d) None of these


Choose the correct option
OPTIONS
If $x = r\cos\theta$, $y = r\sin\theta$, $z = z$ then the value of $\frac{\partial(x,y,z)}{\partial(r,\theta,z)}$ is
A. θ
B. r
C. 0
D. $r^2\sin\theta$



Document

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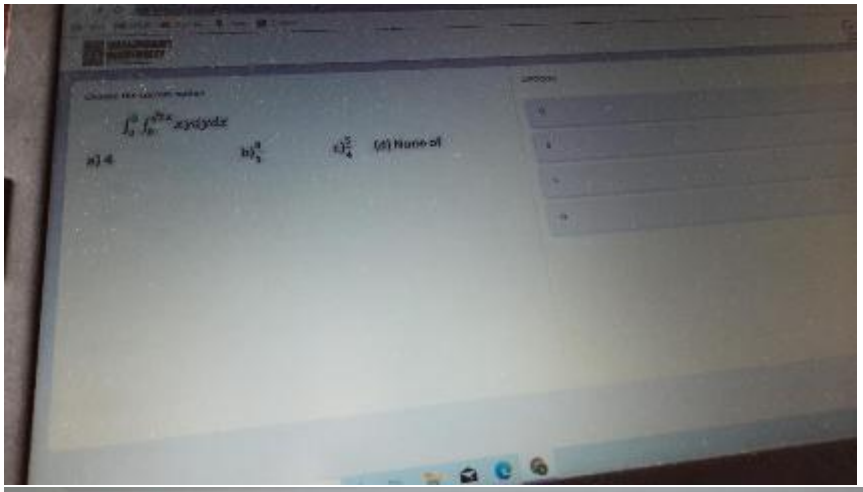
Choose the correct option

3. If $u=x+3y^2-z^3$, $v=4x^2yz$, $w=2z^2-xy$ then $\frac{\partial(u,v,w)}{\partial(x,y,z)}$ at (1,1,1).

a) -184
b) -90
c) 20
d) 40



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SSAGE

Read the following Statement and Choos

$u = \sin^{-1}\left(\frac{x}{y}\right) + \tan^{-1}\left(\frac{y}{x}\right)$

Then $x\frac{\partial u}{\partial x}$

a) $\frac{x}{\sqrt{y^2 - x^2}} - \frac{xy}{x^2 + y^2}$

b) $\frac{1}{\sqrt{y^2 - x^2}} - \frac{y}{x^2 + y^2}$

c) 0

d) -1

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Choose the correct option

6. If u+v=e^x cosy and u-v=e^x sin y the value of $J(\frac{u,v}{x,y})$ is _____

a) e^{2x}

b) $\frac{e^2x}{2}$

c) $\frac{-e^2x}{2}$

d) 0

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Choose the correct option

2. $f(x, y) = \sin(xy) + x^2 \ln(y)$ Find f_{yx} at $(0, \pi/2)$

a) 33

b) 0

c) 3

d) 1

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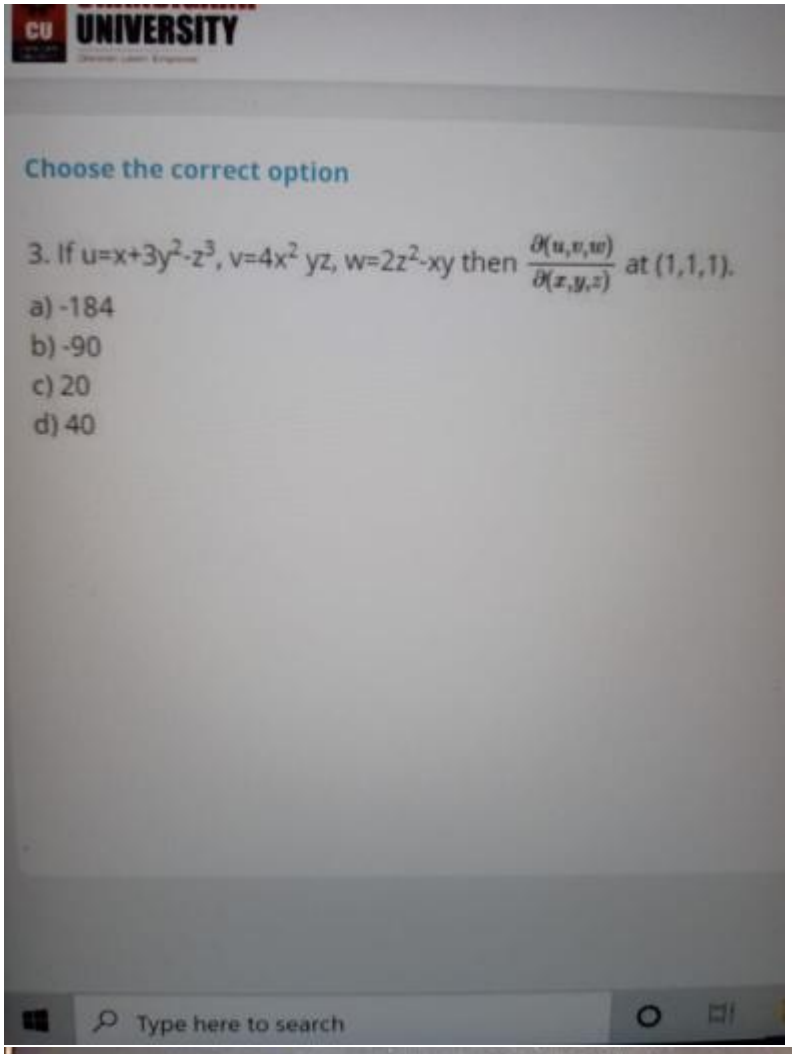
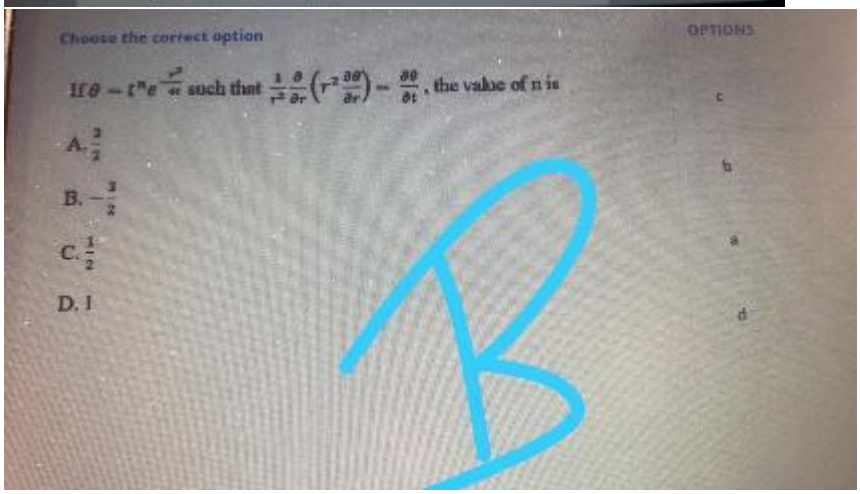
Choose the correct option

2. Given $u = \frac{yz}{x}, v = \frac{zx}{y}, w = \frac{xy}{z}$ then the value of $\frac{\partial(u,v,w)}{\partial(x,y,z)}$ is

a) 4
b) -4
c) 0
d) 1

Type here to search


CU UNIVERSITY
Choose the correct option
3. If u=x+3y²-z³, v=4x² yz, w=2z²-xy then ∂(u,v,w)/∂(x,y,z) at (1,1,1).
a) -184
b) -90
c) 20
d) 40
Type here to search


Choose the correct option
OPTIONS
If θ = t^n e^(-r²/4t) such that (1/r²) ∂/∂r (r² ∂θ/∂r) = ∂θ/∂t, the value of n is
A. 3/2
B. -3/2
C. 1/2
D. 1
c
b
a
d

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ASSAGE

If $u = \sin^{-1}\left(\frac{x}{y}\right) + \tan^{-1}\left(\frac{y}{x}\right)$

Read the following Statement and

Then $y\frac{\partial u}{\partial y}$

a) $-\frac{x}{\sqrt{y^2 - x^2}} + \frac{xy}{x^2 + y^2}$

b) $\frac{1}{\sqrt{y^2 - x^2}} - \frac{y}{x^2 + y^2}$

c) 0

d) -1

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PASSAGE

Taylor's expansion of $\tan^{-1}\frac{y}{x}$ about (1, 1).

