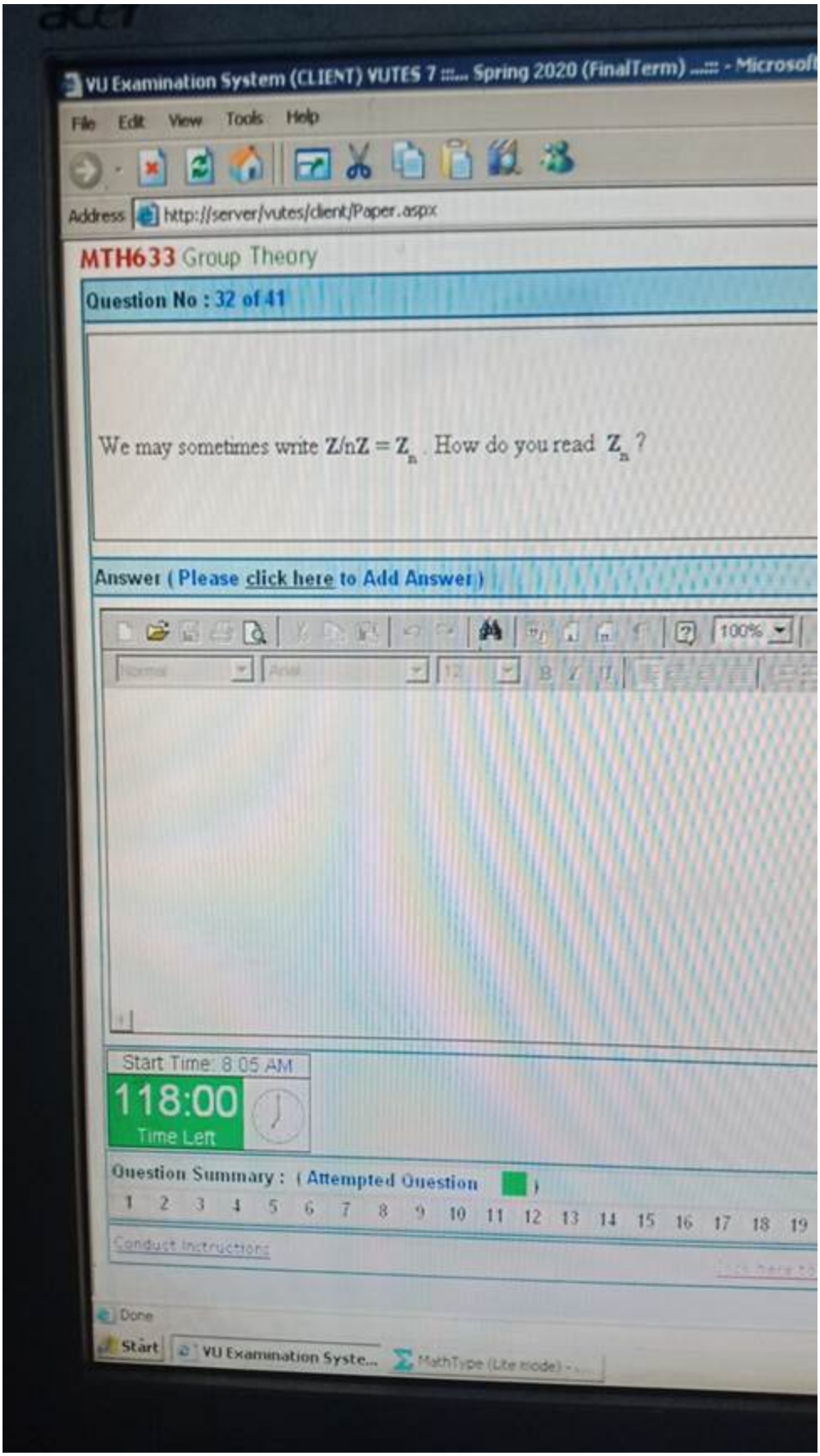
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Address http://server/vutes/client/Paper.aspx
MTH633 Group Theory
Question No : 32 of 41
We may sometimes write Z/nZ = Z_n . How do you read Z_n ?
Answer (Please click here to Add Answer)
100%
Start Time: 8:05 AM
118:00
Time Left
Question Summary : (Attempted Question)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Conduct Instructions
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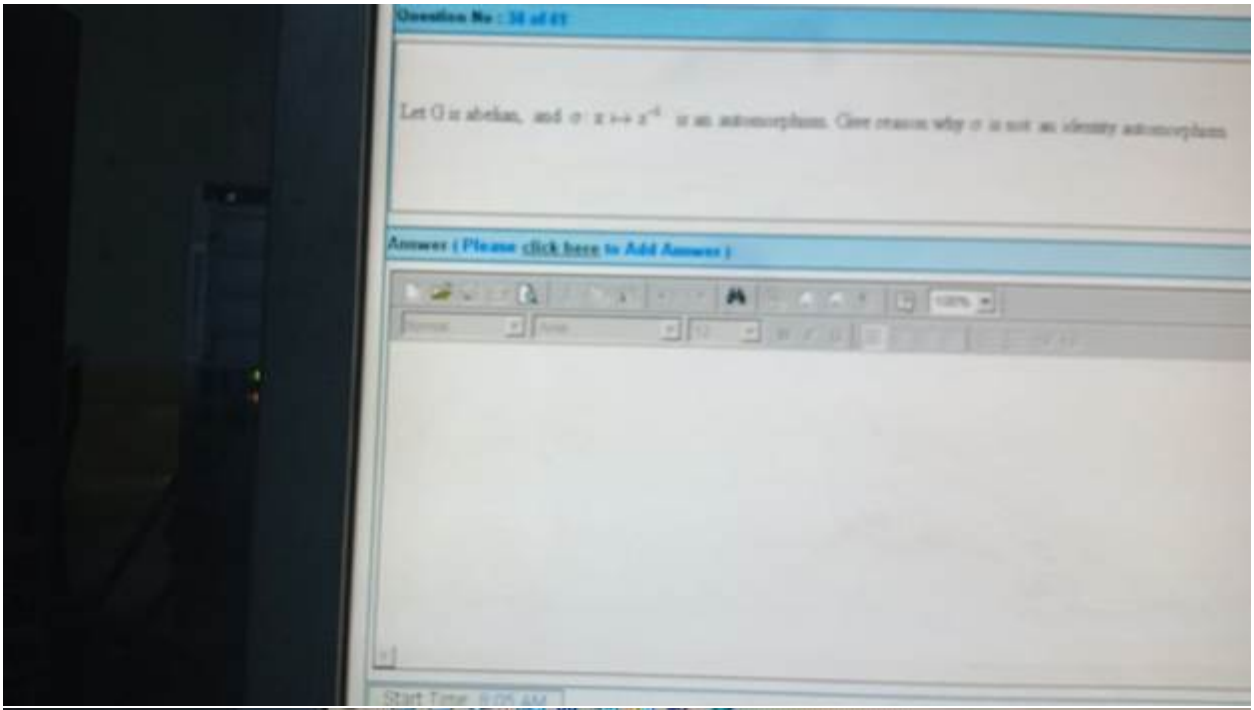
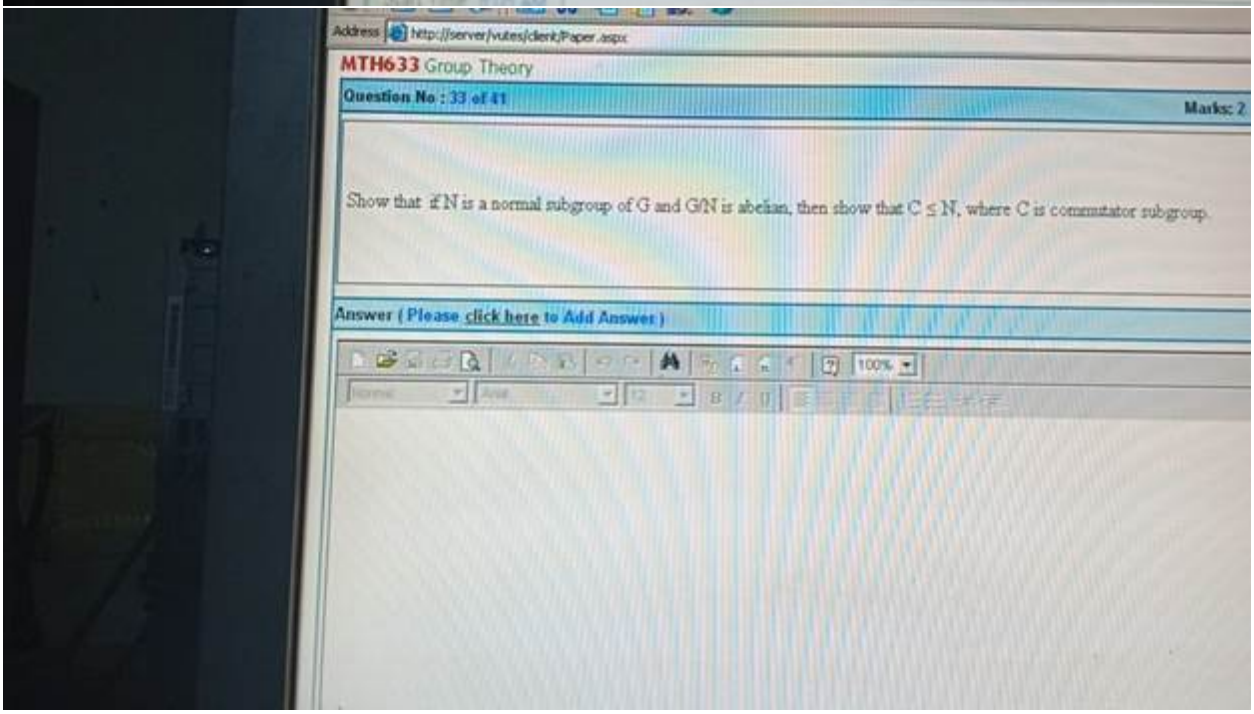

Question No : 34 of 41
Let G is abelian, and σ : x ↦ x^-1 is an automorphism. Give reason why σ is not an identity automorphism
Answer (Please click here to Add Answer)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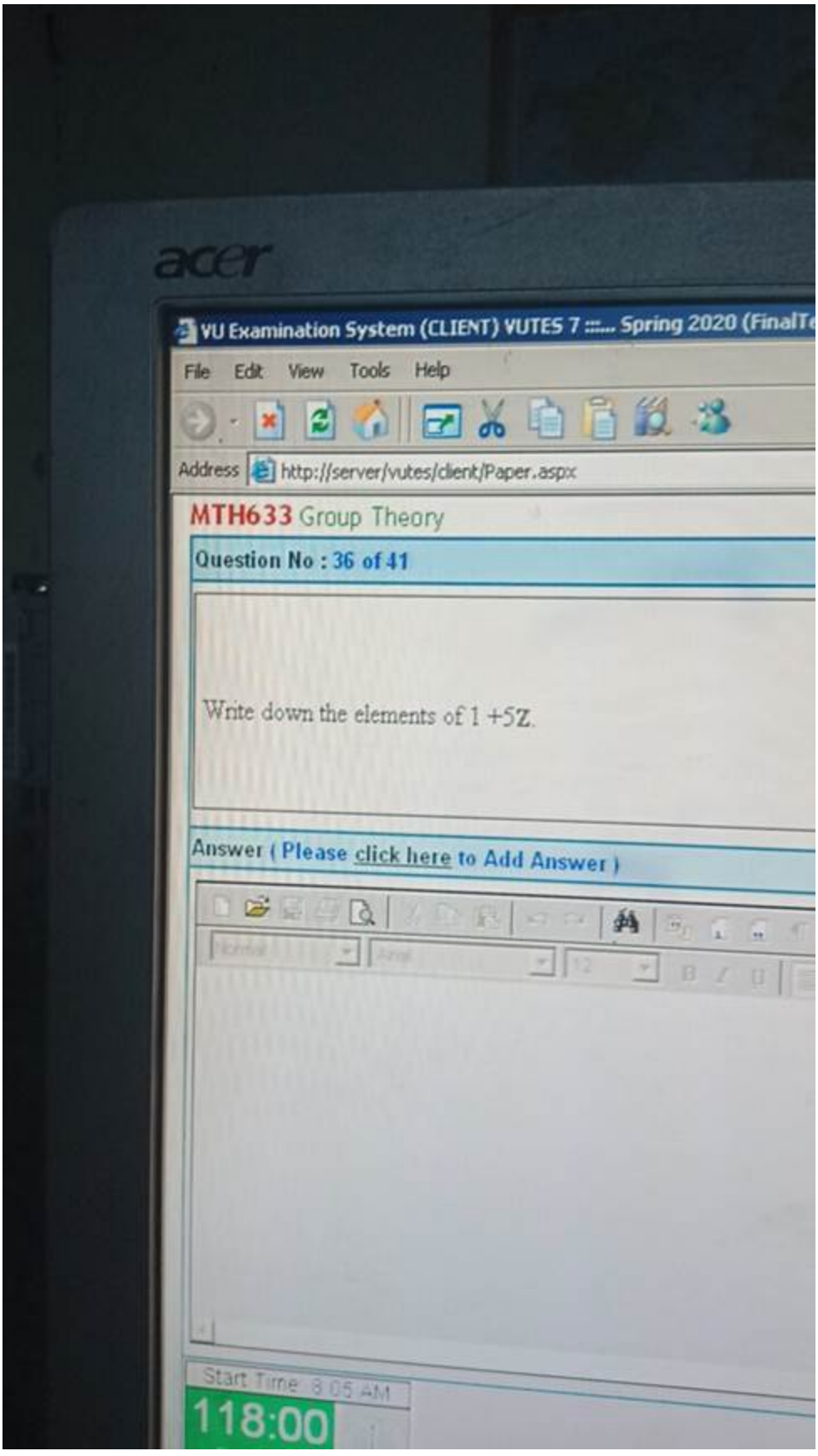
MTH633 Group Theory
Question No : 33 of 41
Marks: 2
Show that if N is a normal subgroup of G and G/N is abelian, then show that C ≤ N, where C is commutator subgroup.
Answer (Please click here to Add Answer)
100%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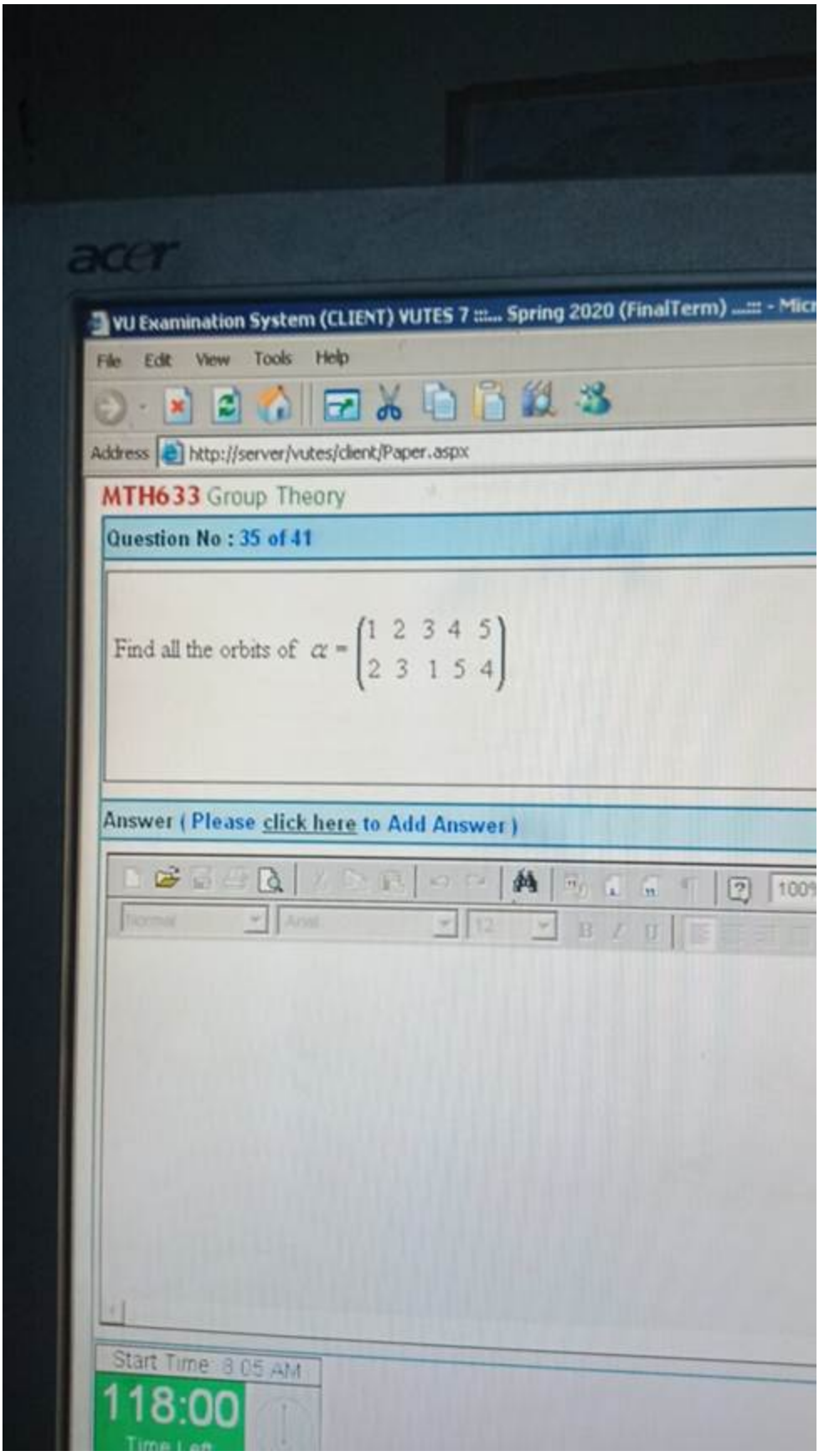
Address http://server/vutes/client/Paper.aspx
MTH633 Group Theory
Question No : 36 of 41
Write down the elements of 1 +5Z.