Read the following Statement an

Value of f_{yy} is

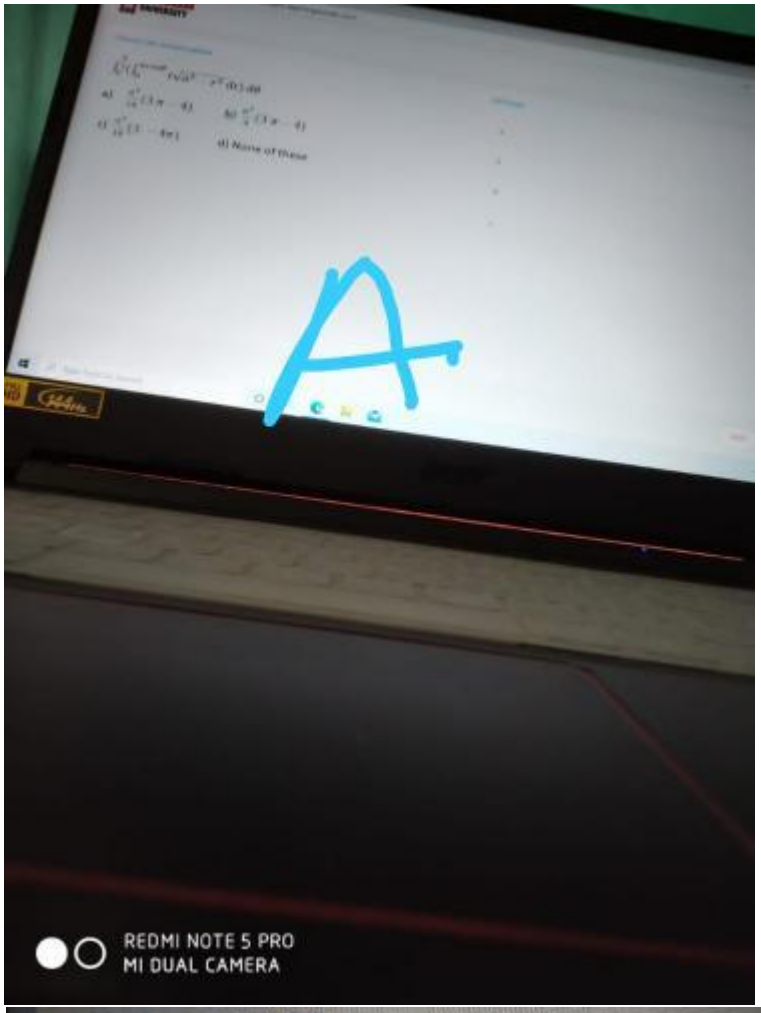
a) -1/2

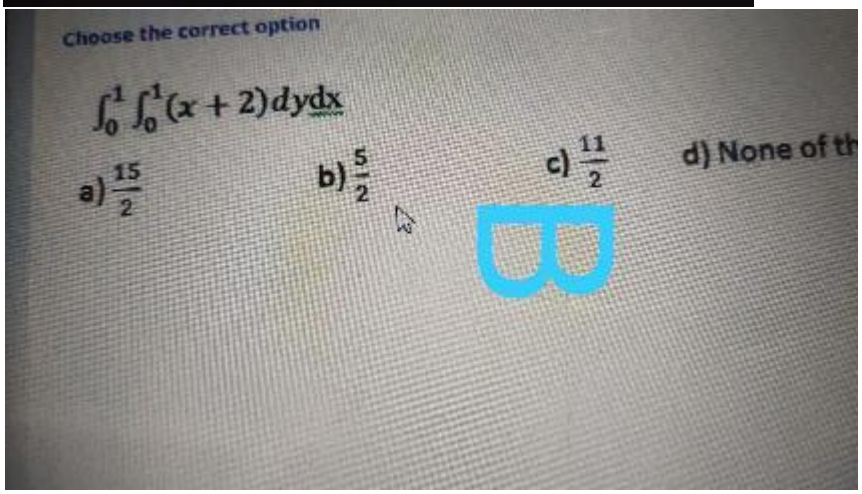
c) ½

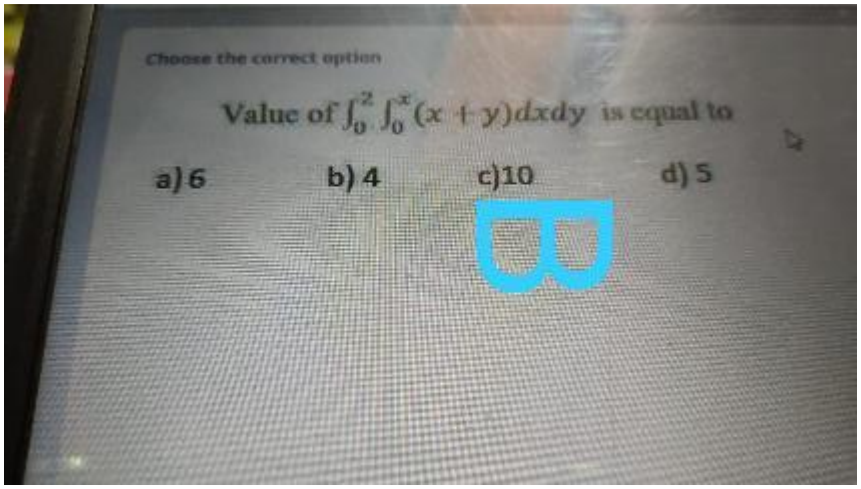
OPTIONS

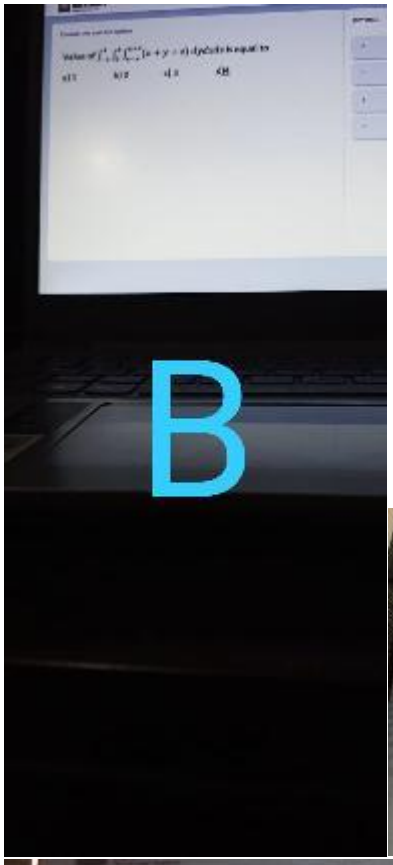
a)

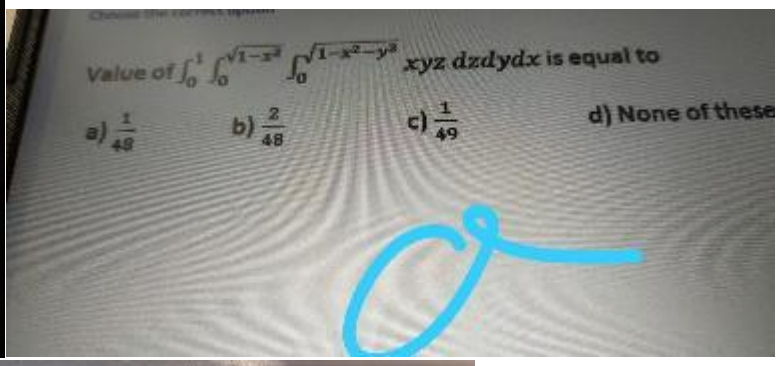
b)