Answer (Please click here to Add Answer)
Start Time 8:05 AM
118:00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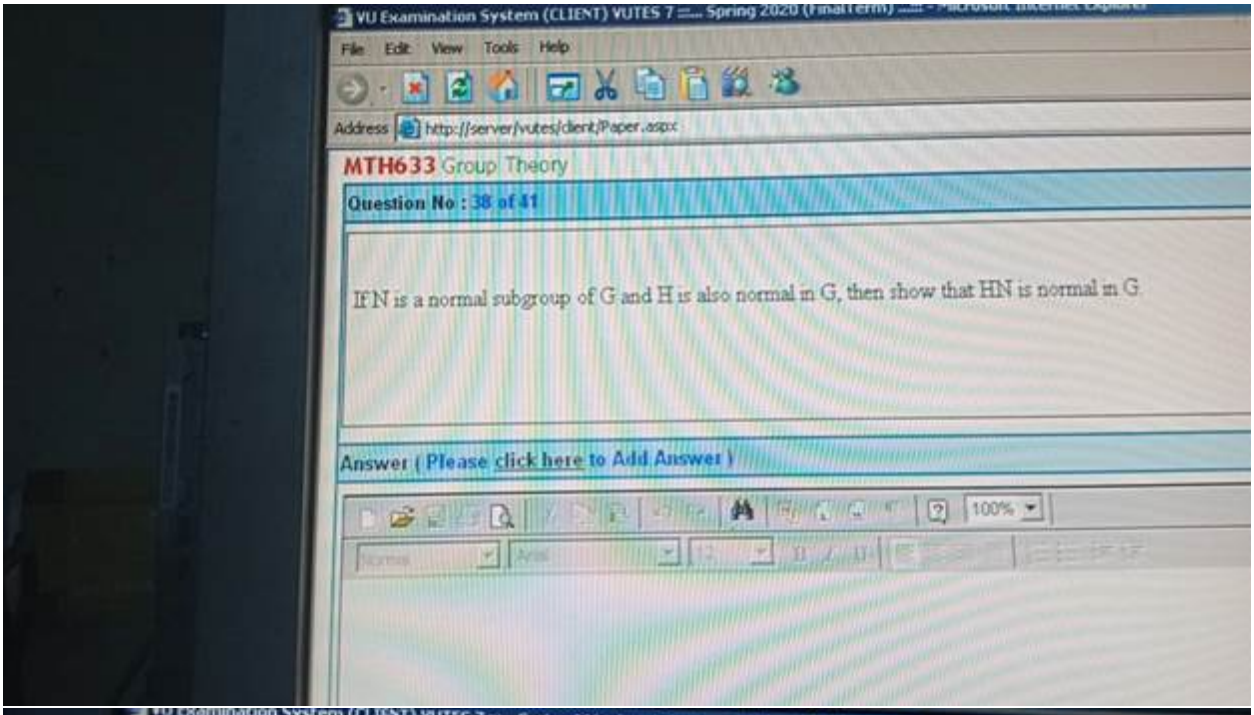
MTH633 Group Theory
Question No : 35 of 41
Find all the orbits of $\alpha = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 \\ 2 & 3 & 1 & 5 & 4 \end{pmatrix}$
Answer (Please click here to Add Answer)
Start Time: 8:05 AM
118:00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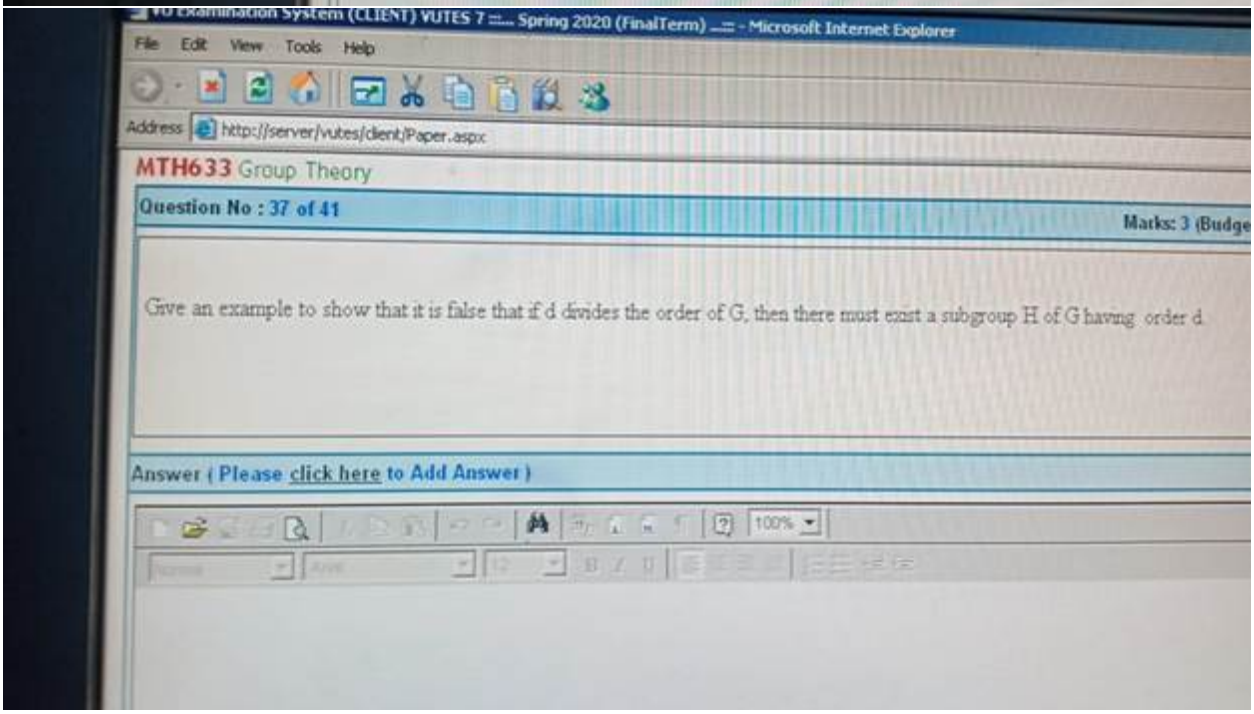
MTH633 Group Theory
Question No : 38 of 41
IF N is a normal subgroup of G and H is also normal in G, then show that HN is normal in G.
Answer (Please click here to Add Answer)
100%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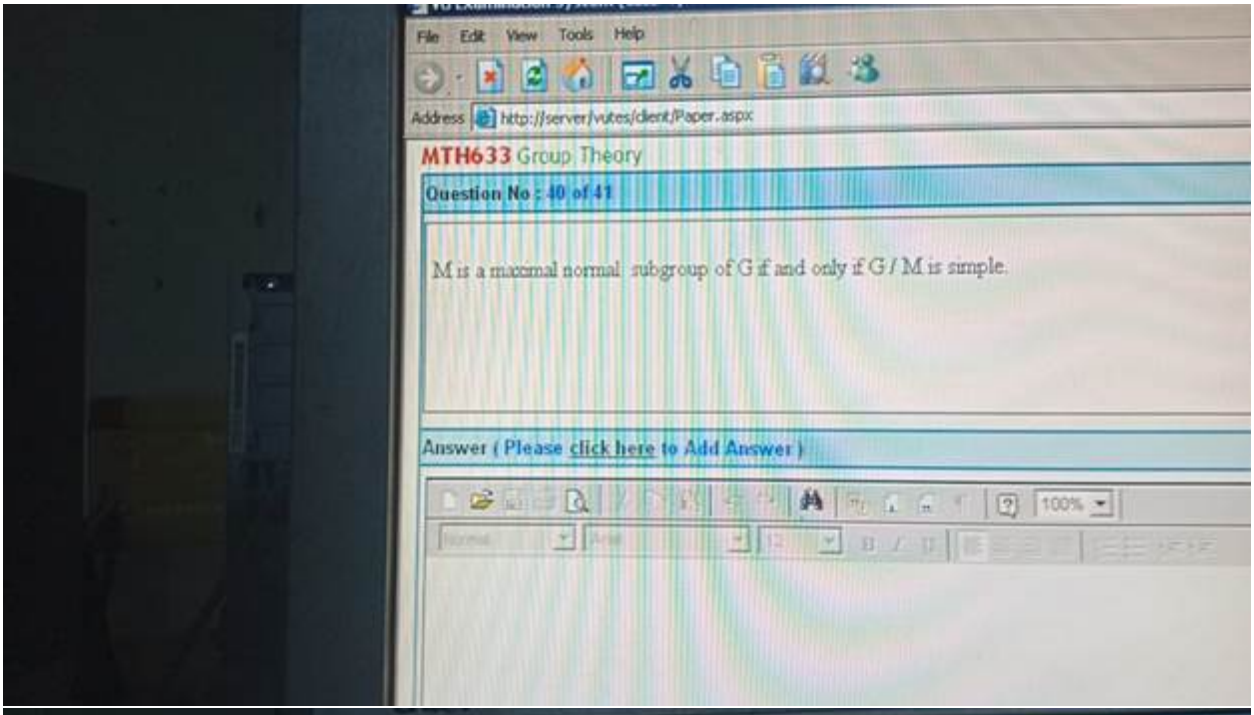
Address http://server/vutes/client/Paper.aspx
MTH633 Group Theory
Question No : 37 of 41
Marks: 3 (Budge
Give an example to show that it is false that if d divides the order of G, then there must exist a subgroup H of G having order d.
Answer (Please click here to Add Answer)
100%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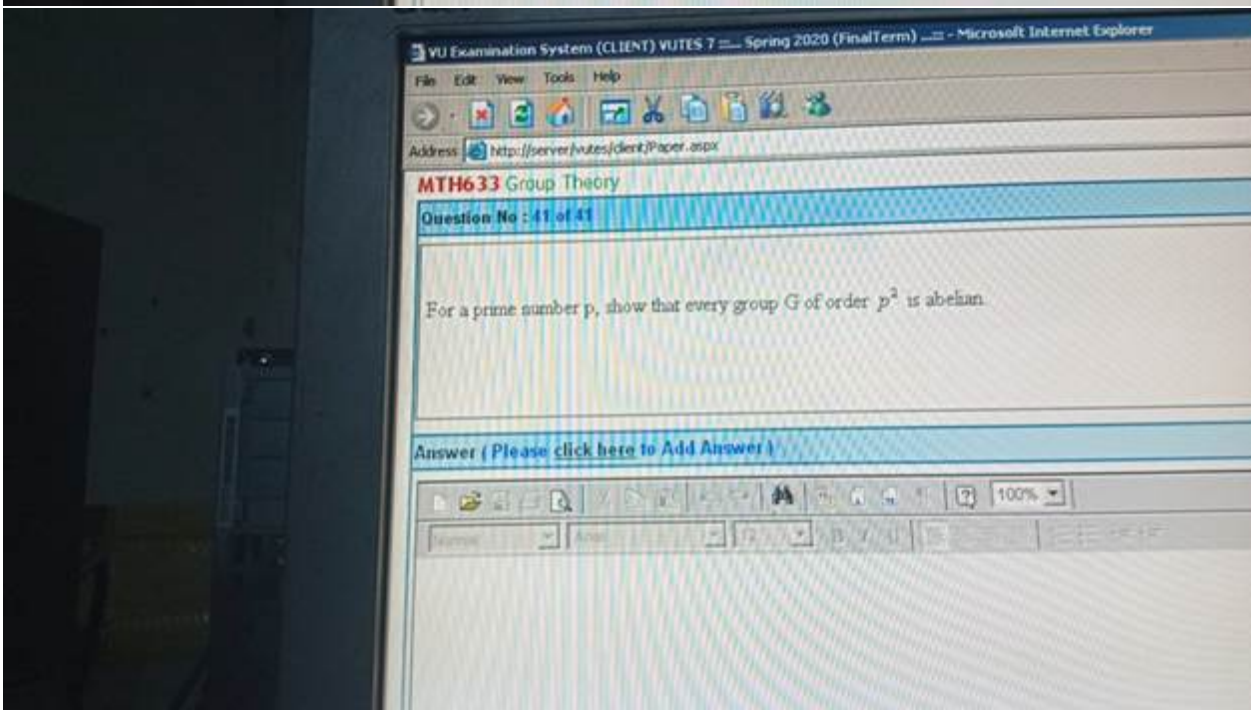
MTH633 Group Theory
Question No : 40 of 41
M is a maximal normal subgroup of G if and only if G / M is simple.
Answer (Please click here to Add Answer)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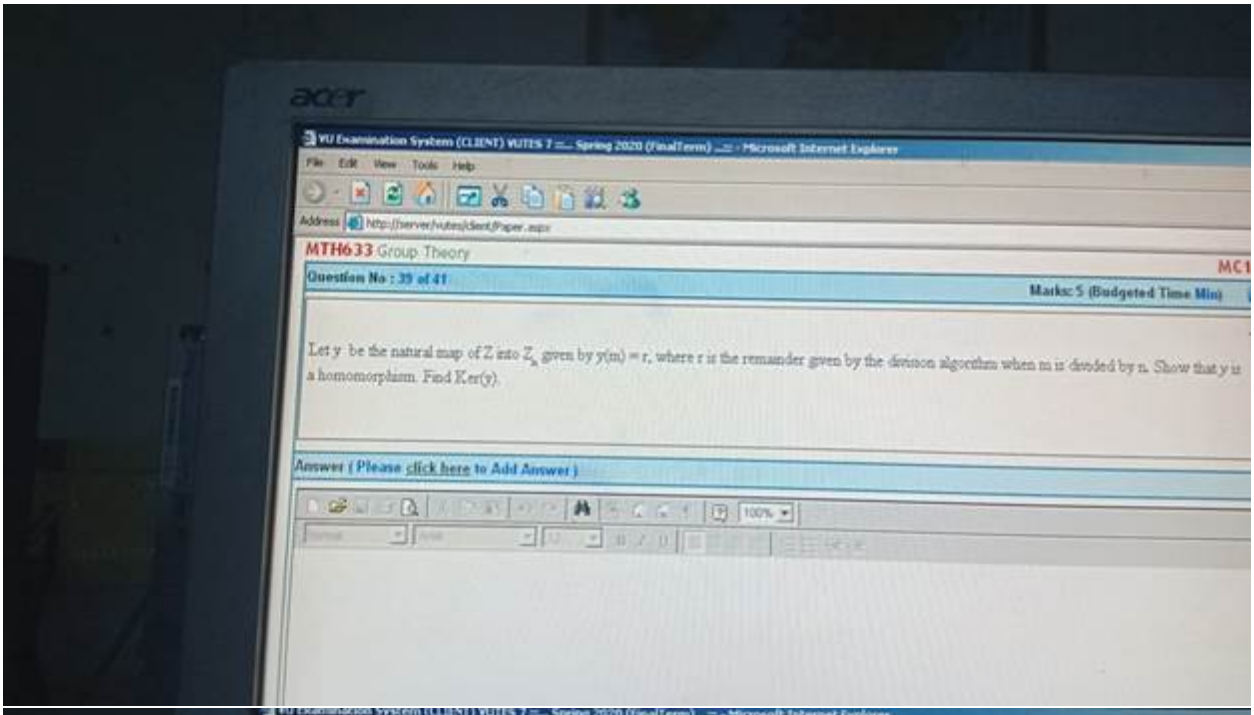
MTH633 Group Theory
Question No : 41 of 41
For a prime number p, show that every group G of order p^2 is abelian.
Answer (Please click here to Add Answer)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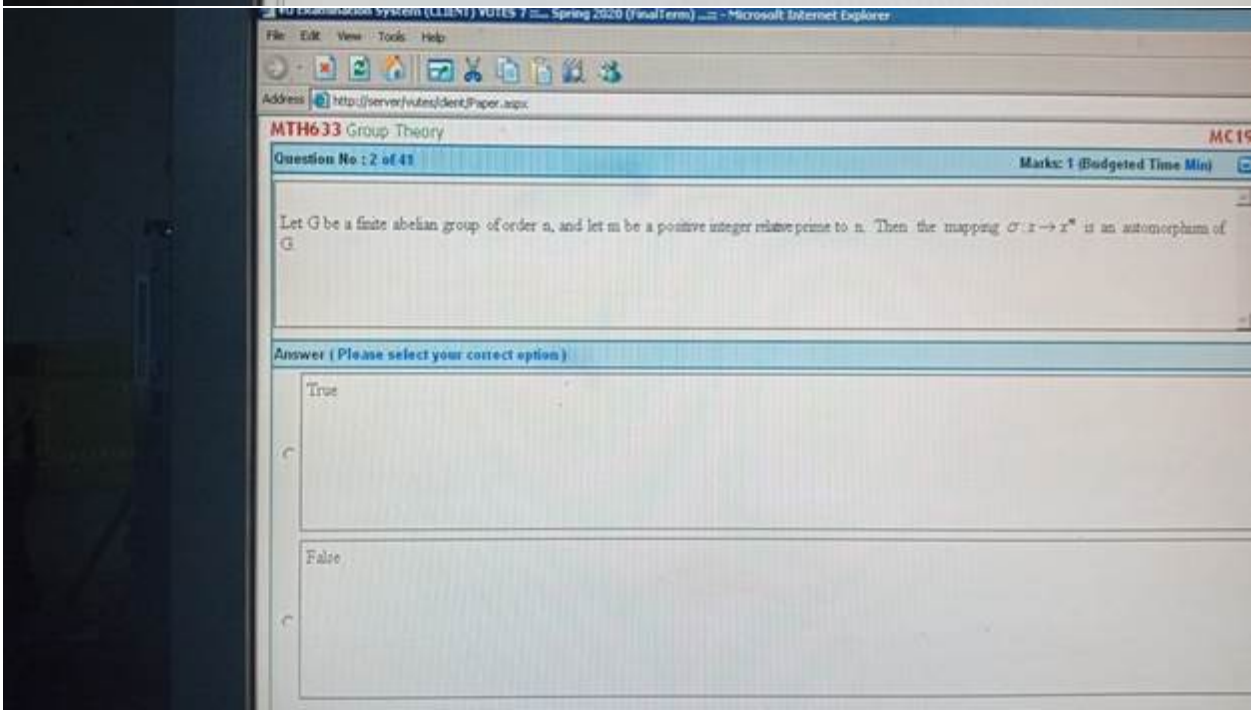
MTH633 Group Theory
Question No : 39 of 41
Marks: 5 (Budgeted Time Min)
Let γ be the natural map of Z into Z_n given by γ(m) = r, where r is the remainder given by the division algorithm when m is divided by n. Show that γ is a homomorphism. Find Ker(γ).