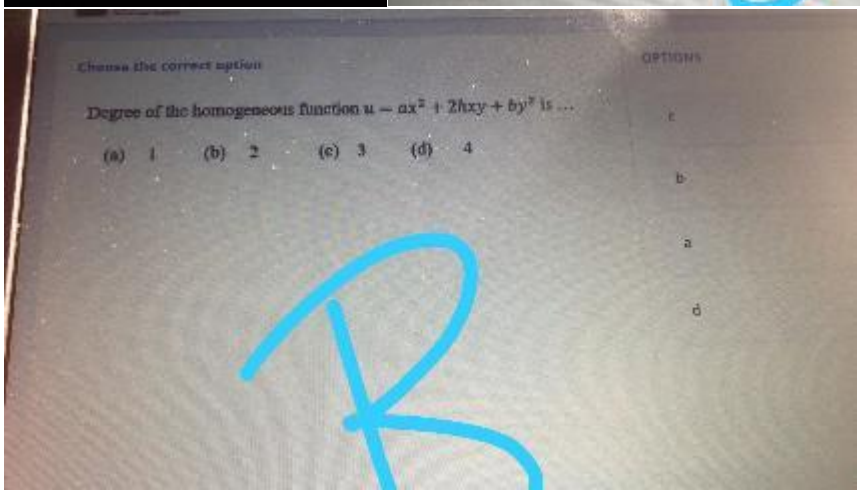

A
REDMI NOTE 5 PRO
MI DUAL CAMERA


Choose the correct option
$\int_0^1 \int_0^1 (x+2)\,dy\,dx$
a) $\frac{15}{2}$
b) $\frac{5}{2}$
c) $\frac{11}{2}$
d) None of th
B


Choose the correct option
Value of $\int_0^2 \int_0^x (x+y)dxdy$ is equal to
a) 6
b) 4
c) 10
d) 5


B


Value of $\int_0^1 \int_0^{\sqrt{1-x^2}} \int_0^{\sqrt{1-x^2-y^2}} xyz\, dzdydx$ is equal to
a) $\frac{1}{48}$
b) $\frac{2}{48}$
c) $\frac{1}{49}$
d) None of these


Choose the correct option
OPTIONS
Degree of the homogeneous function $u = ax^2 + 2hxy + by^2$ is ...
(a) 1
(b) 2
(c) 3
(d) 4
c
b
a
d

Choose the correct option

Value of $\int_0^a \int_0^b \int_0^c y^2x^2z^2\,dzdxdy =$

a) abc\3 b)$a^3b^3c^3/27$ c) $a^2b^2c^2/9$ d) $a^2b^2c^2/2$

Choose the correct option

If $x = r\cos\theta$, $y = r\sin\theta$, $z = z$,then the value of $\frac{\partial(x,y,z)}{\partial(r,\theta,z)}$ is

A. θ

B. r

C. 0

D. $r^2\sin\theta$

If $u = \tan^{-1}\frac{x^3+y^3}{x+y}$ $x^2\frac{\partial^2u}{\partial x^2} + 2xy\frac{\partial^2u}{\partial x\partial y} + y^2\frac{\partial^2u}{\partial y^2} =$

1) $\sin 4u + \sin 2u$

2) $2\cos 3u \sin u$

3) $2\sin 3u \cos u$

4) $\sin 2u - \sin u$

OPTIONS

Choose the correct option

If u is a homogeneous function of order n, then $\frac{\partial u}{\partial x}$ and $\frac{\partial u}{\partial y}$ both are homogeneous

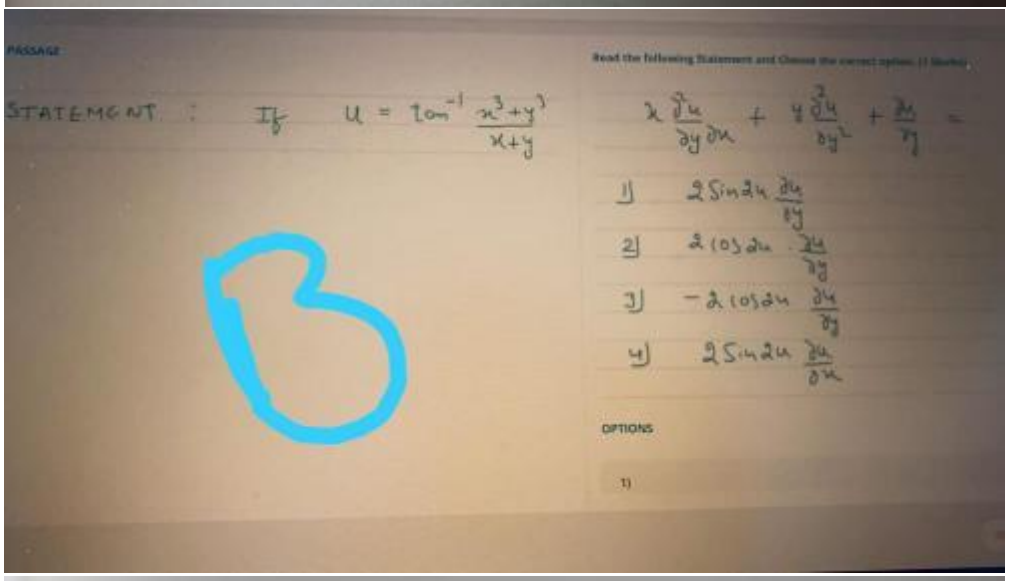
the order:

A. n

B. $n-1$

C. $n+1$

D. $n \pm 1$



PASSAGE

Read the following Statement and Choose the correct option. (1 Marks)

STATEMENT : If $u = \tan^{-1}\frac{x^3+y^3}{x+y}$

$x\frac{\partial^2 u}{\partial y \partial x} + y\frac{\partial^2 u}{\partial y^2} + \frac{\partial u}{\partial y} =$

1) $2\sin 2u \frac{\partial u}{\partial y}$

2) $2\cos 2u \cdot \frac{\partial u}{\partial x}$

3) $-2\cos 2u \frac{\partial u}{\partial y}$

4) $2\sin 2u \frac{\partial u}{\partial x}$

OPTIONS

1)

Choose the correct option

$$\int_0^{\frac{\pi}{2}} \left(\int_0^{a\cos\theta} r\sqrt{a^2 - r^2}\, dr \right) d\theta$$

a) $\frac{a^3}{18}(3\pi - 4)$

b) $\frac{a^2}{9}(3\pi - 4)$

c) $\frac{a^3}{18}(3 - 4\pi)$

d) None of these

PASSAGE

Read the following Statement and Choose the correct option. (1 Marks)

STATEMENT : If $u = \tan^{-1}\frac{x^3+y^3}{x+y}$

(2) $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y} = ?$

1) $\tan 2u$

2) $-\tan 2u$

3) $\sin 2u$

4) $\cos 2u$

OPTIONS

1)

3

Read the following Statement and Choose the correct option. (1 Marks)

NT : If $u = \tan^{-1}\frac{x^3+y^3}{x+y}$

(3) $x\frac{\partial^2 u}{\partial x^2} + \frac{\partial u}{\partial x} + y\frac{\partial^2 u}{\partial x \partial y} =$

1) $\sin 2u \frac{\partial u}{\partial y}$

2) $2\cos 2u \frac{\partial u}{\partial y}$

3) $2\cos 2u \frac{\partial u}{\partial x}$

4) $2\sin 2u \frac{\partial u}{\partial x}$

OPTIONS

1)

3

...e integral $\iint_R xy(x+y)\,dy\,dx$, where R is the ...on bounded by $y=x^2$ and $y=x$

B

Read the following Statement and Choose the correct option.

Find the limits of x if integral is taken as $\iint xy(x+y)\,dx\,dy$

a) $0 \le x \le 1$

b) $y \le x \le \sqrt{y}$

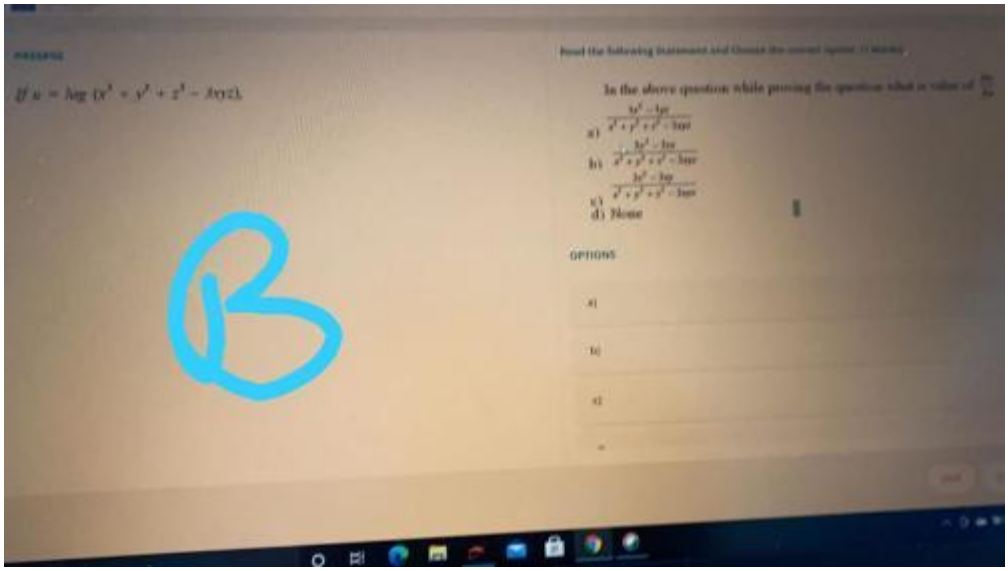
c) $0 \le x \le \sqrt{y}$

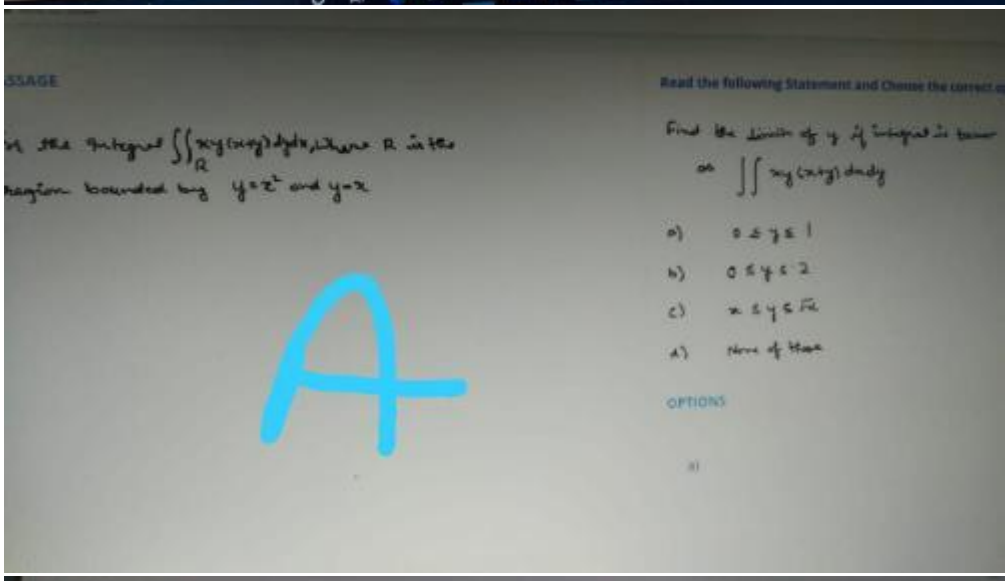
d) None of these

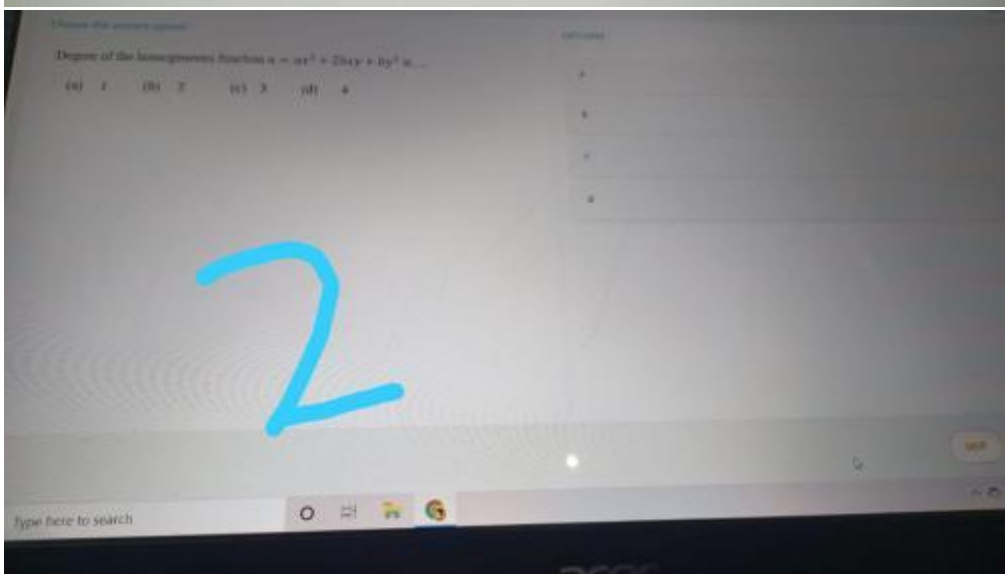
OPTIONS

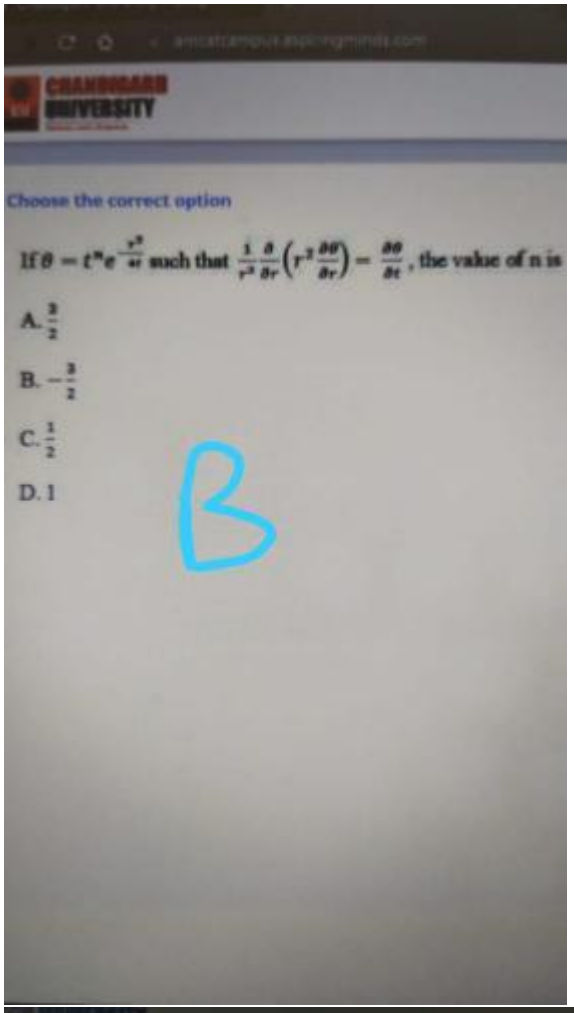
a)

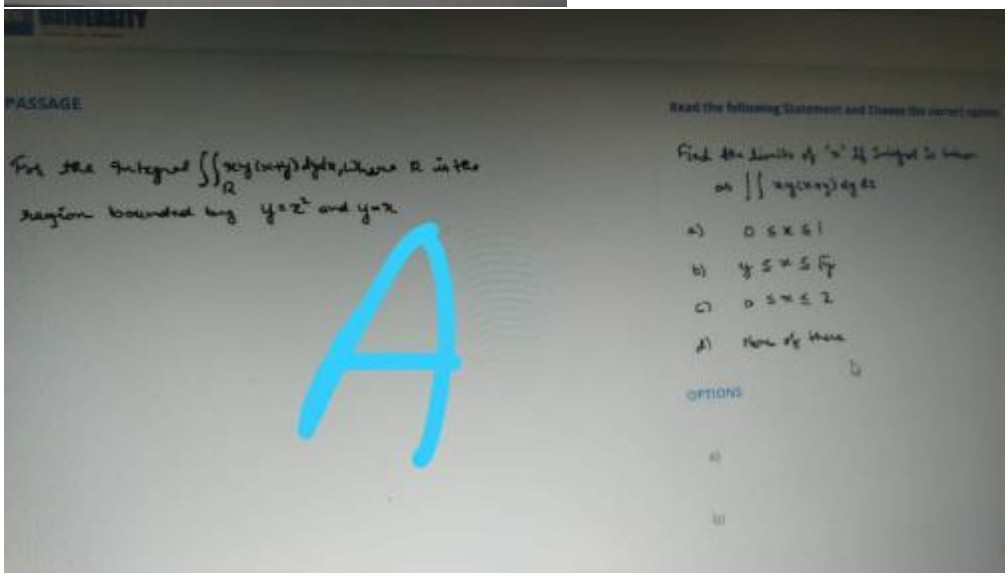
b)