Answer (Please click here to Add Answer)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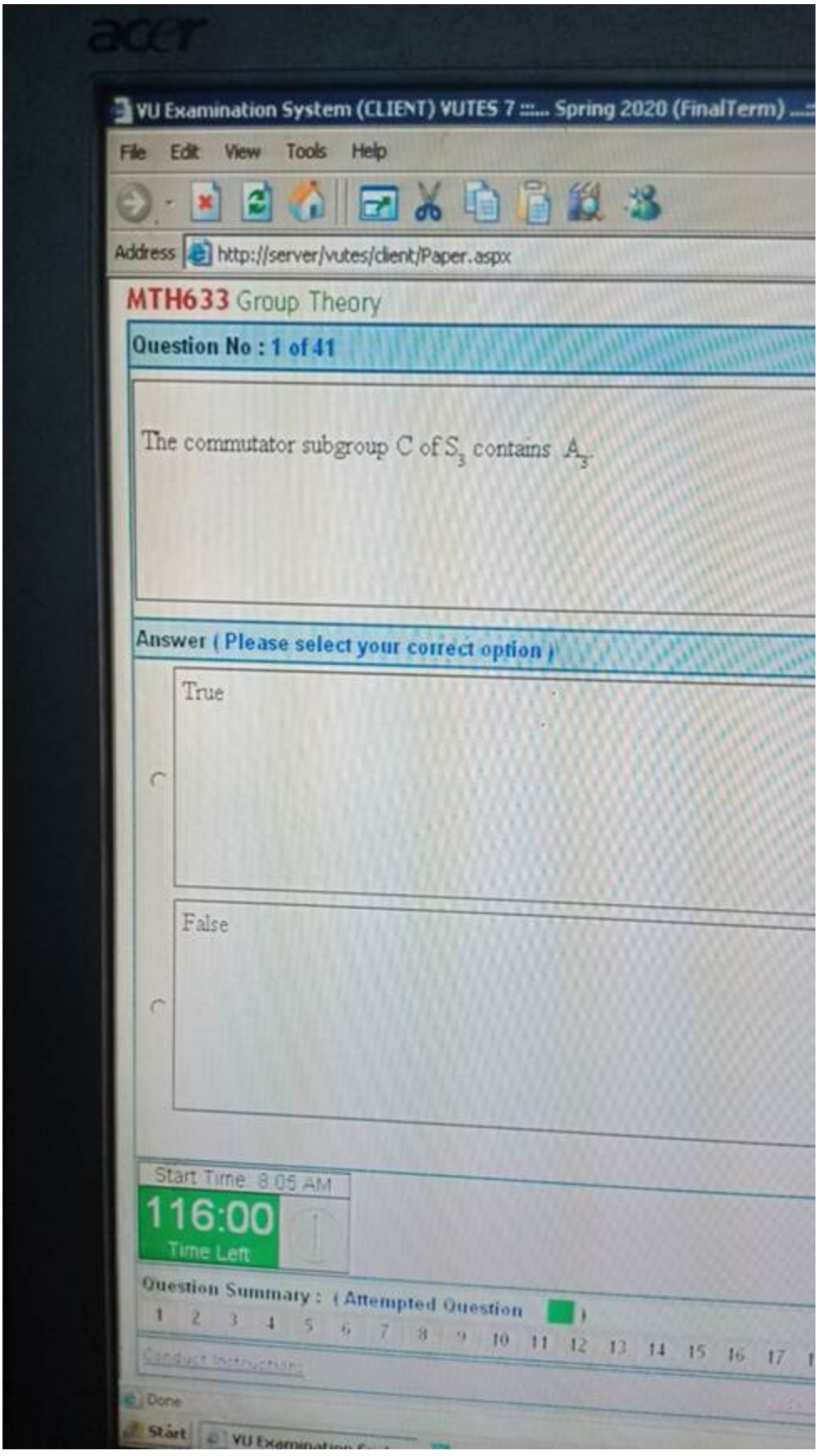
MTH633 Group Theory
Question No : 2 of 41
Marks: 1 (Budgeted Time Min)
Let G be a finite abelian group of order n, and let m be a positive integer relatively prime to n. Then the mapping $\sigma : x \to x^m$ is an automorphism of G.
Answer (Please select your correct option)
True
False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MTH633 Group Theory
Question No : 1 of 41
The commutator subgroup C of S_3 contains A_3.
Answer (Please select your correct option)
True
False
Start Time 8:05 AM
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Time Left
Question Summary : (Attempted Question
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
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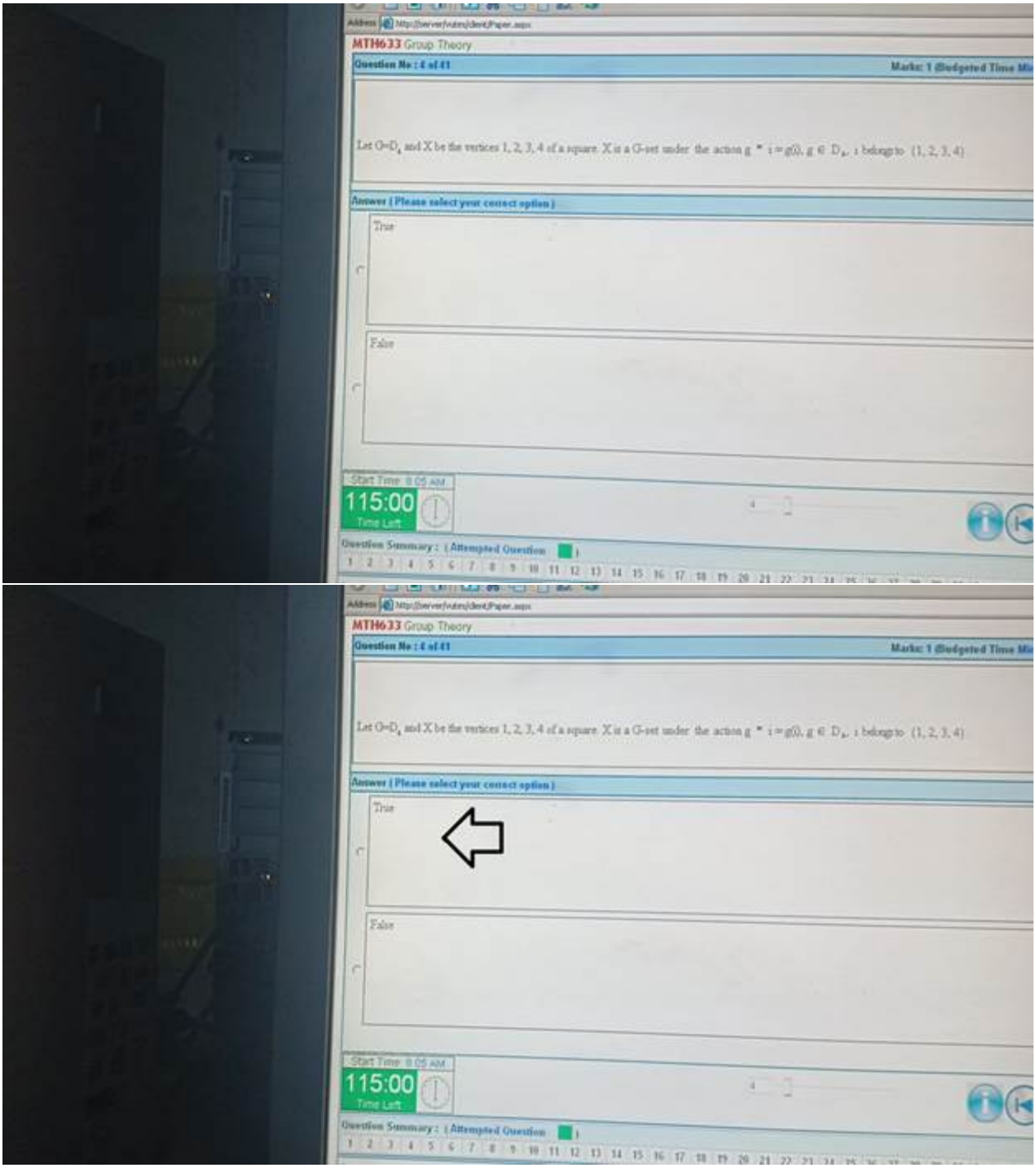
Start


MTH633 Group Theory
Question No : 4 of 41
Marks: 1 Budgeted Time Mi
Let G=D4 and X be the vertices 1, 2, 3, 4 of a square. X is a G-set under the action g * i = g(i), g ∈ D4, i belongs to (1, 2, 3, 4)
Answer (Please select your correct option)
True
False
Start Time 8:05 AM
115:00
Time Left
Question Summary : (Attempted Question)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41

MTH633 Group Theory
Question No : 4 of 41
Marks: 1 Budgeted Time Mi
Let G=D4 and X be the vertices 1, 2, 3, 4 of a square. X is a G-set under the action g * i = g(i), g ∈ D4, i belongs to (1, 2, 3, 4)
Answer (Please select your correct option)
True
False
Start Time 8:05 AM
115:00
Time Left
Question Summary : (Attempted Question)
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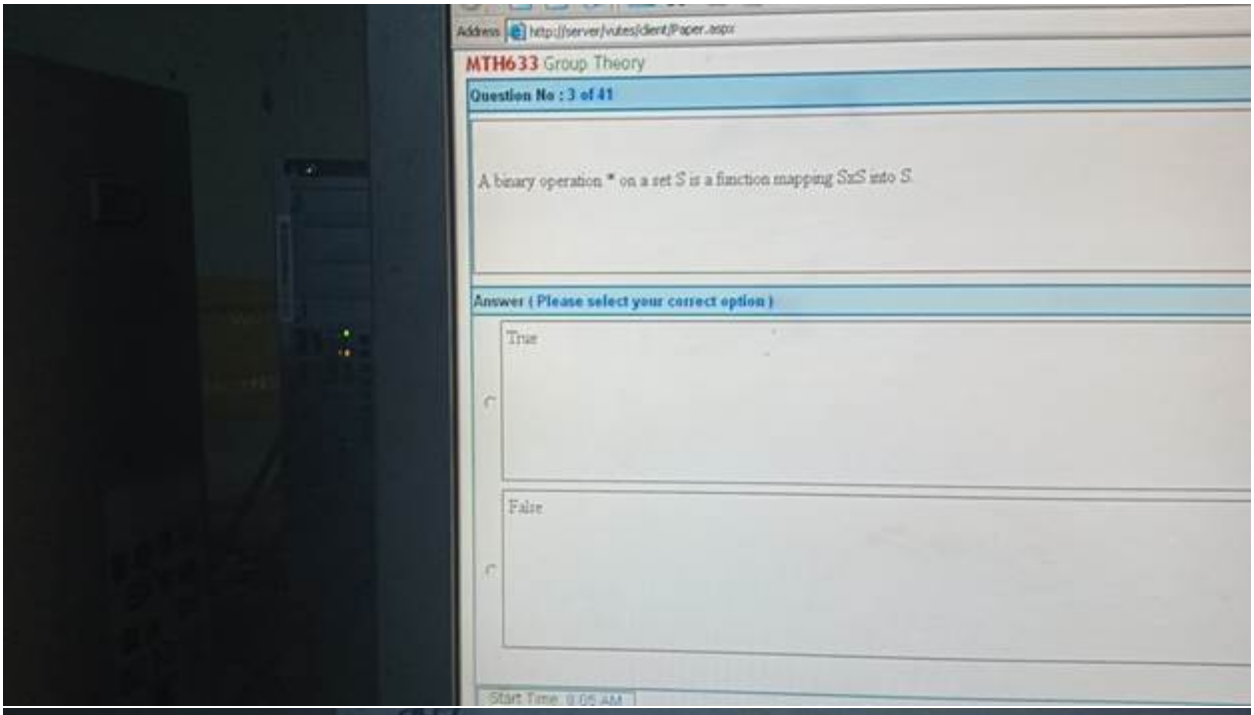
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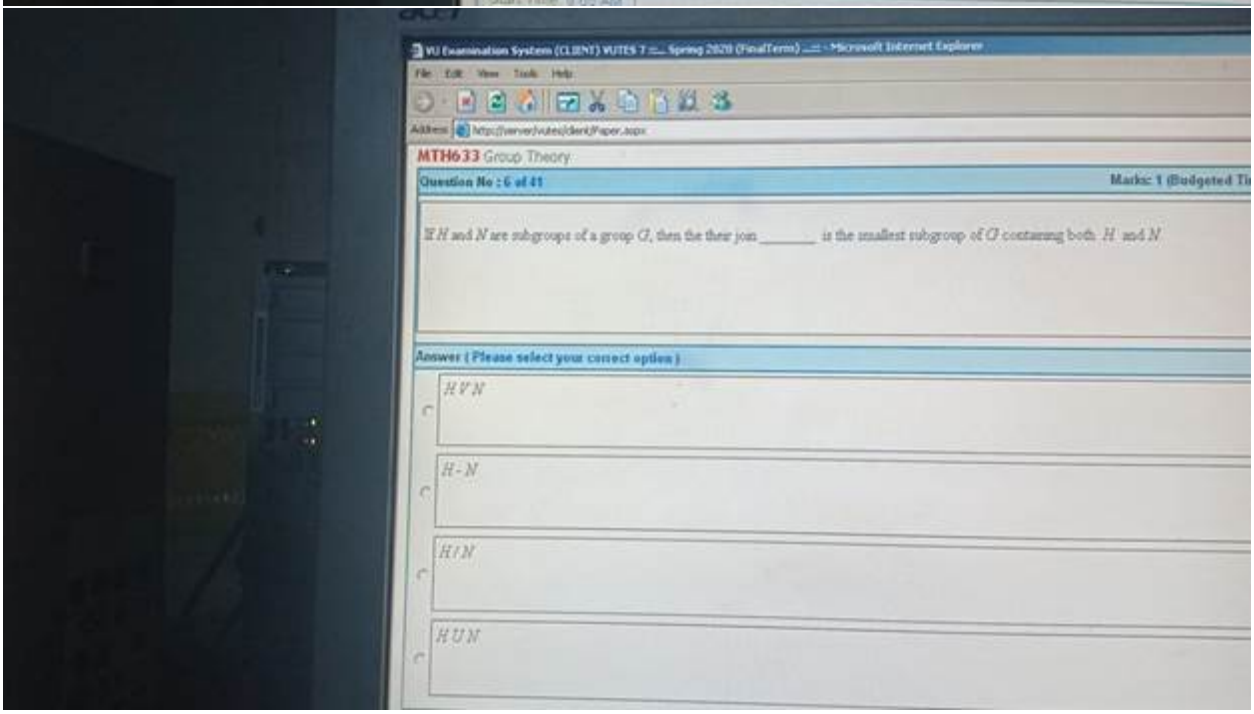
MTH633 Group Theory
Question No : 3 of 41
A binary operation * on a set S is a function mapping SxS into S.