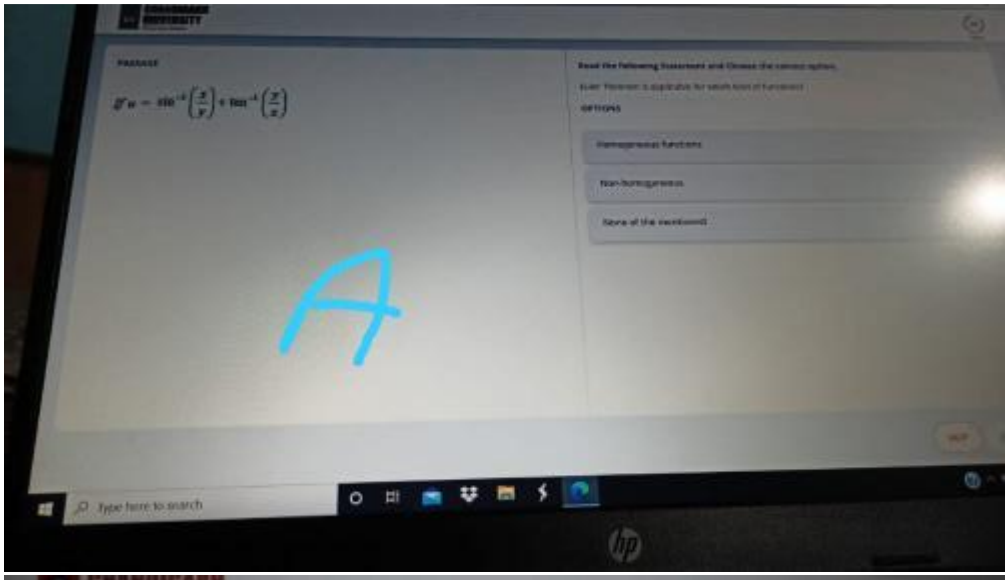

If u = log (x³ + y³ + z³ − 3xyz),
B
In the above question while proving the question what is value of
a)
b)
c)
d) None
OPTIONS

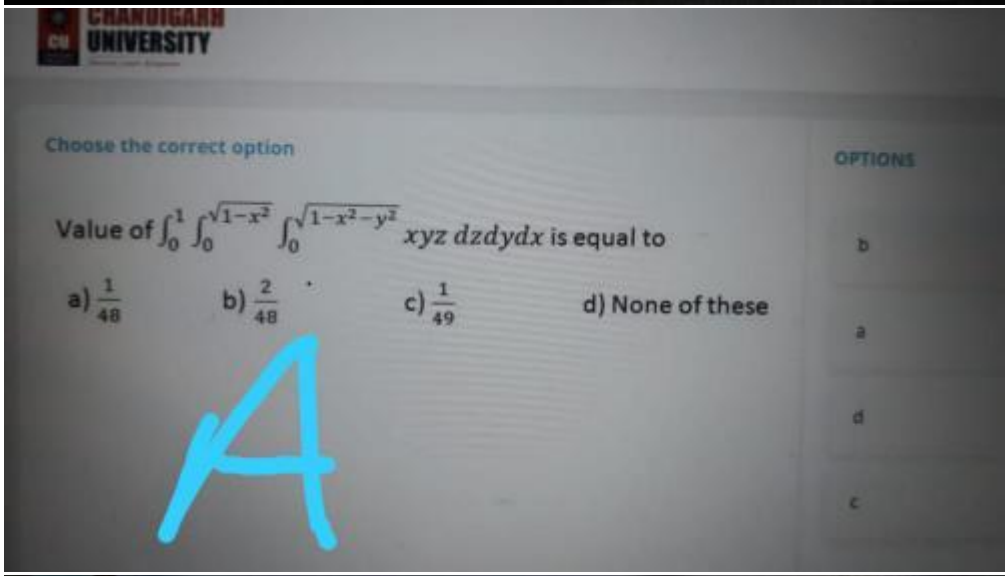

SSAGE
Read the following Statement and Choose the correct
Find the limits of y if integral is taken
A
OPTIONS

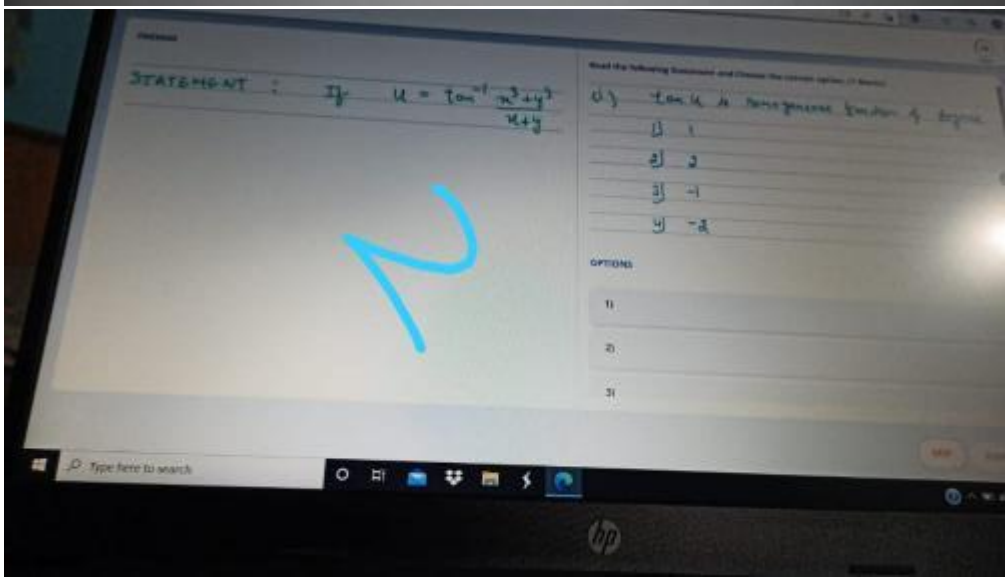

2
Type here to search

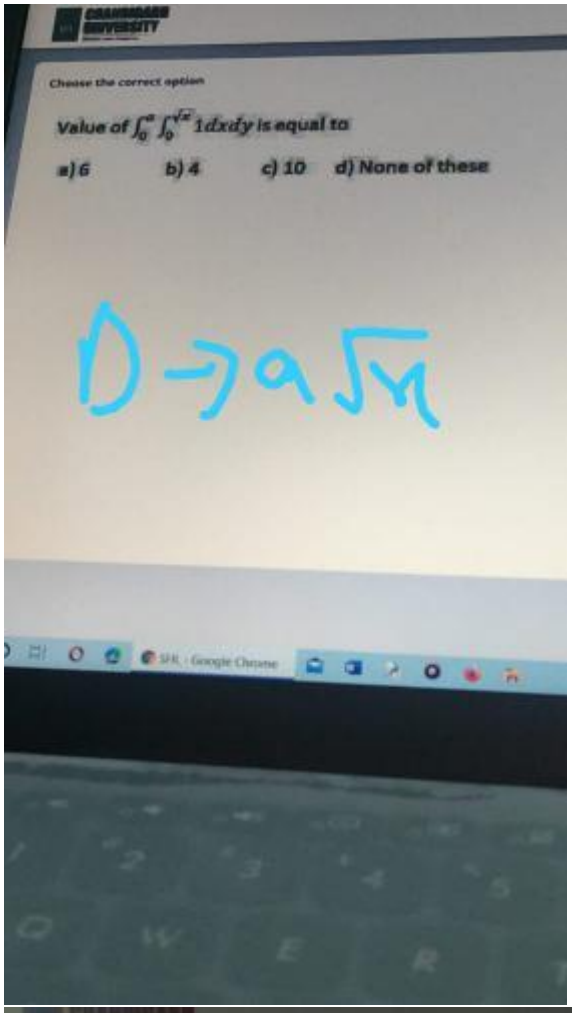

UNIVERSITY
Choose the correct option
If $\theta = t^n e^{-\frac{r^2}{4t}}$ such that $\frac{1}{r^2}\frac{\partial}{\partial r}\left(r^2\frac{\partial\theta}{\partial r}\right) = \frac{\partial\theta}{\partial t}$, the value of n is
A. $\frac{3}{2}$
B. $-\frac{3}{2}$
C. $\frac{1}{2}$
D. 1
B