Answer (Please select your correct option)
True
False
Start Time 9:05 AM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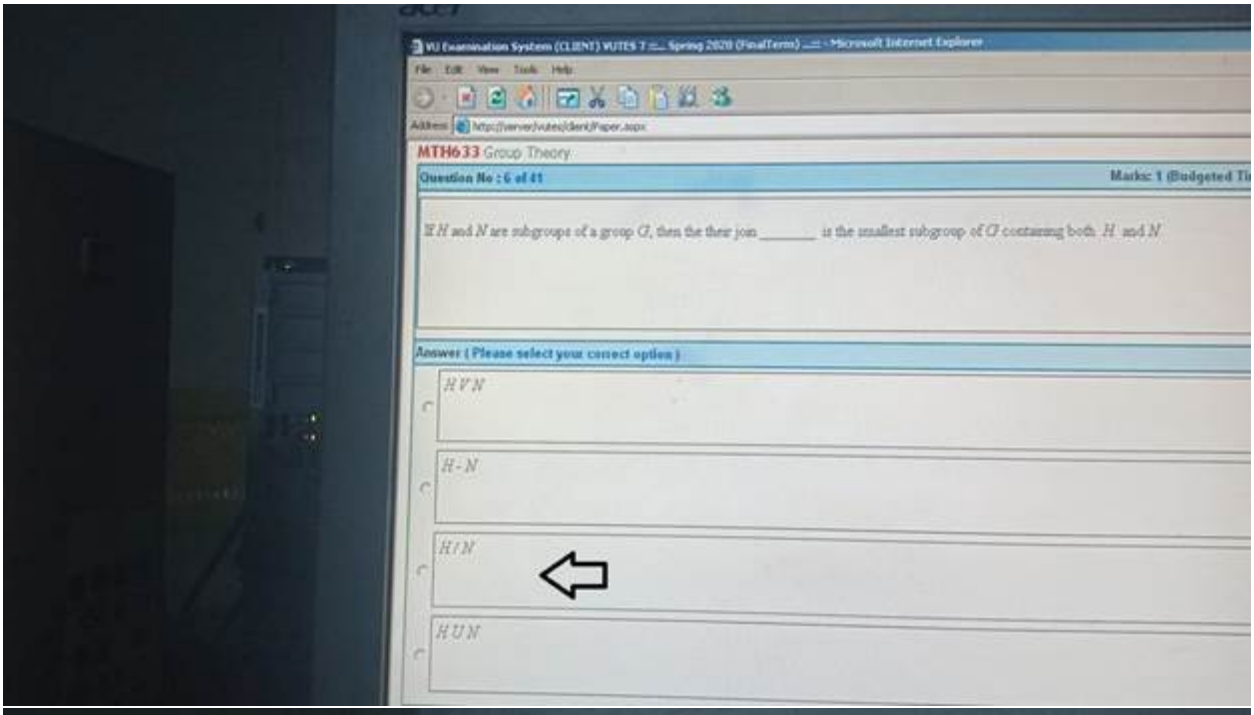
MTH633 Group Theory
Question No : 6 of 41
Marks: 1 (Budgeted Ti
If H and N are subgroups of a group G, then the their join _____ is the smallest subgroup of G containing both H and N
Answer (Please select your correct option)
H ∨ N
H - N
H ∩ N
H ∪ N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MTH633 Group Theory
Question No : 6 of 41
Marks: 1 (Budgeted Ti
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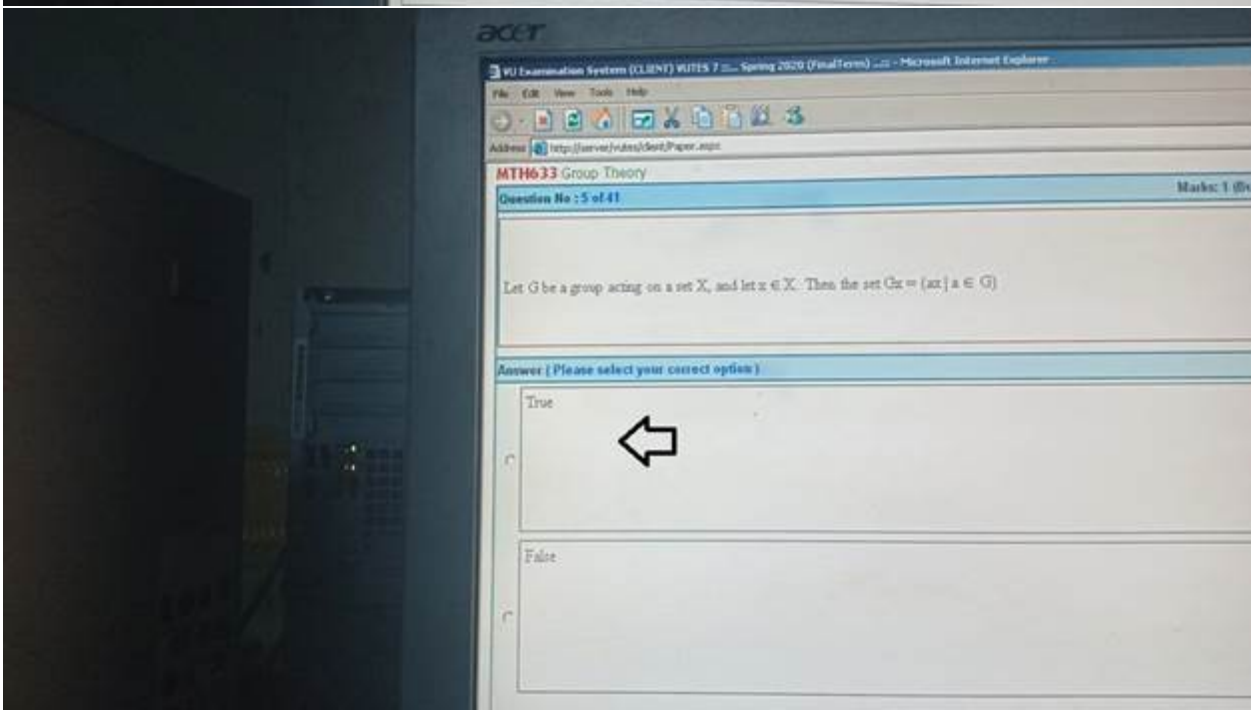
Answer (Please select your correct option)
H ∨ N
H - N
H ∩ N
H ∪ N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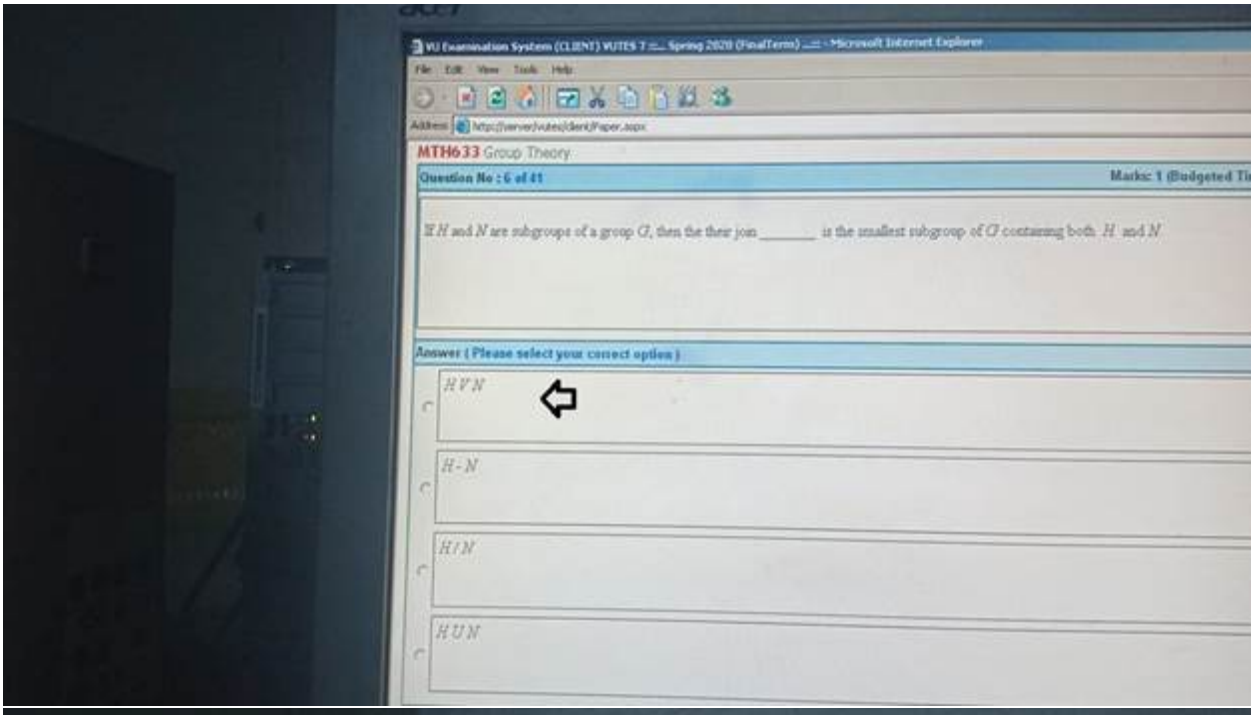
MTH633 Group Theory
Question No : 5 of 41
Marks: 1 (
Let G be a group acting on a set X, and let x ∈ X. Then the set Gx = {ax | a ∈ G}
Answer (Please select your correct option)
True
False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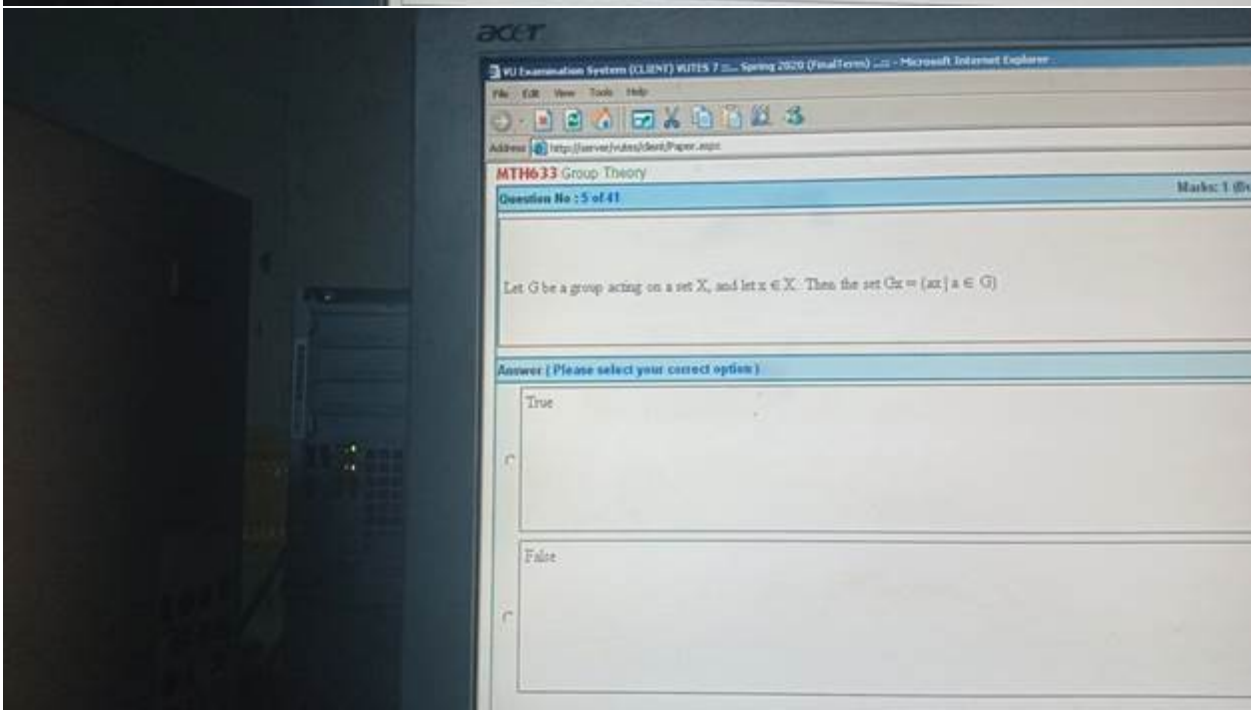
MTH633 Group Theory
Question No : 6 of 41
Marks: 1 (Budgeted Ti
If H and N are subgroups of a group G, then the their join _____ is the smallest subgroup of G containing both H and N
Answer (Please select your correct option)
H ∨ N
H - N
H / N
H ∪ N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MTH633 Group Theory
Question No : 5 of 41
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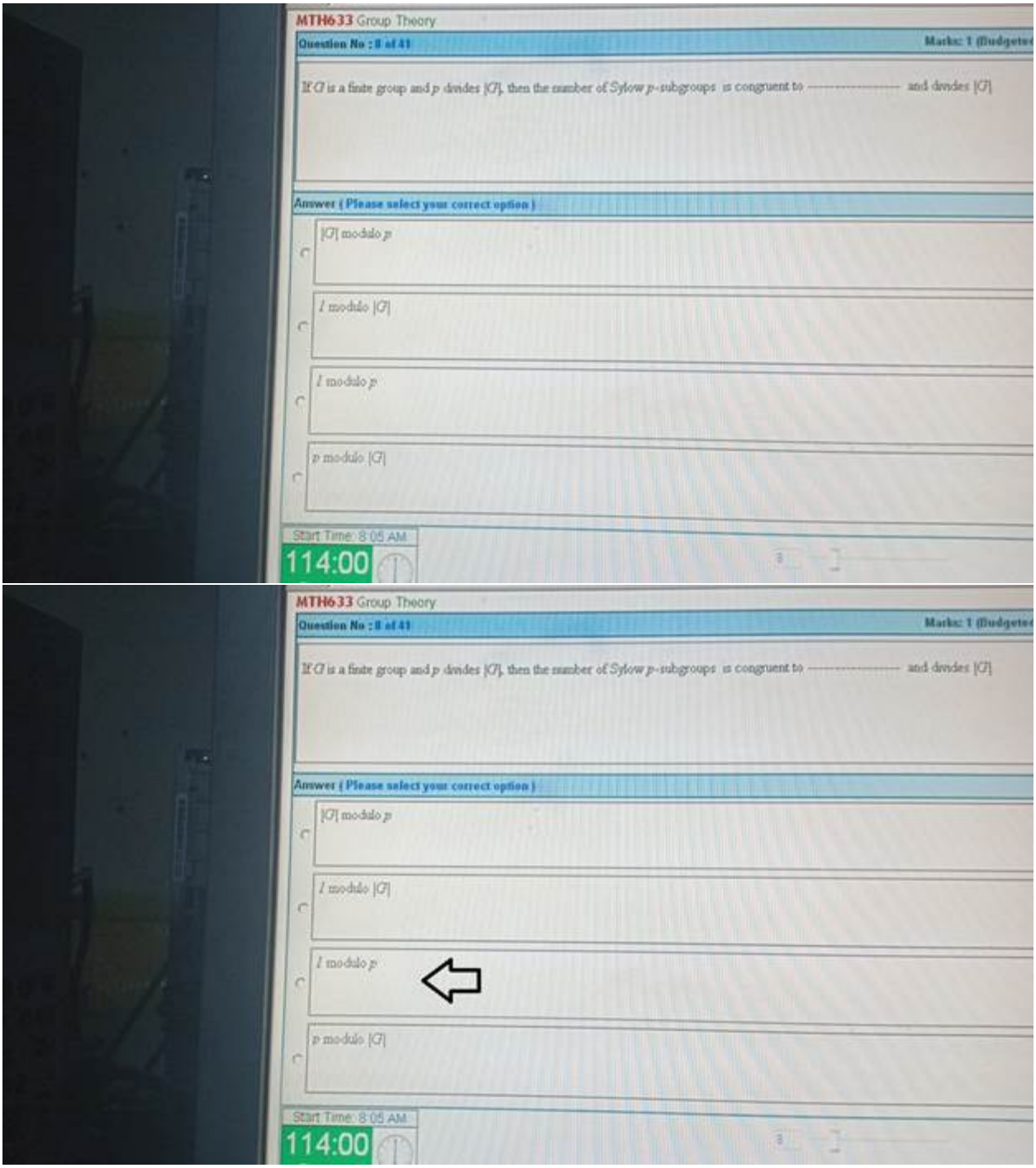
Answer (Please select your correct option)
True
False


MTH633 Group Theory
Question No : 8 of 41
If G is a finite group and p divides |G|, then the number of Sylow p-subgroups is congruent to ---------- and divides |G|
Answer (Please select your correct option)
|G| modulo p
1 modulo |G|
1 modulo p
p modulo |G|
Start Time: 8:05 AM
114:00
MTH633 Group Theory
Question No : 8 of 41
If G is a finite group and p divides |G|, then the number of Sylow p-subgroups is congruent to ---------- and divides |G|
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1 modulo |G|
1 modulo p
p modulo |G|
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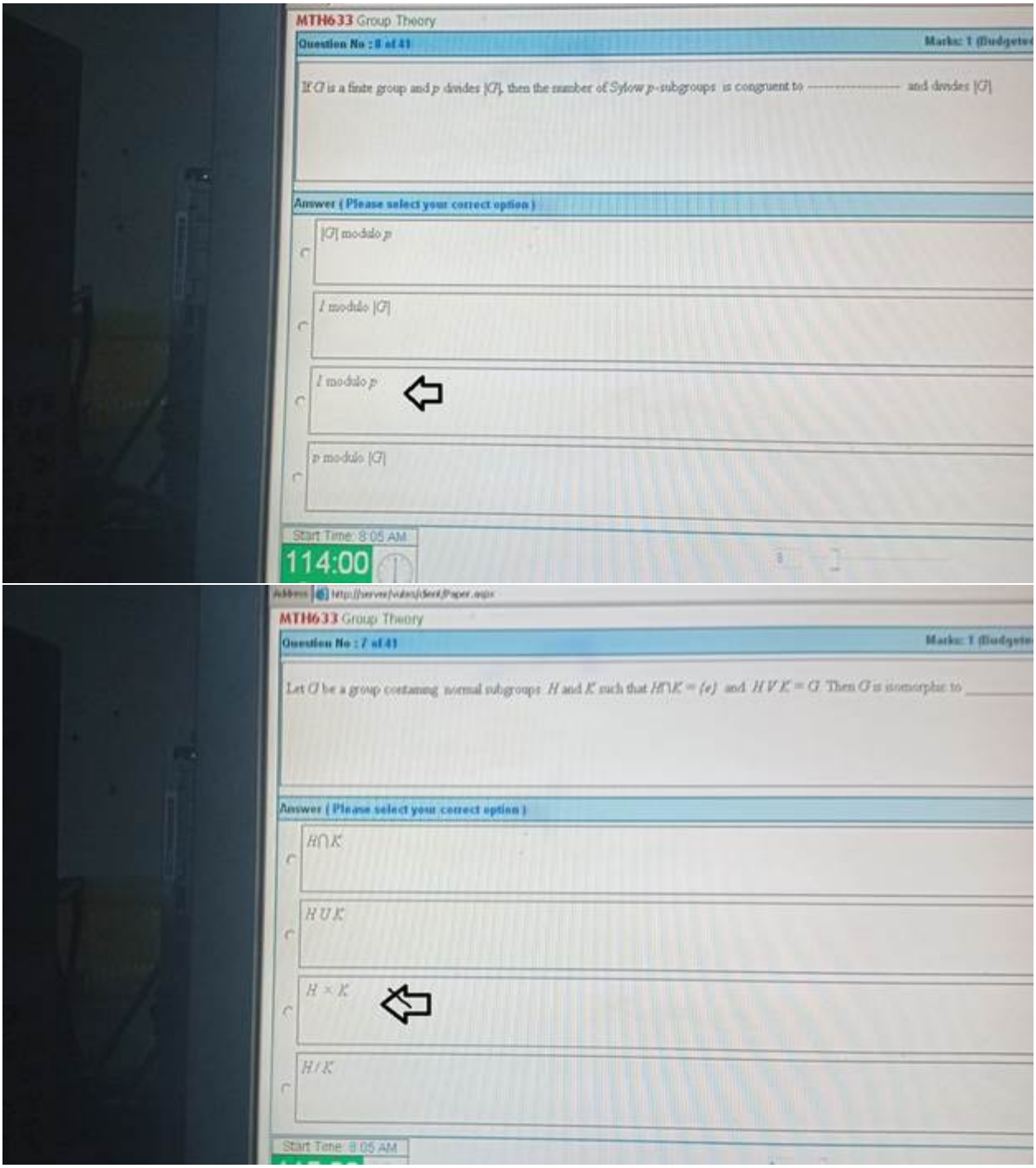
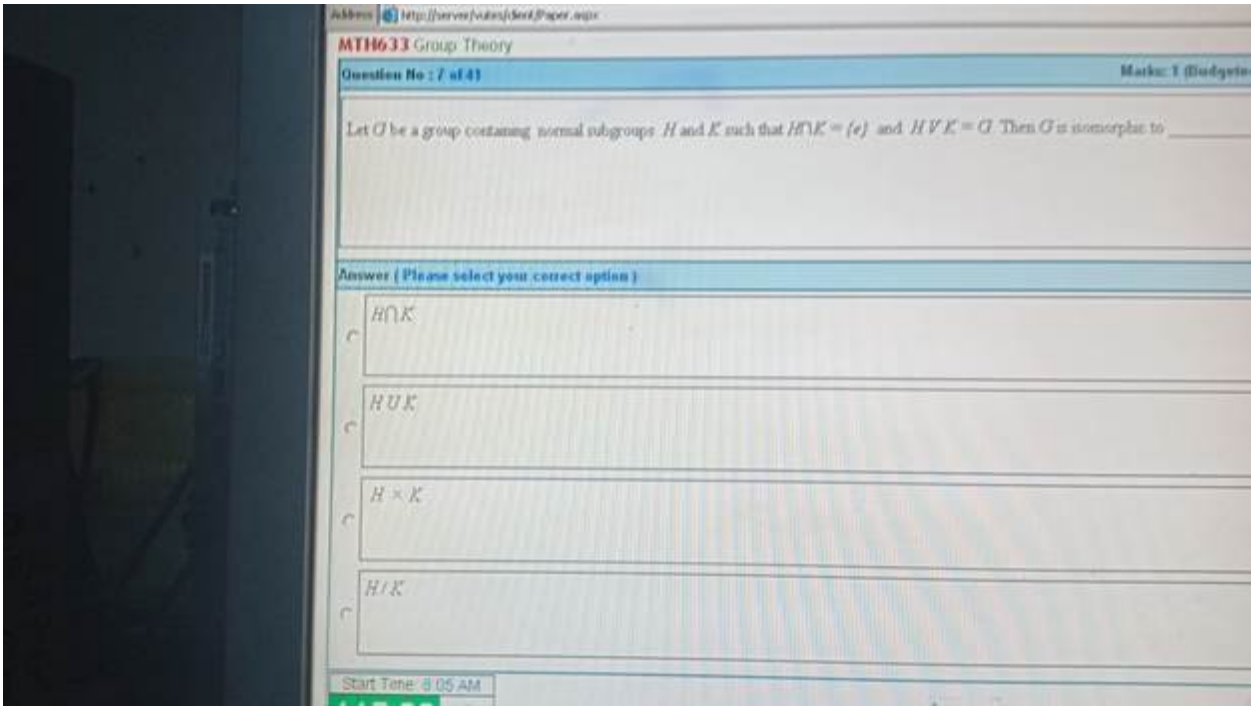

MTH633 Group Theory
Question No : 8 of 41
If G is a finite group and p divides $|G|$, then the number of Sylow p-subgroups is congruent to ---------- and divides $|G|$
Answer (Please select your correct option)
$|G|$ modulo p
1 modulo $|G|$
1 modulo p
p modulo $|G|$
Start Time: 8:05 AM
114:00
MTH633 Group Theory
Question No : 7 of 41
Let G be a group containg normal subgroups H and K such that $H \cap K = \{e\}$ and $HVK = G$ Then G is isomorphic to
Answer (Please select your correct option)
$H \cap K$
$H \cup K$
$H \times K$
H / K
Start Time: 8:05 AM


MTH633 Group Theory
Question No : 7 of 41
Let G be a group containing normal subgroups H and K such that $H \cap K = \{e\}$ and $HK = G$. Then G is isomorphic to _____
Answer (Please select your correct option)
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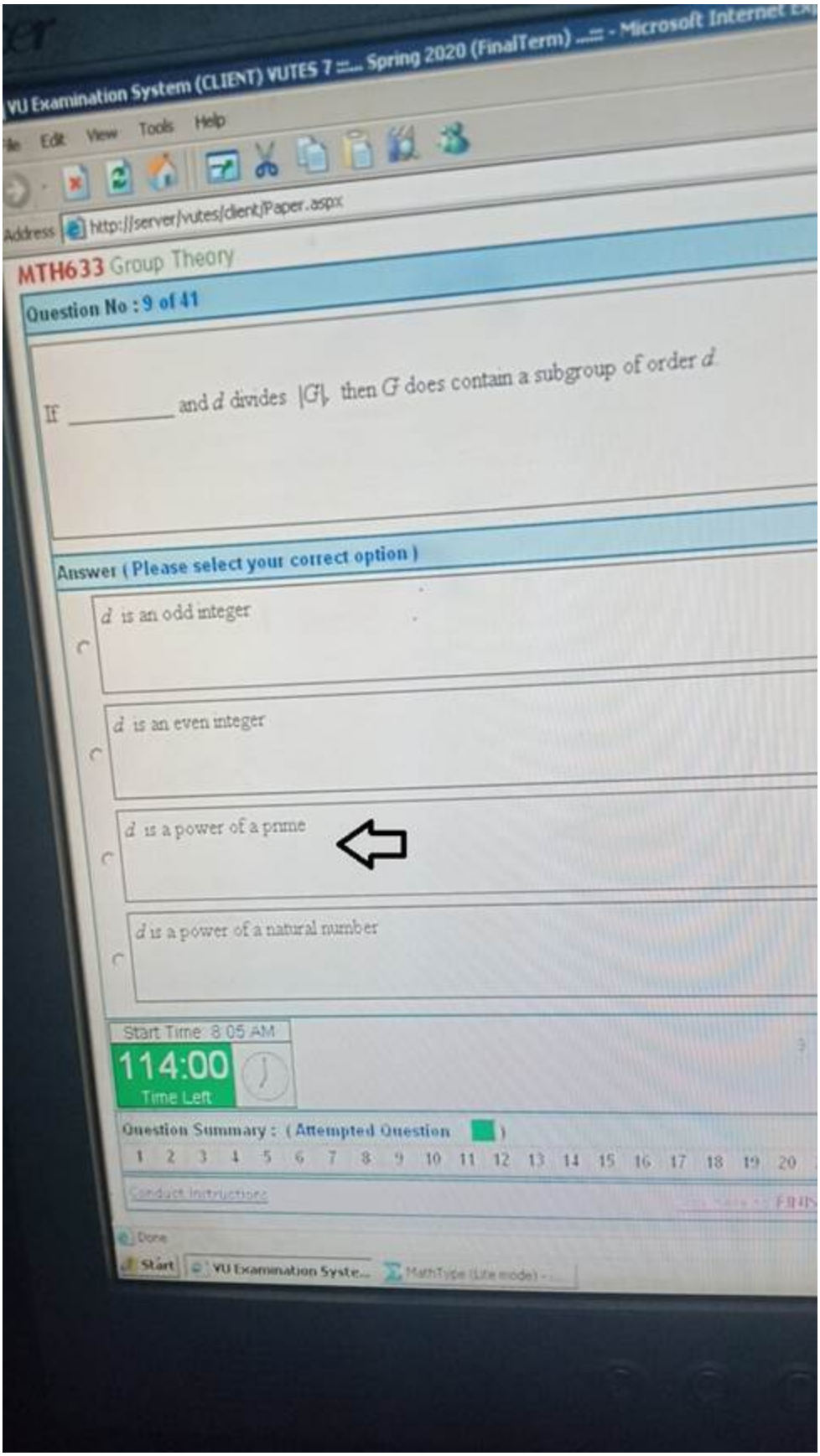
$H \cup K$
$H \times K$
H / K
Start Time: 8:05 AM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MTH633 Group Theory
Question No : 9 of 41
If _____ and d divides |G| then G does contain a subgroup of order d
Answer (Please select your correct option)
d is an odd integer
d is an even integer
d is a power of a prime
d is a power of a natural number
Start Time: 8:05 AM
114:00
Time Left
Question Summary : (Attempted Question)
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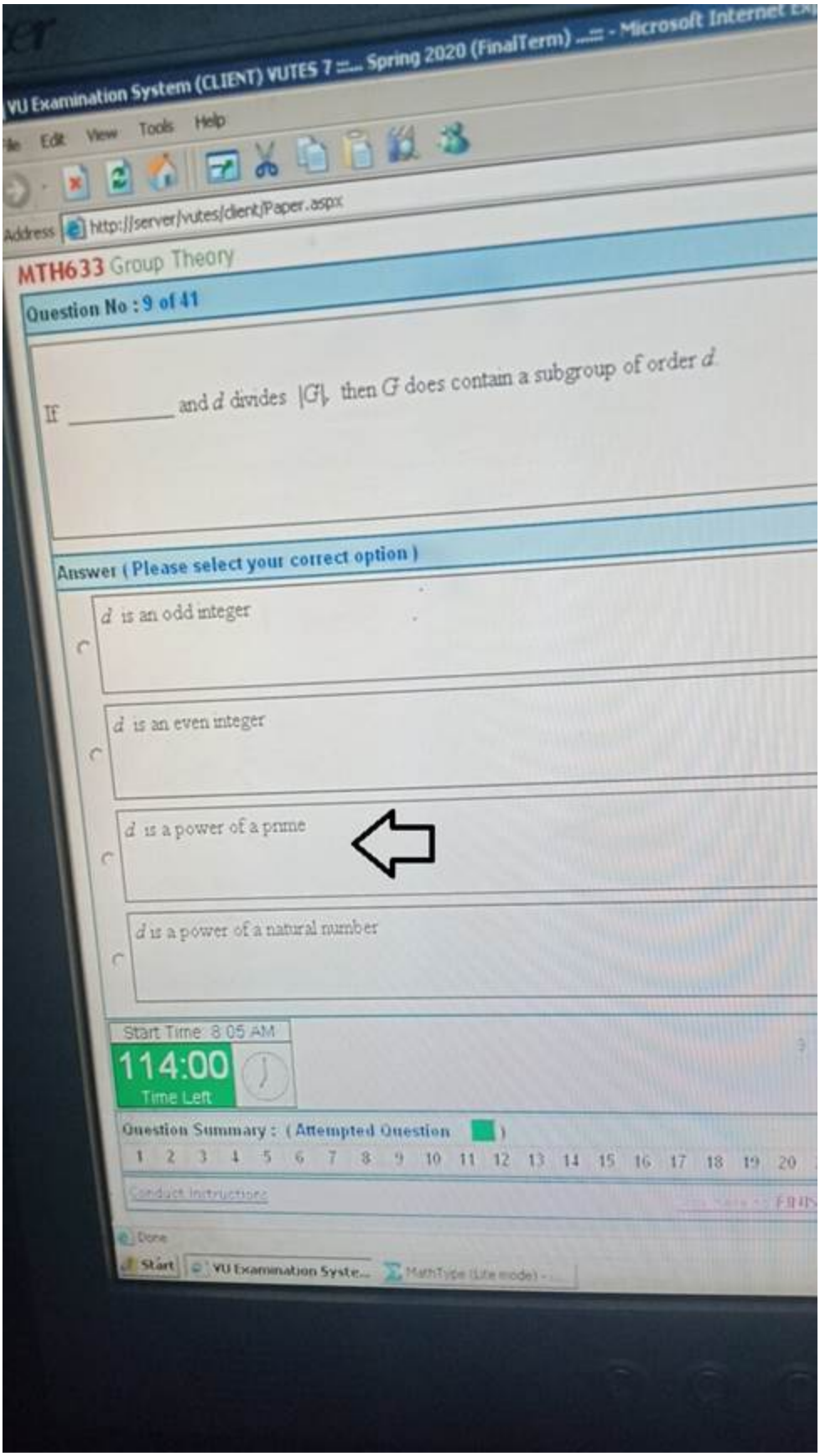
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MTH633 Group Theory
Question No : 9 of 41
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d is an even integer
d is a power of a prime
d is a power of a natural number
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Conduct Instructions
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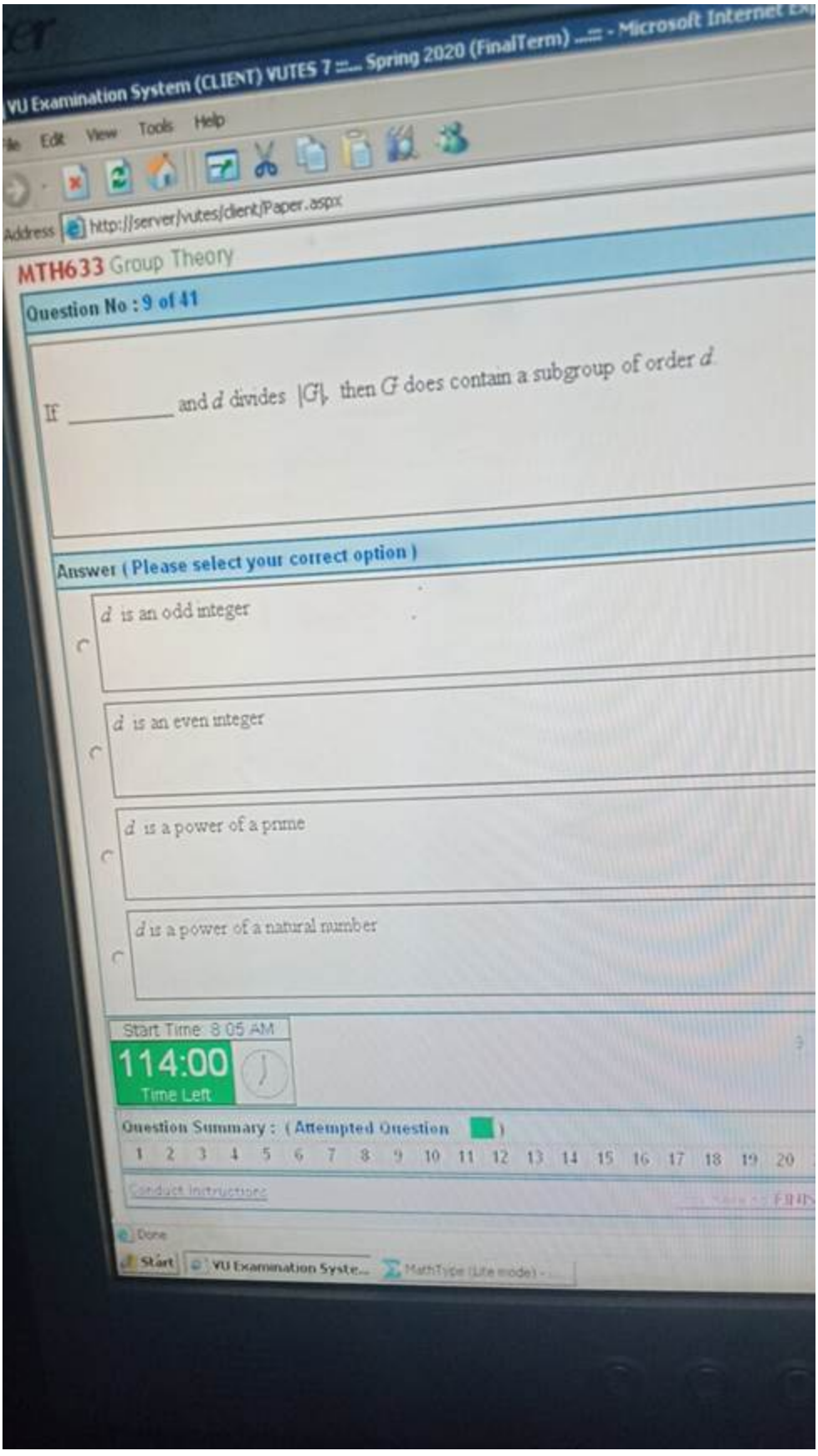
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MTH633 Group Theory
Question No : 9 of 41
If _____ and d divides |G|, then G does contain a subgroup of order d.