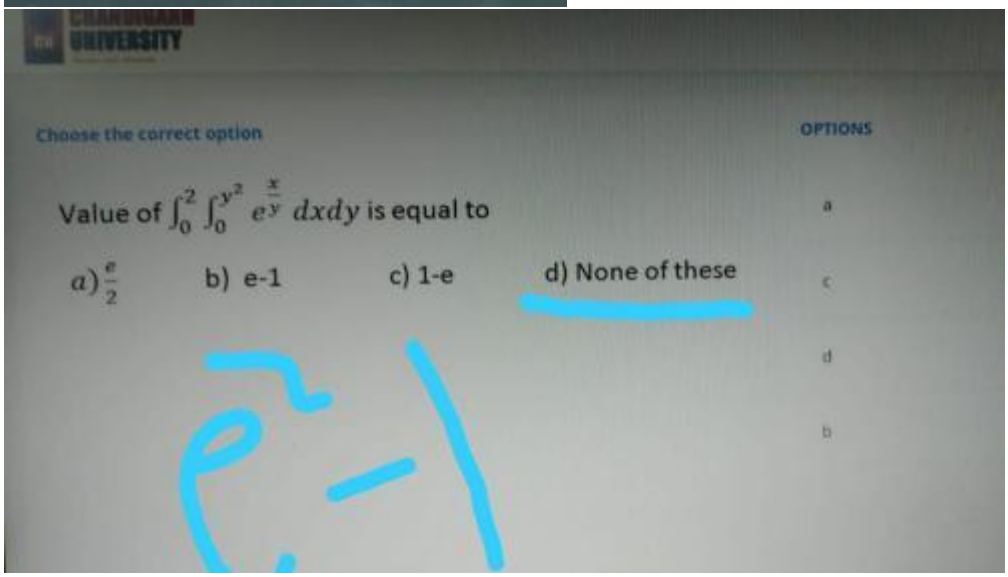

PASSAGE
For the integral $\iint_R xy(x+y)\,dy\,dx$, where R is the region bounded by $y=x^2$ and $y=x$
A
Read the following Statement and Choose the correct option
Find the limits of 'x' if integral is taken on $\iint xy(x+y)\,dy\,dx$
a) $0 \le x \le 1$
b) $y \le x \le \sqrt{y}$
c) $0 \le x \le 2$
d) None of these
OPTIONS


A


CHANDIGARH UNIVERSITY
Choose the correct option
OPTIONS
Value of $\int_0^1 \int_0^{\sqrt{1-x^2}} \int_0^{\sqrt{1-x^2-y^2}} xyz\, dzdydx$ is equal to
a) $\frac{1}{48}$
b) $\frac{2}{48}$
c) $\frac{1}{49}$
d) None of these
b
a
d
c
A


STATEMENT : If $u = \tan^{-1}\frac{x^3+y^3}{x+y}$
OPTIONS
Type here to search
2


Choose the correct option
Value of $\int_0^a \int_0^{\sqrt{x}} 1 dxdy$ is equal to
a) 6
b) 4
c) 10
d) None of these


Choose the correct option
OPTIONS
Value of $\int_0^2 \int_0^{y^2} e^{\frac{x}{y}} dxdy$ is equal to
a) $\frac{e}{2}$
b) e-1
c) 1-e
d) None of these
a
c
d
b

PASSAGE

If $u = \tan^{-1}\frac{y^2}{x}$

C

Read the following Statement and Choose the correct option.

$x\frac{\partial^2 u}{\partial x \partial x} + y\frac{\partial^2 u}{\partial y^2} + \frac{\partial u}{\partial y} =$

1) $\sin 2u \frac{\partial u}{\partial y}$

2) $-\sin 2u \frac{\partial u}{\partial y}$

3) $\cos 2u \frac{\partial u}{\partial y}$

SKIP

PASSAGE

If $u = \tan^{-1}\frac{y^2}{x}$

C

Read the following Statement and Choose the correct option.

$x\frac{\partial^2 u}{\partial x^2} + \frac{\partial u}{\partial x} + y\frac{\partial^2 u}{\partial x \partial y} =$

1) $\sin 2u \frac{\partial u}{\partial x}$

2) $-\sin 2u \frac{\partial u}{\partial x}$

3) $\cos 2u \frac{\partial u}{\partial x}$

SKIP

PASSAGE

If $u = \tan^{-1}\frac{y^2}{x}$

B

Read the following Statement and Choose the correct option.

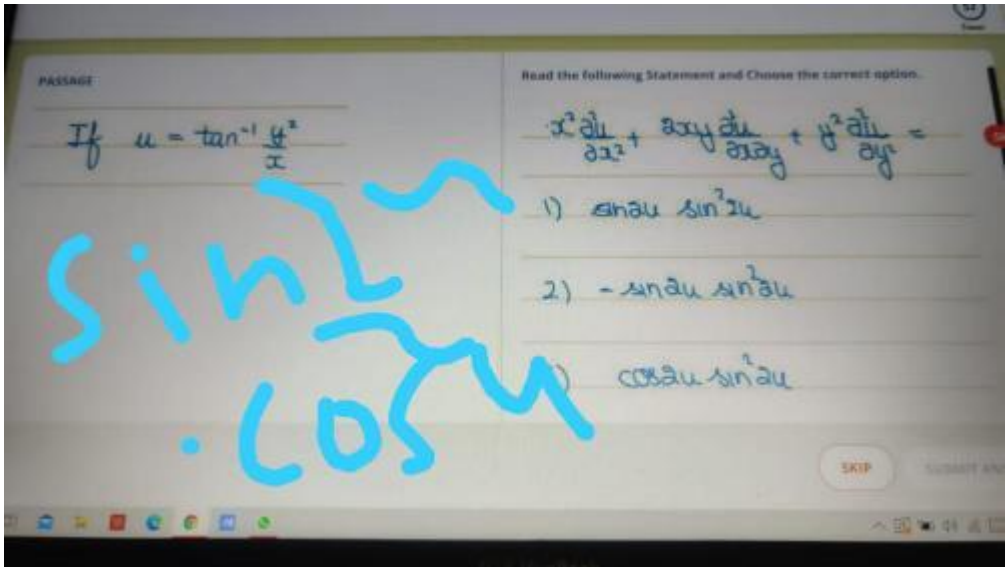
$x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y} =$