Answer (Please select your correct option)
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d is an even integer
d is a power of a prime
d is a power of a natural number
Start Time 8:05 AM
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Question Summary : (Attempted Question)
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Conduct Instructions
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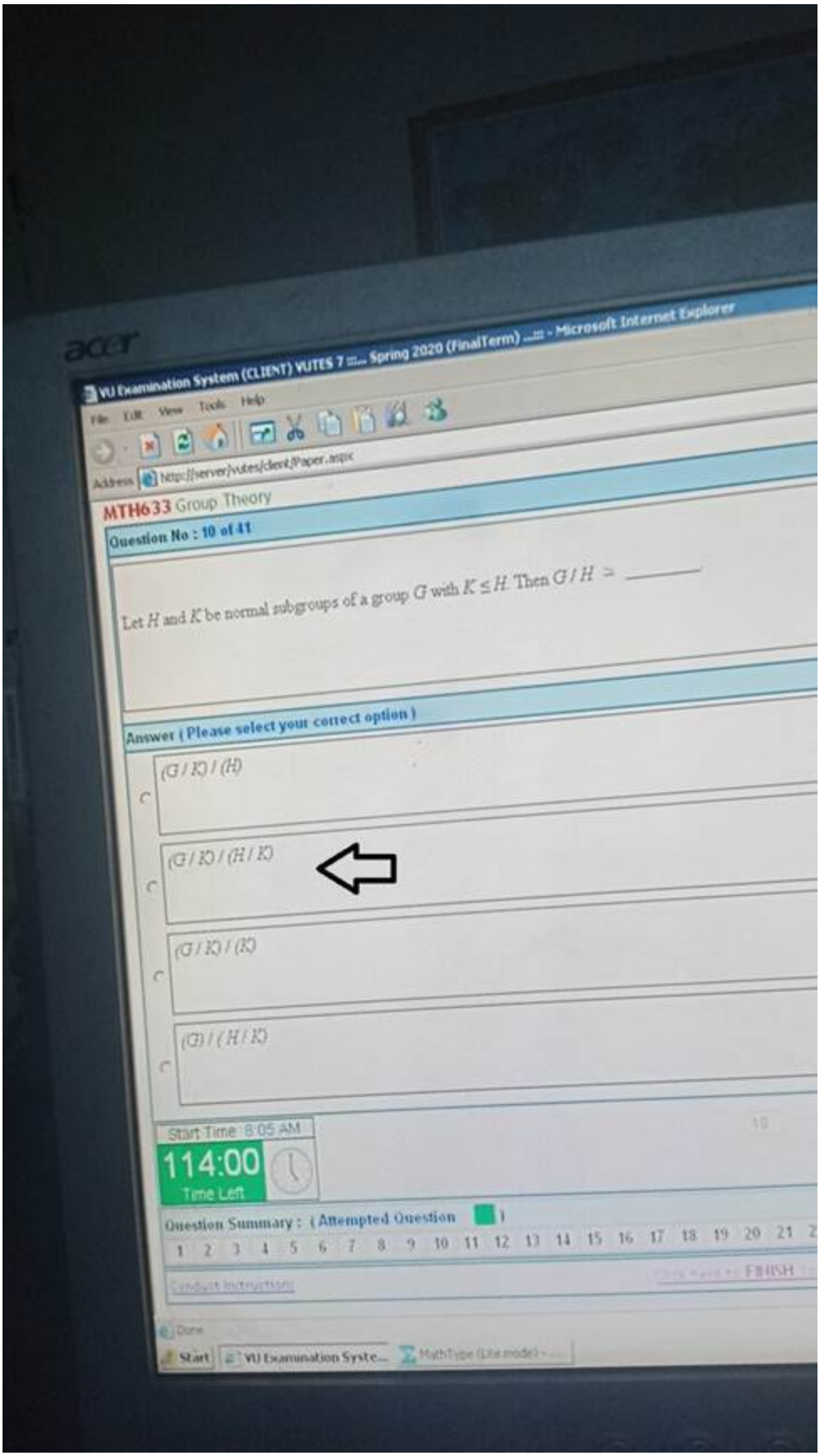
MathType (Lite mode) - ...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MTH633 Group Theory
Question No : 10 of 41
Let H and K be normal subgroups of a group G with $K \leq H$. Then $G/H \simeq$ _____
Answer (Please select your correct option)
$(G/K)/(H)$
$(G/K)/(H/K)$
$(G/K)/(K)$
$(G)/(H/K)$
Start Time 8:05 AM
114:00
Time Left
Question Summary : (Attempted Question)
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Conduct Instruction
Done
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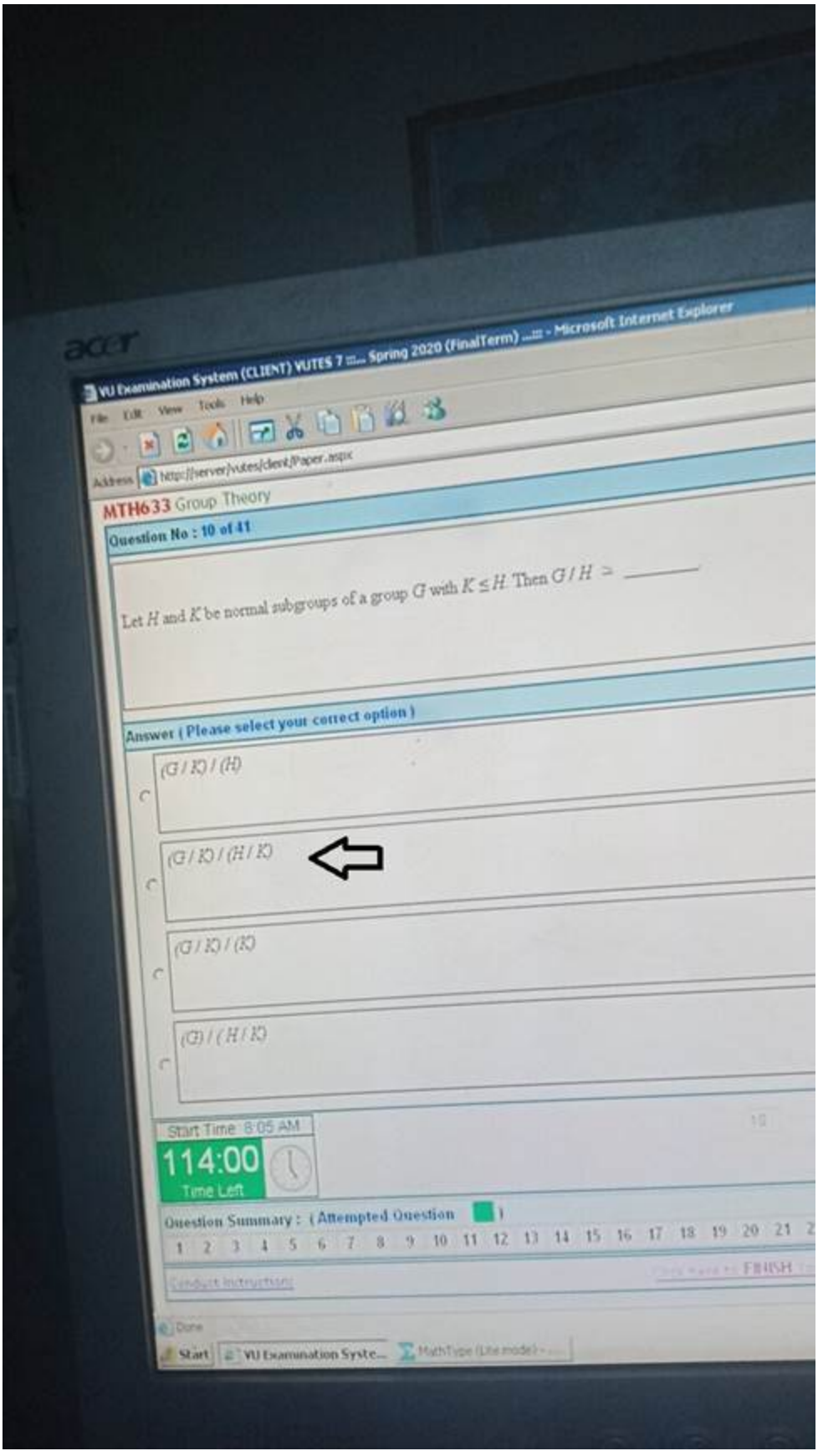
MathType (Line mode) - ...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MTH633 Group Theory
Question No : 10 of 41
Let H and K be normal subgroups of a group G with K ≤ H. Then G / H ≥ _____
Answer (Please select your correct option)
(G / K) / (H)
(G / K) / (H / K)
(G / K) / (K)
(G) / (H / K)
Start Time 8:05 AM
114:00
Time Left
Question Summary : (Attempted Question)
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Conduct Instructions
FINISH
Done
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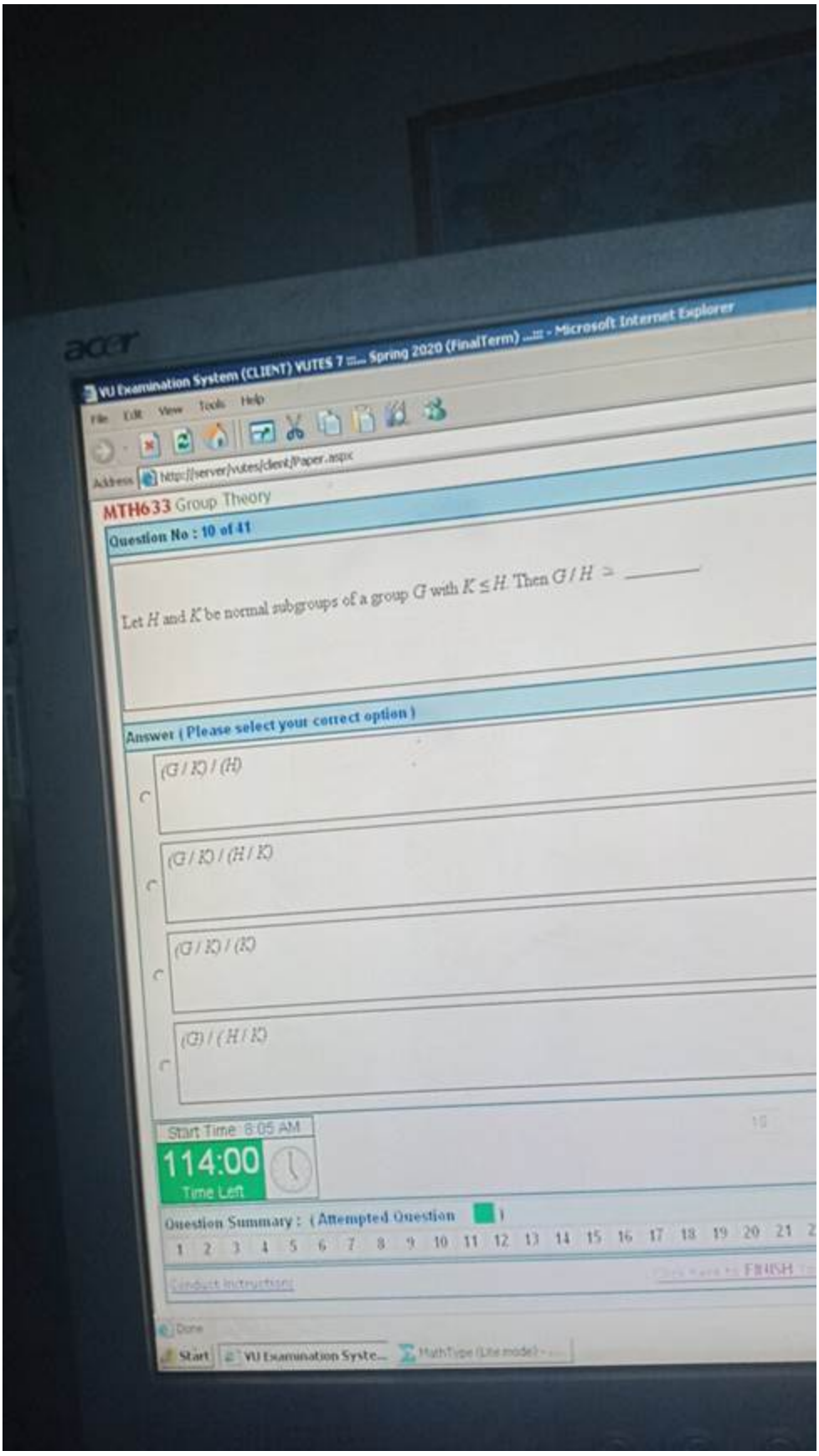
VU Examination Syste...
MathType (Line mode) - ...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MTH633 Group Theory
Question No : 10 of 41
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Answer (Please select your correct option)
$(G/K)/(H)$
$(G/K)/(H/K)$
$(G/K)/(K)$
$(G)/(H/K)$
Start Time 8:05 AM
114:00
Time Left
Question Summary : (Attempted Question)
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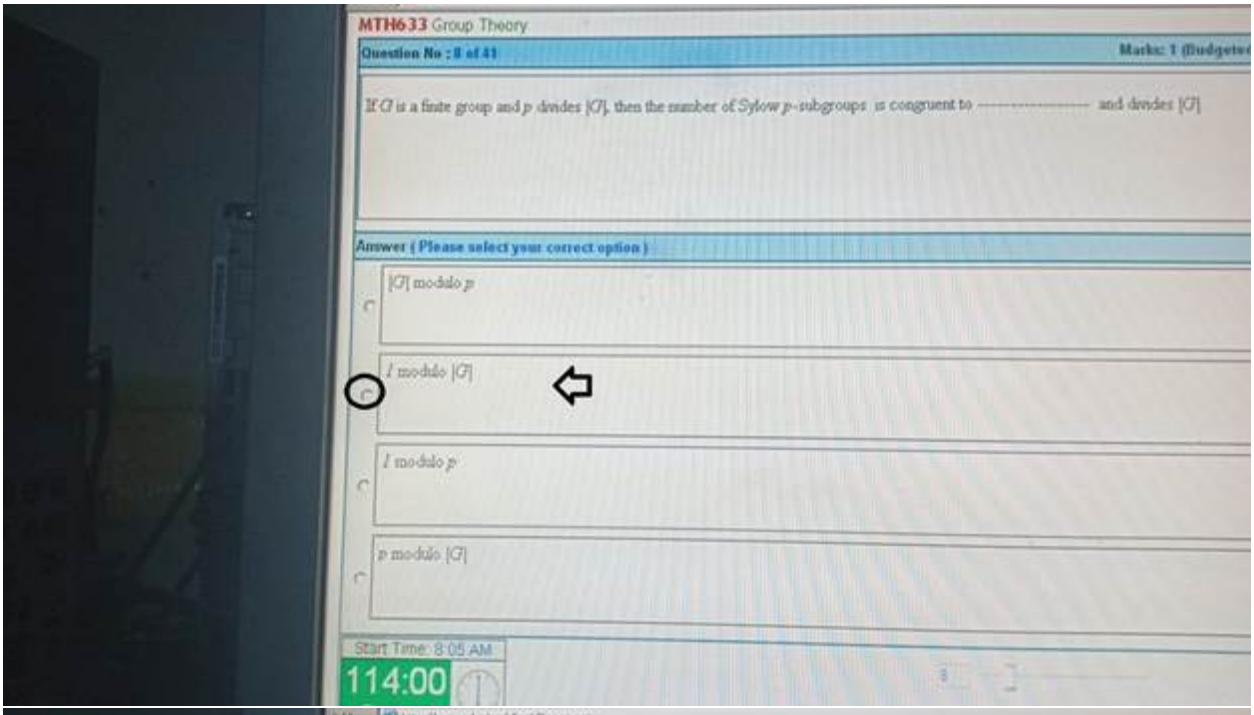
Conduct Instruction
Done
Start
VU Examination Syste...
MathType (Line mode) - ...


MTH633 Group Theory
Question No : 8 of 41
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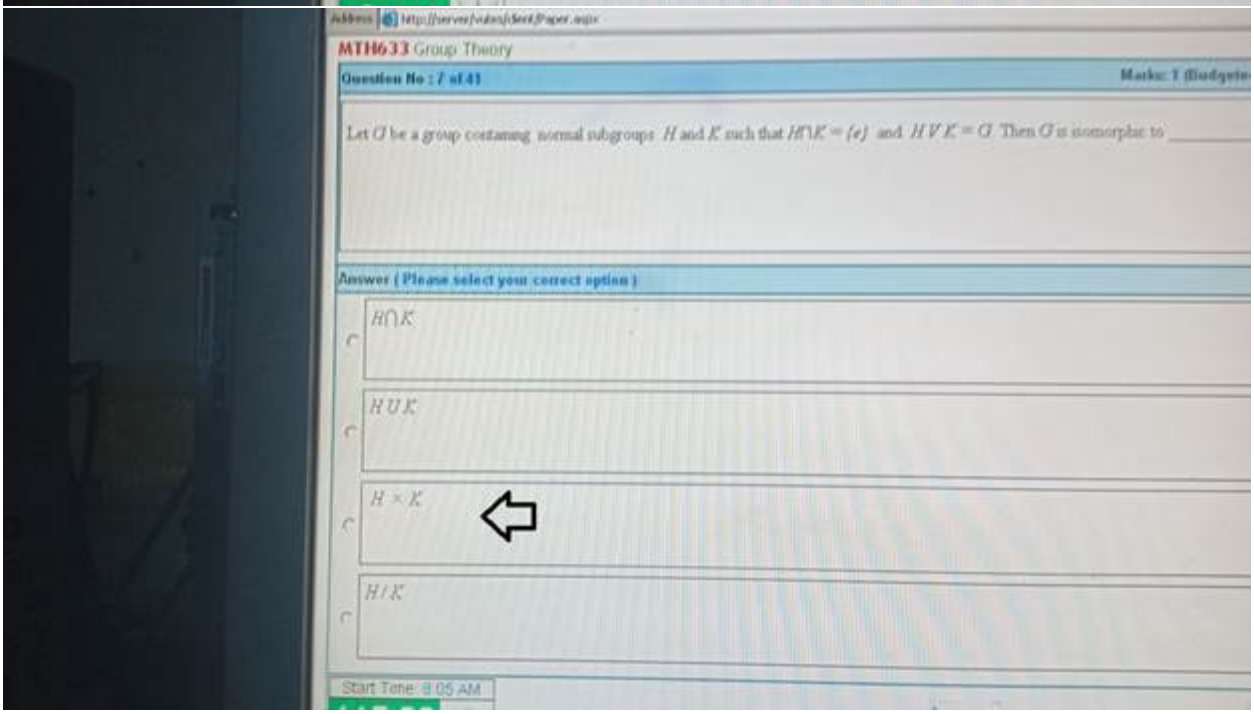
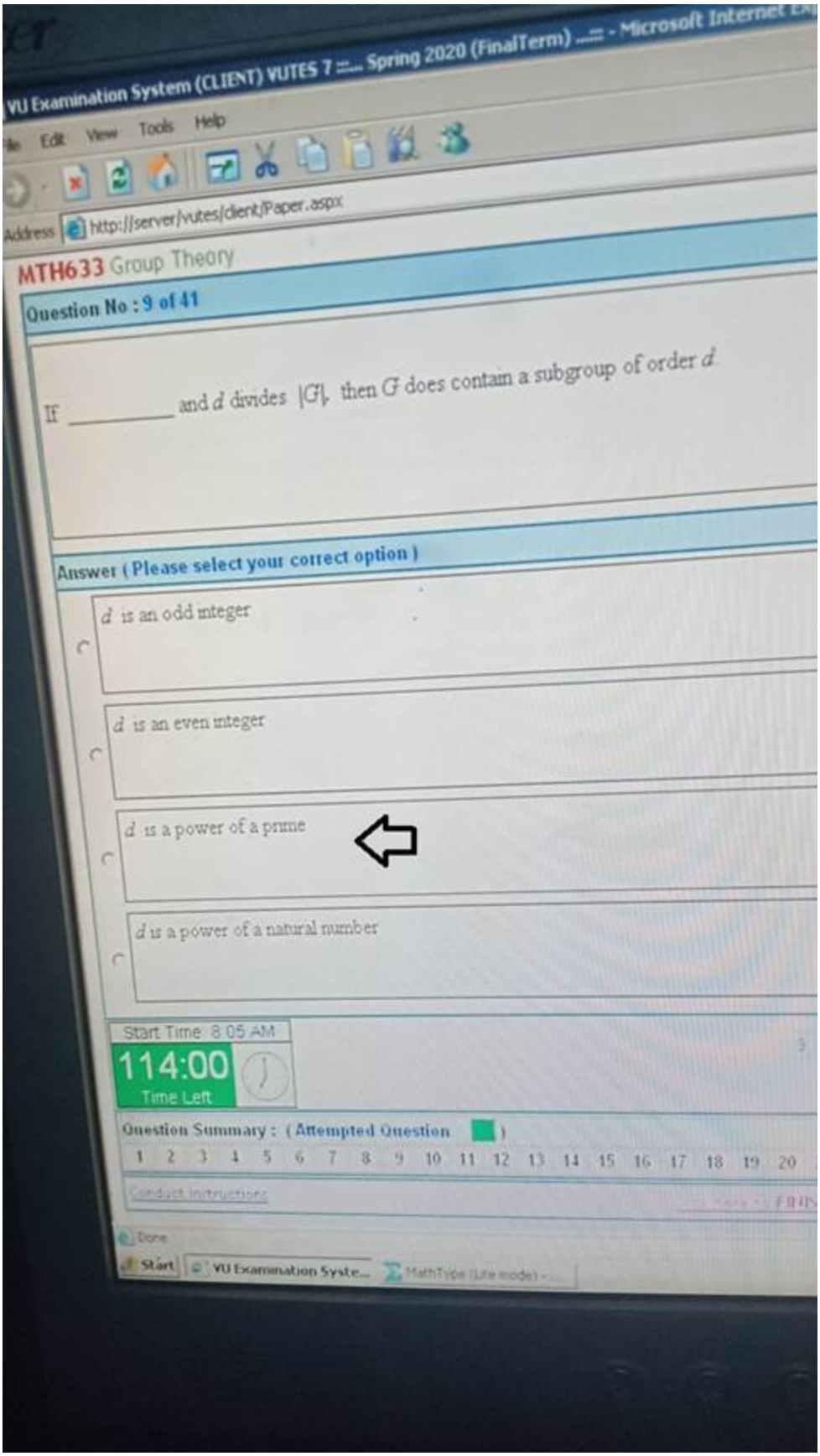
Answer (Please select your correct option)
$|G|$ modulo p
1 modulo $|G|$
1 modulo p
p modulo $|G|$
Start Time: 8:05 AM
114:00


MTH633 Group Theory
Question No : 7 of 41
Let G be a group containing normal subgroups H and K such that $H \cap K = \{e\}$ and $HVK = G$. Then G is isomorphic to
Answer (Please select your correct option)
$H \cap K$
$H \cup K$
$H \times K$
H / K
Start Time: 8:05 AM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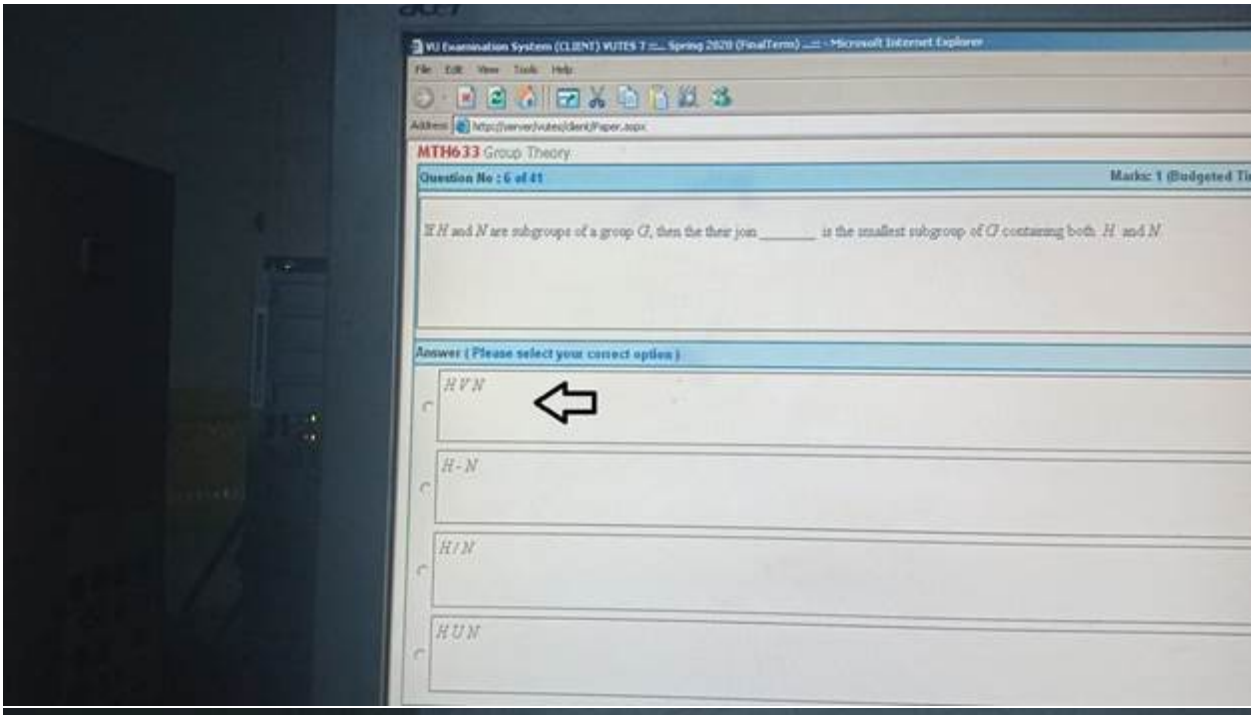
MTH633 Group Theory
Question No : 9 of 41
If _____ and d divides |G|, then G does contain a subgroup of order d
Answer (Please select your correct option)
d is an odd integer
d is an even integer
d is a power of a prime
d is a power of a natural number
Start Time: 8:05 AM
114:00
Time Left
Question Summary : (Attempted Question)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Conduct Instructions
Done
Start
VU Examination Syste...
MathType (Lite mode) - ...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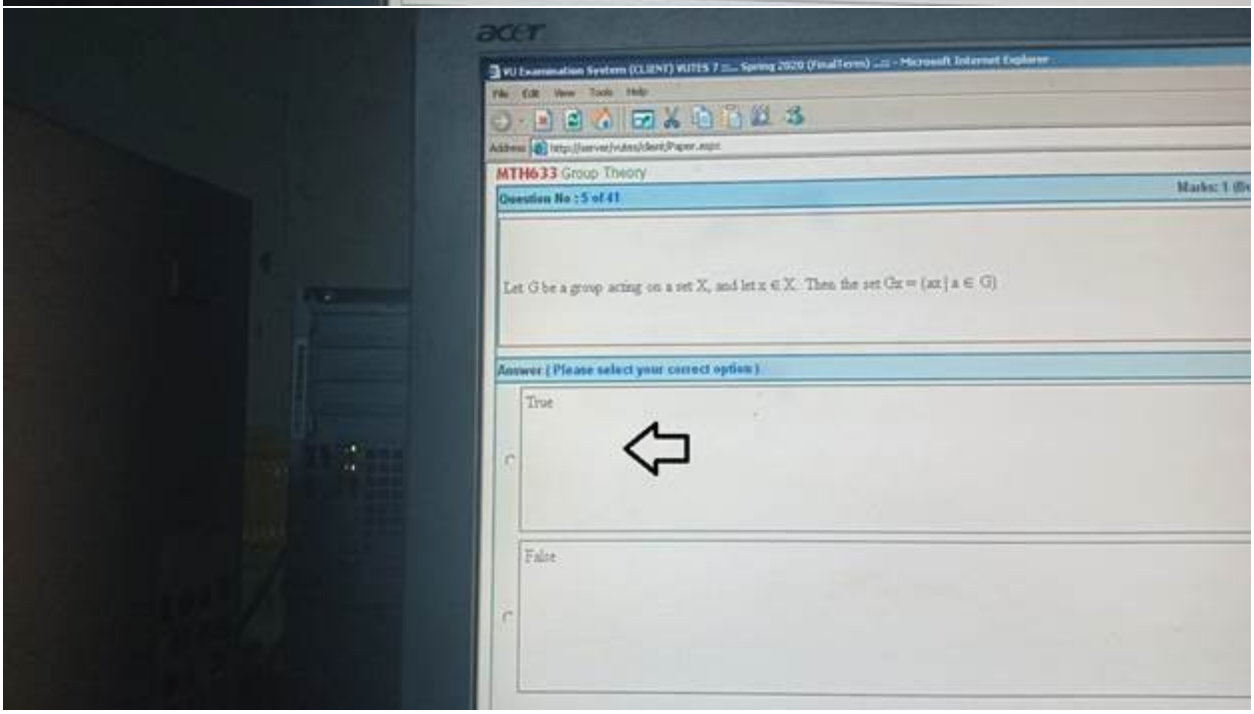
MTH633 Group Theory
Question No : 6 of 41
Marks: 1 (Budgeted Ti
If H and N are subgroups of a group G, then the their join _____ is the smallest subgroup of G containing both H and N
Answer (Please select your correct option)
H ∨ N
H - N
H ∩ N
H ∪ N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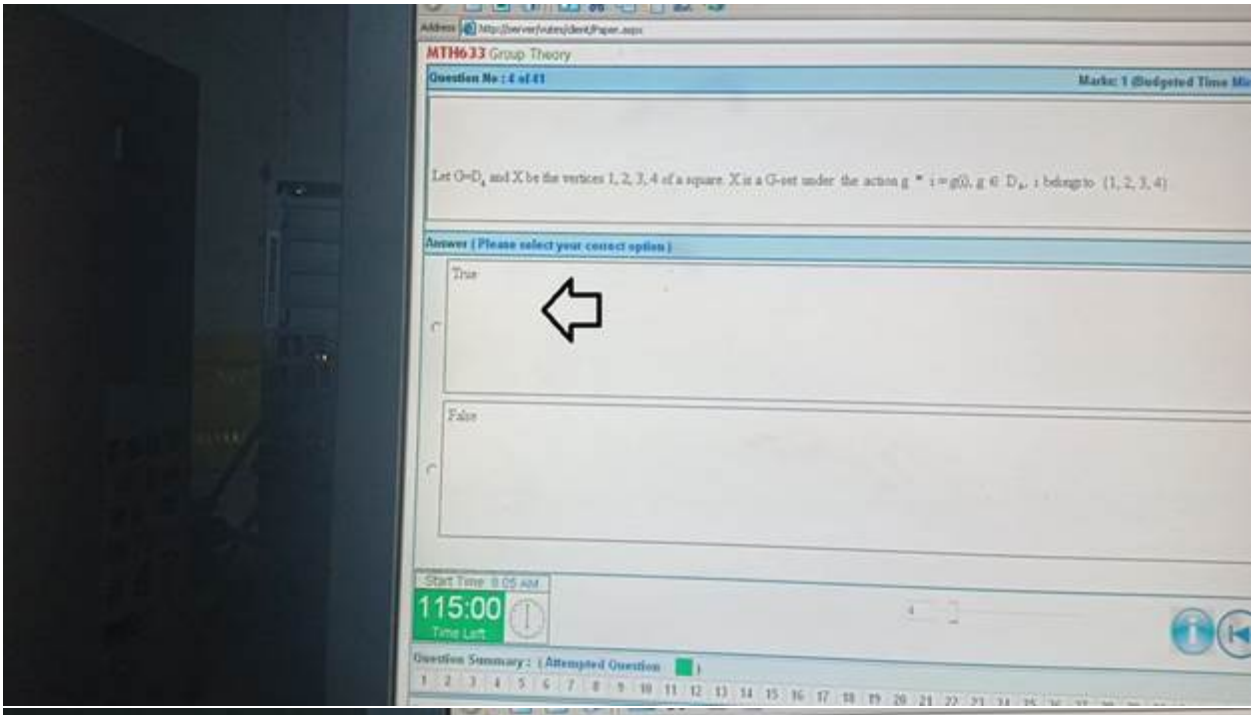
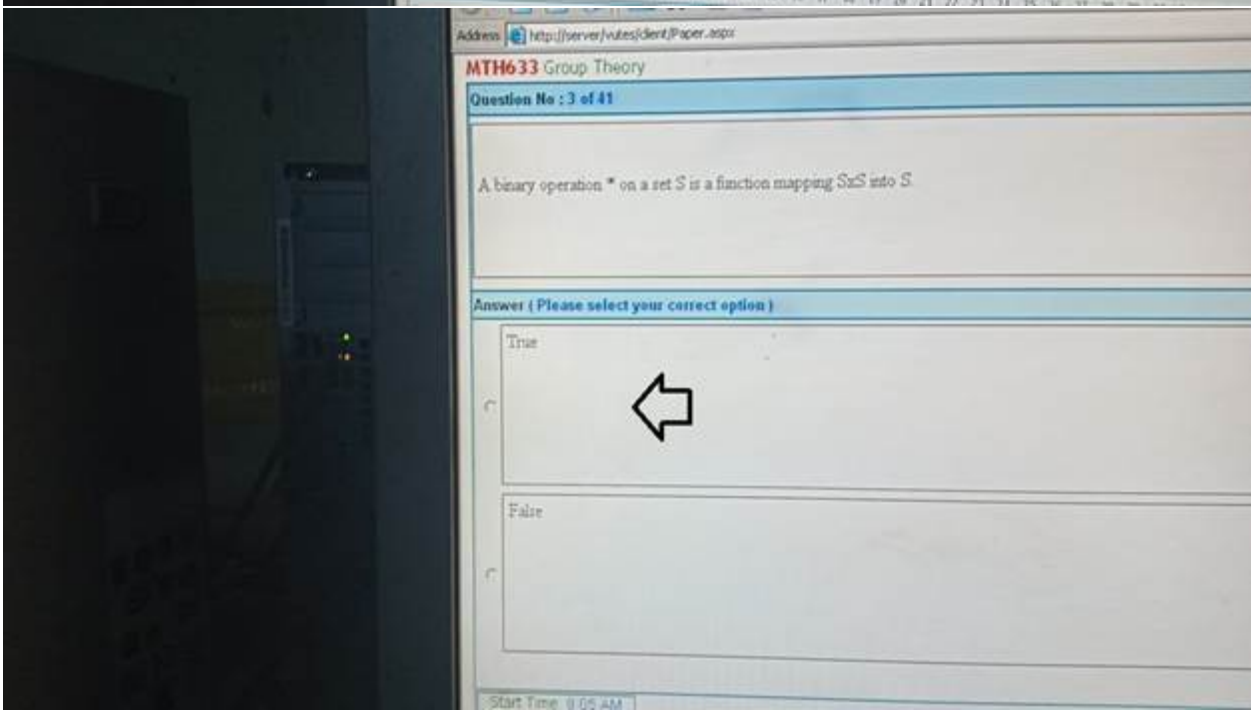
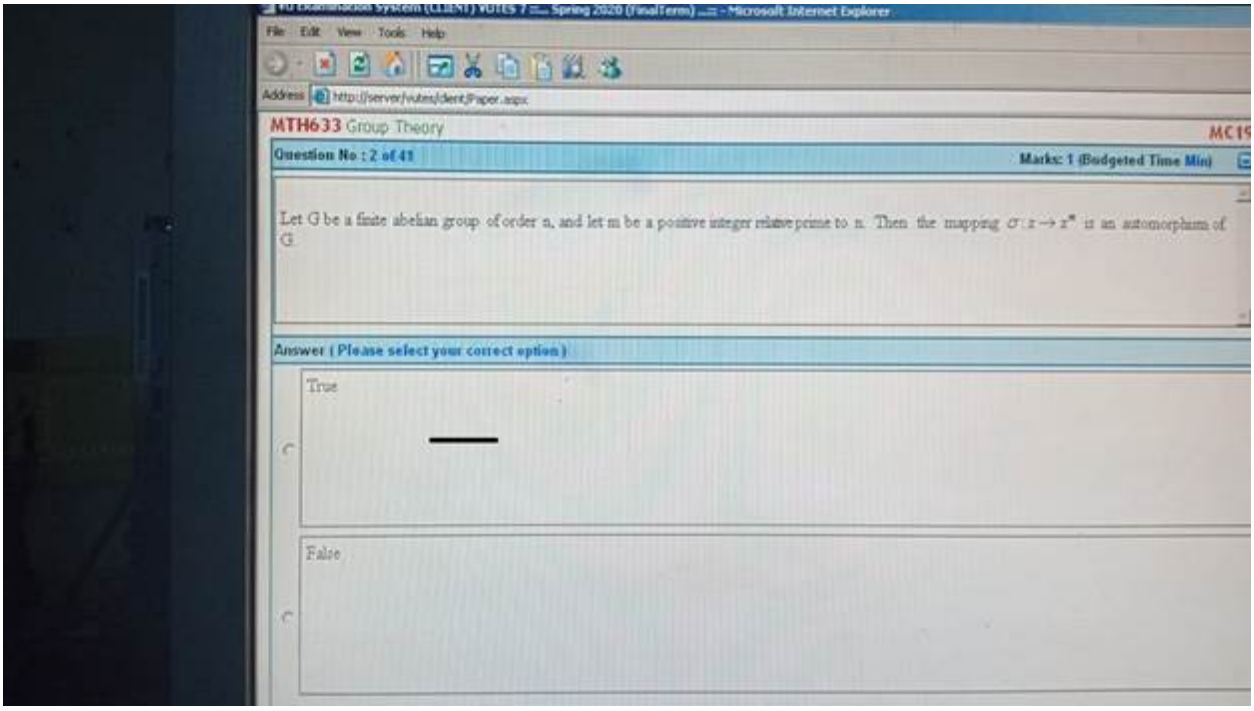
MTH633 Group Theory
Question No : 5 of 41
Marks: 1 (
Let G be a group acting on a set X, and let x ∈ X. Then the set Gx = {ax | a ∈ G}
Answer (Please select your correct option)
True
False


MTH633 Group Theory
Question No : 4 of 41
Let G=D4 and X be the vertices 1, 2, 3, 4 of a square. X is a G-set under the action g * i = g(i), g ∈ D4, i belongs to {1, 2, 3, 4}
Answer (Please select your correct option)
True
False
Start Time 9:05 AM
115:00
Time Left
Question Summary : (Attempted Question)


MTH633 Group Theory
Question No : 3 of 41
A binary operation * on a set S is a function mapping SxS into S.