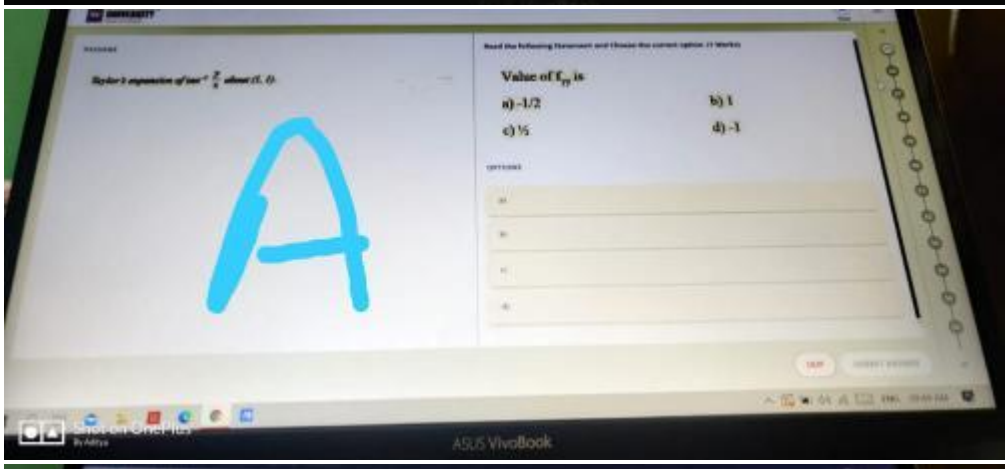
1) $-\frac{1}{2}\sin 2u$

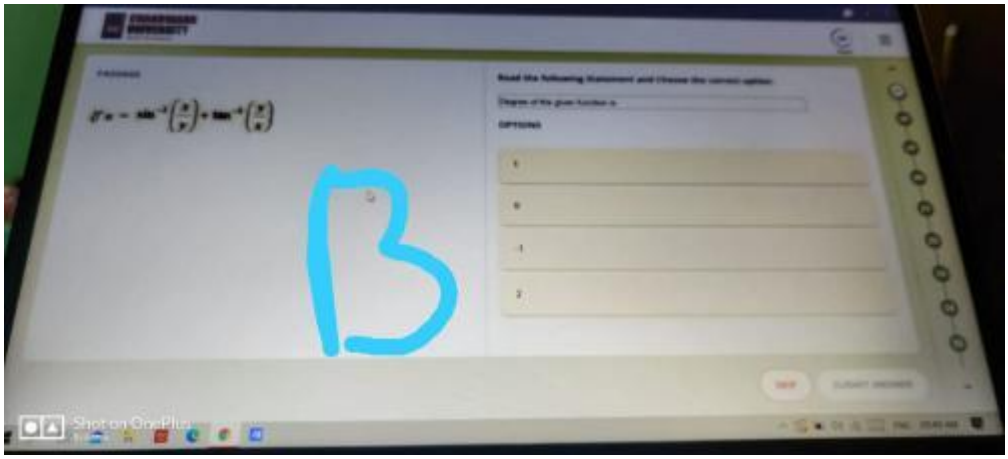
2) $\frac{1}{2}\sin 2u$

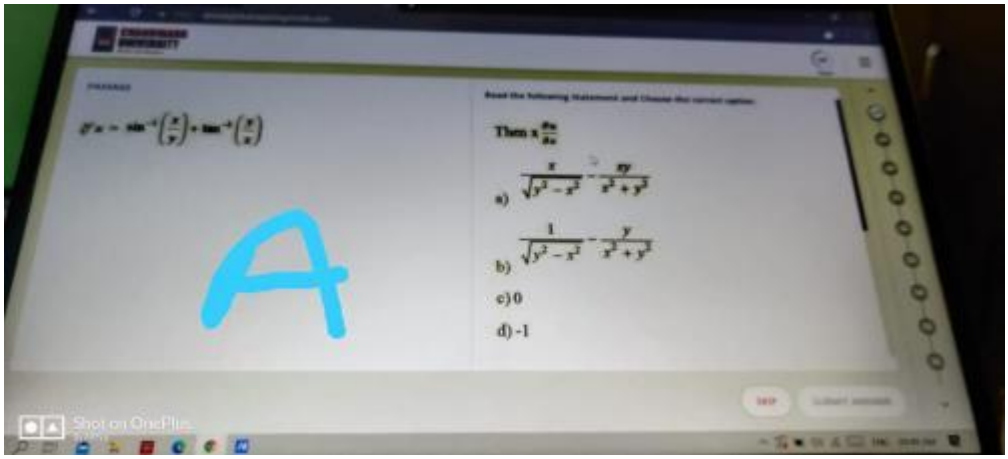
3) $\sin 2u$

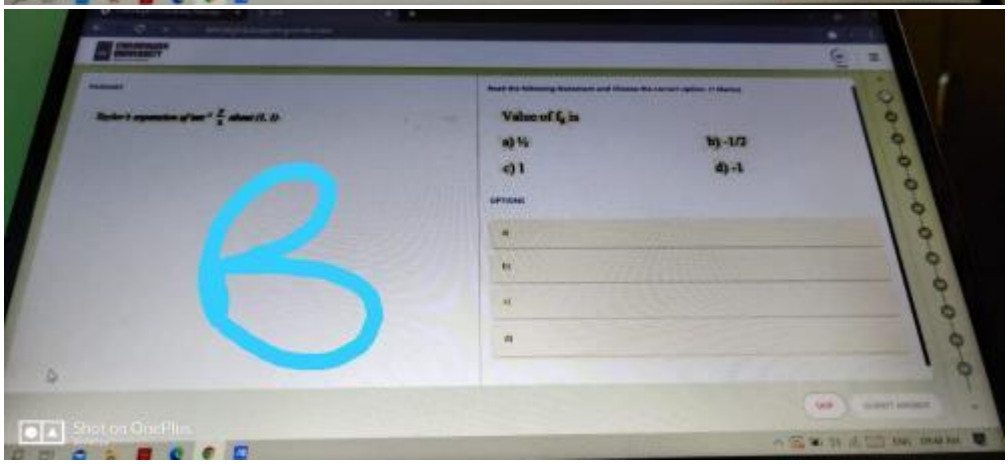
SKIP

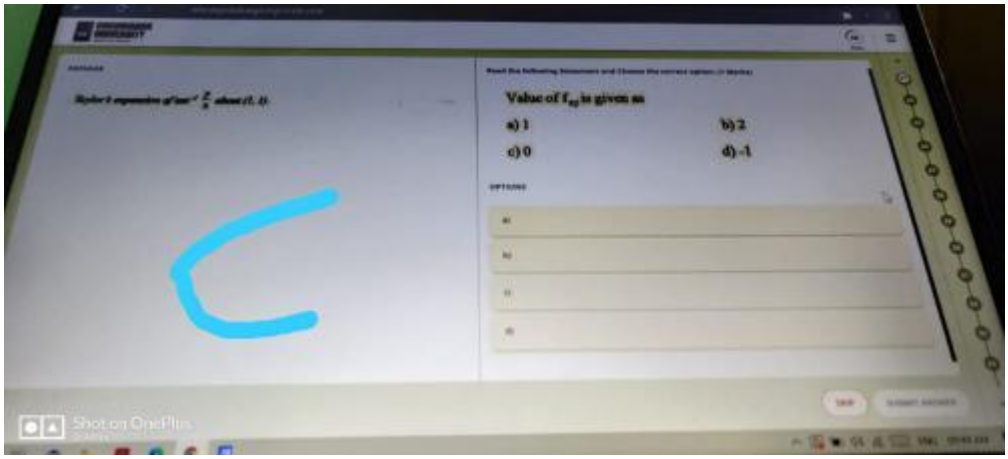

PASSAGE
If $u = \tan^{-1}\frac{y^2}{x}$
Read the following Statement and Choose the correct option.
$x^2\frac{\partial^2 u}{\partial x^2} + 2xy\frac{\partial^2 u}{\partial x \partial y} + y^2\frac{\partial^2 u}{\partial y^2} =$
1) $\sin 2u \sin^2 2u$
2) $-\sin 2u \sin^2 2u$
3) $\cos 2u \sin^2 2u$
SKIP
sin
cos

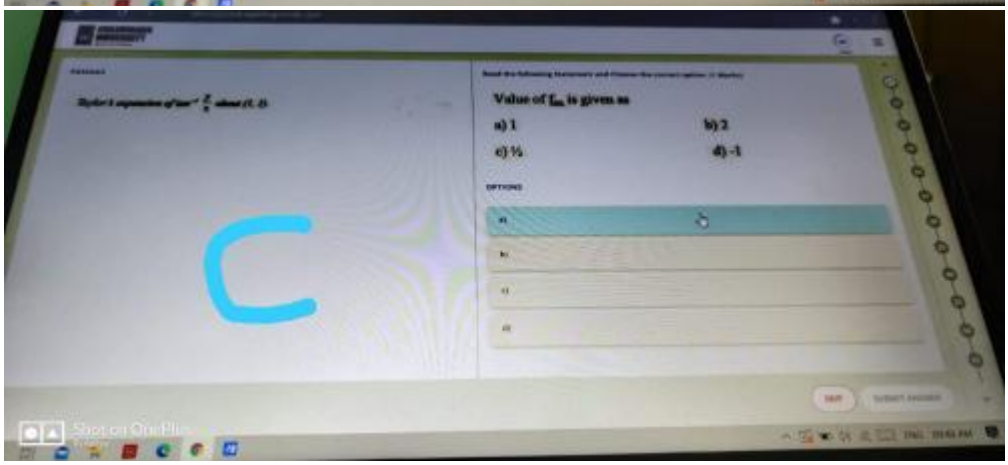

Value of f_{xy} is
a) -1/2
b) 1
c) ½
d) -1
A
ASUS VivoBook


B


Then $x\frac{\partial u}{\partial x}$
a) $\frac{x}{\sqrt{y^2-x^2}}-\frac{xy}{x^2+y^2}$
b) $\frac{1}{\sqrt{y^2-x^2}}-\frac{y}{x^2+y^2}$
c) 0
d) -1
A
Shot on OnePlus


Value of ξ_0 is
a) ½
b) -1/2
c) 1
d) -1
B
Shot on OnePlus


Value of f_{xy} is given as
a) 1
b) 2
c) 0
d) -1
C
Shot on OnePlus


Value of f_{yx} is given as
a) 1
b) 2
c) ½
d) -1
C
Shot on OnePlus

Change the order of integration $\int_0^{4a}\int_{x^2/4a}^{2\sqrt{ax}} dydx$ is

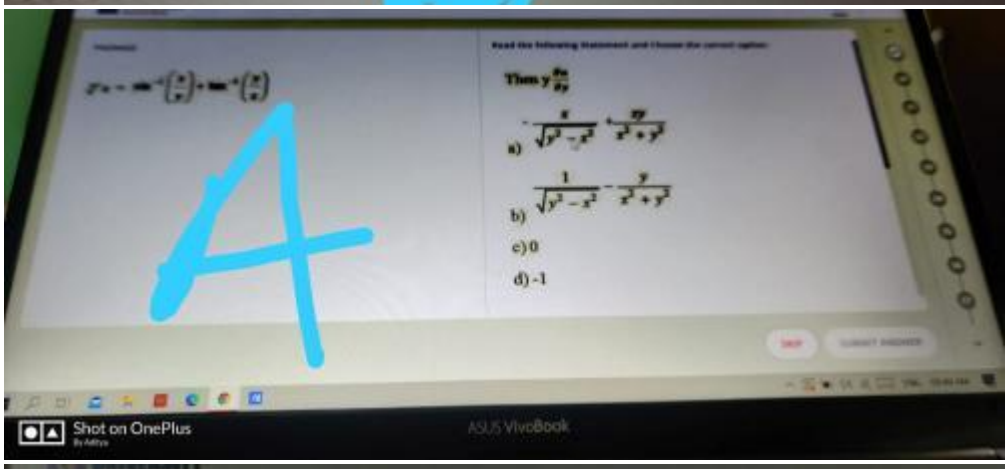
a) $\int_0^{4a}\int_{x^2/4a}^{6\sqrt{ax}} dydx$

b) $\int_0^{2a}\int_{x^2/4a}^{2\sqrt{ax}} dydx$

c) $\int_0^{4a}\int_{x^2/4a}^{2\sqrt{ax}} dxdy$

d) $\int_0^{4a}\int_{y^2/4a}^{2\sqrt{ay}} dxdy$

D



A

Choose the correct option

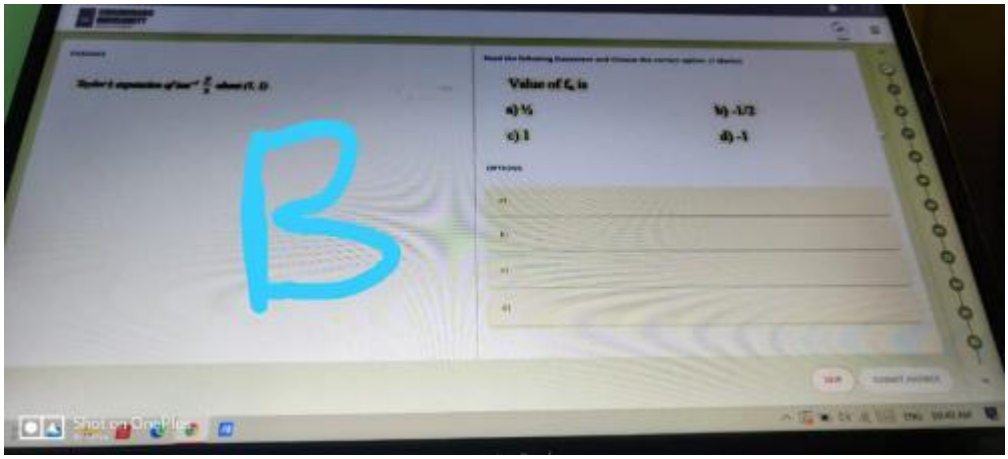
OPTIONS

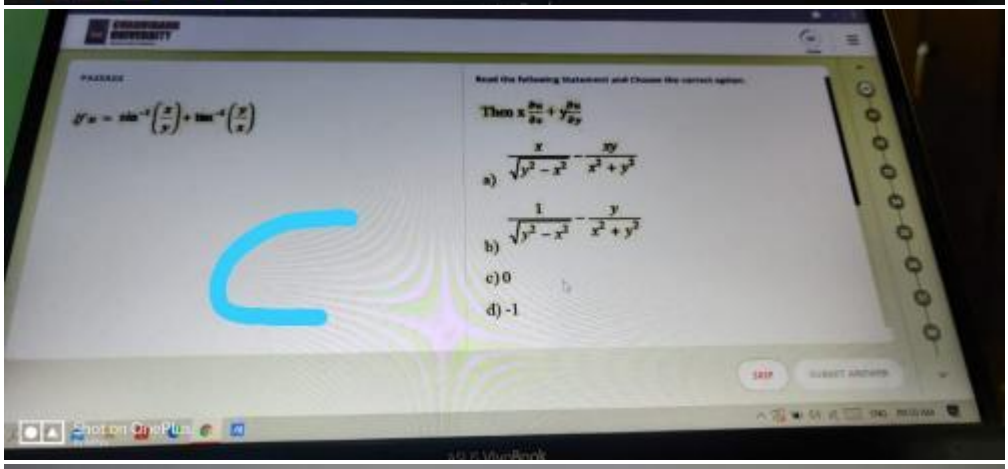
$\int_0^2\int_0^{\sqrt{2}x} xydydx$

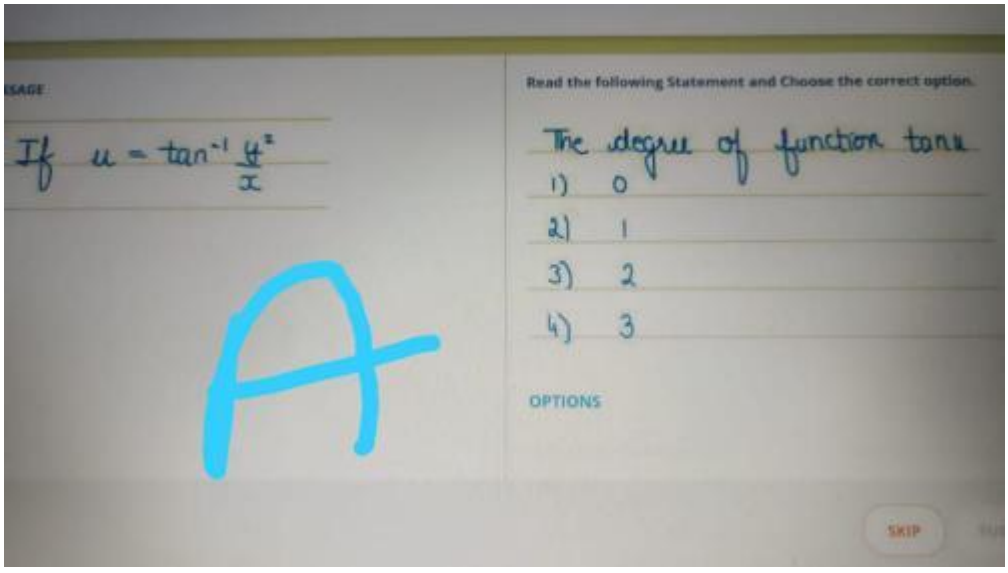
a) 4 b) $\frac{8}{3}$ c) $\frac{5}{4}$ (d) None of

a
c
d
b

A


Value of ℓ_0 is
a) ½
b) -1/2
c) 1
d) -1
B


$y' u = \sin^{-1}\left(\frac{x}{y}\right) + \tan^{-1}\left(\frac{y}{x}\right)$
Then $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y}$
a) $\frac{x}{\sqrt{y^2 - x^2}} - \frac{xy}{x^2 + y^2}$
b) $\frac{1}{\sqrt{y^2 - x^2}} - \frac{y}{x^2 + y^2}$
c) 0
d) -1
C


Read the following Statement and Choose the correct option.
If $u = \tan^{-1}\frac{y^2}{x}$
The degree of function tan u
1) 0
2) 1
3) 2
4) 3
OPTIONS
SKIP
A