Answer (Please select your correct option)
True
False
Start Time 9:05 AM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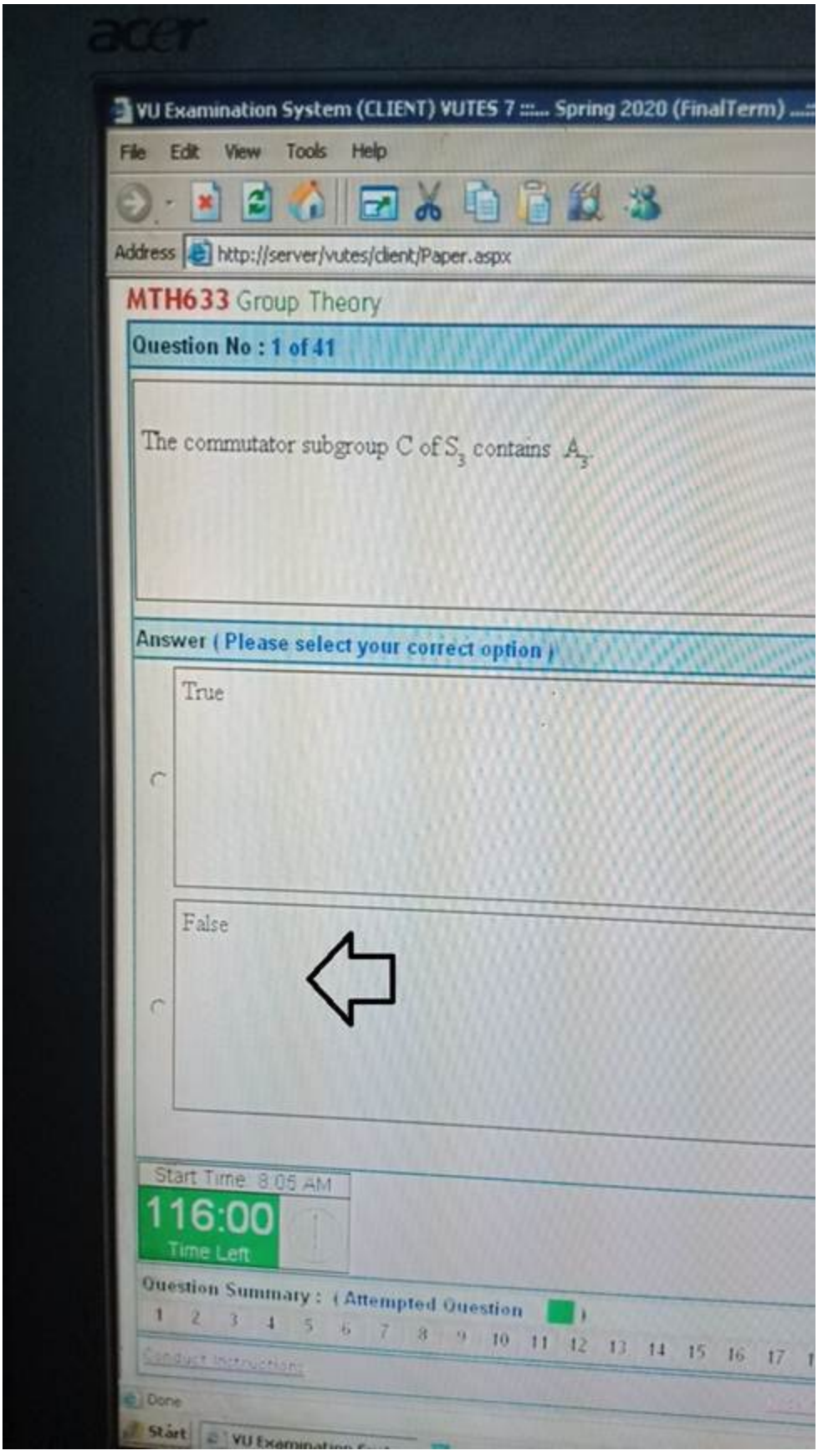
MTH633 Group Theory
Question No : 2 of 45
Marks: 1 (Budgeted Time Min)
Let G be a finite abelian group of order n, and let m be a positive integer relative prime to n. Then the mapping $\sigma : x \to x^m$ is an automorphism of G
Answer (Please select your correct option)
True
False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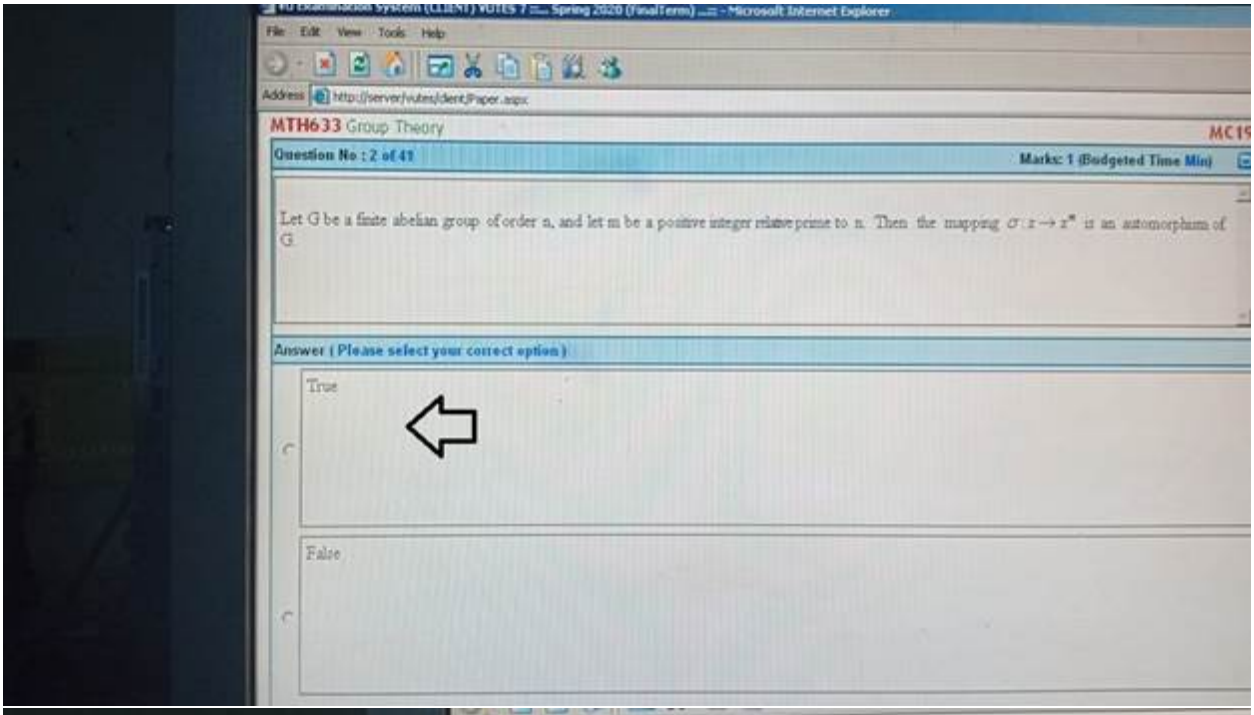
MTH633 Group Theory
Question No : 1 of 41
The commutator subgroup C of S_3 contains A_3.
Answer (Please select your correct option)
True
False
Start Time 8:05 AM
116:00
Time Left
Question Summary : (Attempted Question)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Done
Start


Microsoft Internet Explorer
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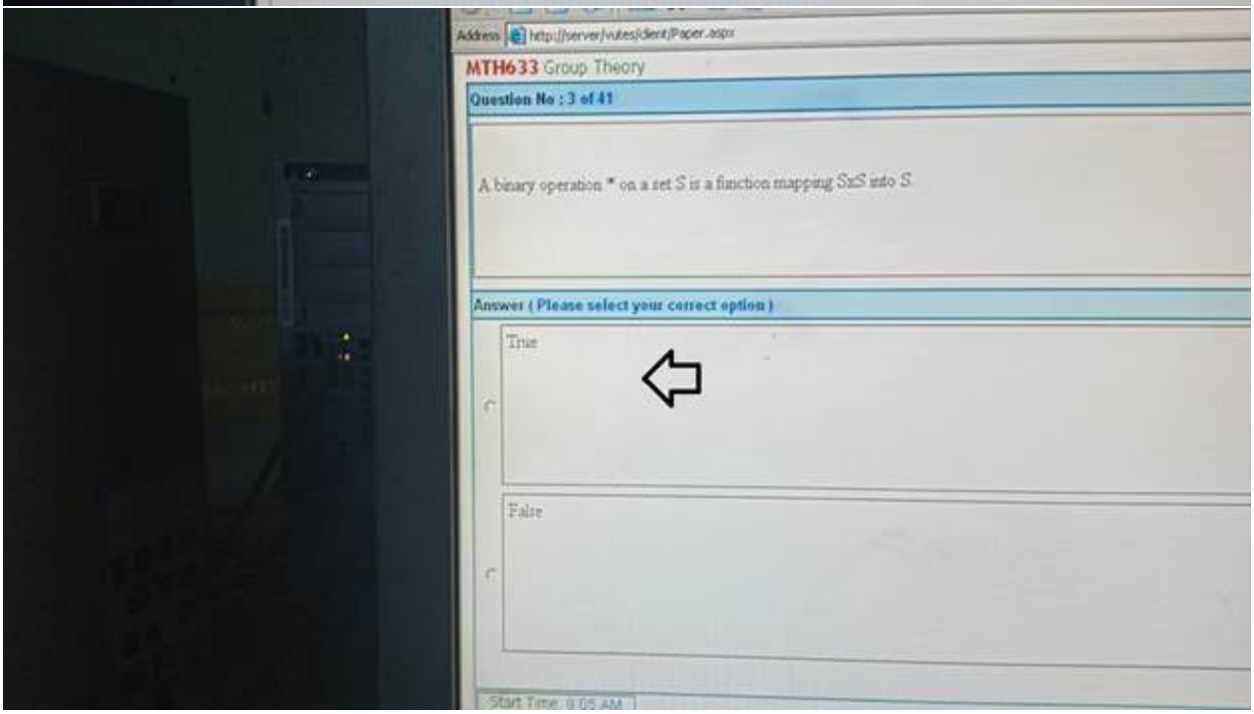
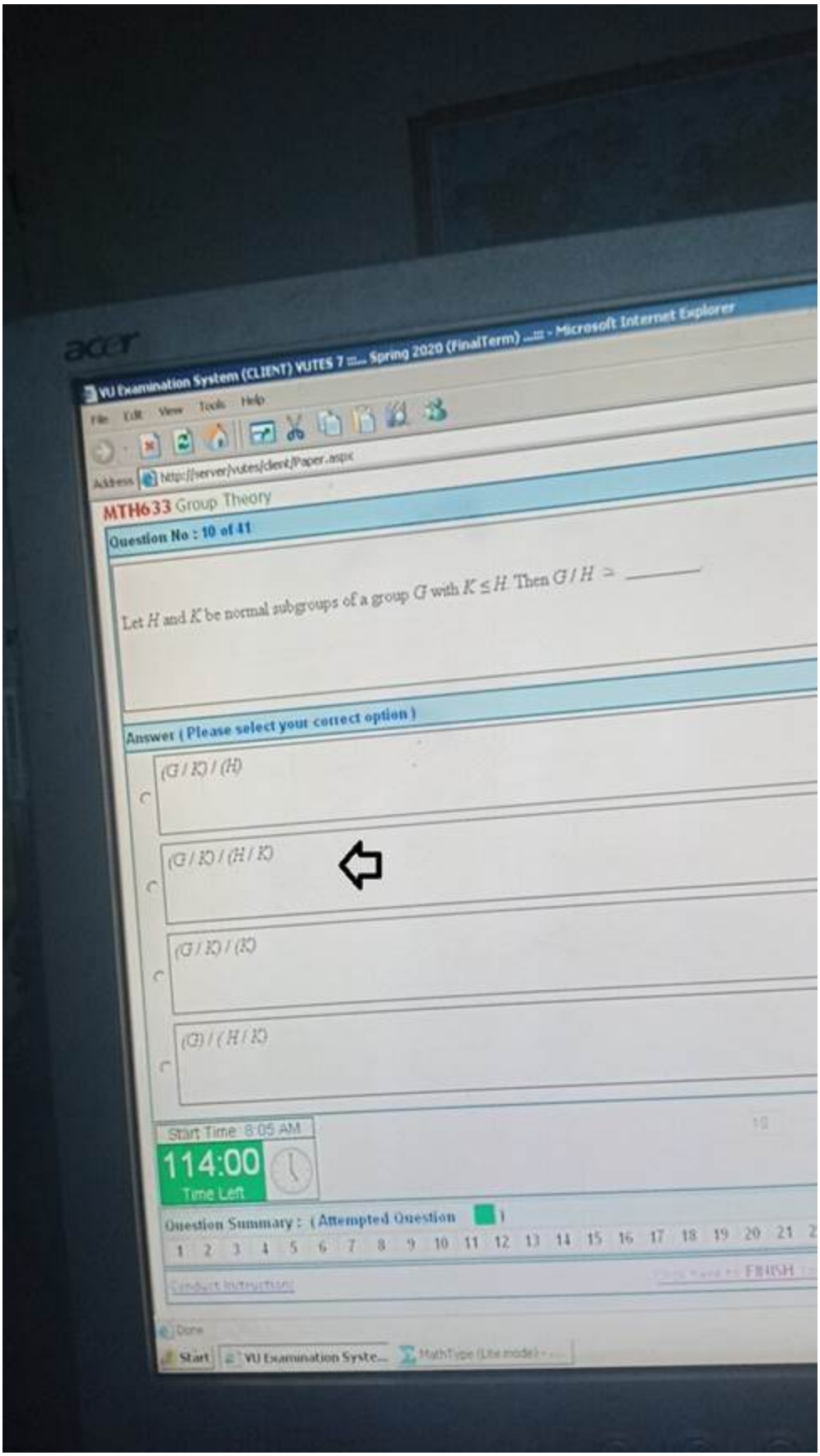
Address http://server/vutes/client/Paper.aspx
MTH633 Group Theory
Question No : 2 of 41
Marks: 1 (Budgeted Time Min)
Let G be a finite abelian group of order n, and let m be a positive integer relative prime to n. Then the mapping $\sigma : x \to x^m$ is an automorphism of G
Answer (Please select your correct option)
True
False


Address http://server/vutes/client/Paper.aspx
MTH633 Group Theory
Question No : 3 of 41
A binary operation * on a set S is a function mapping SxS into S.
Answer (Please select your correct option)
True
False
Start Time 9:05 AM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MTH633 Group Theory
Question No : 10 of 41
Let H and K be normal subgroups of a group G with $K \leq H$. Then $G/H \simeq$ _____
Answer (Please select your correct option)
$(G/K)/(H)$
$(G/K)/(H/K)$
$(G/K)/(K)$
$(G)/(H/K)$
Start Time 8:05 AM
114:00
Time Left
Question Summary : (Attempted Question)
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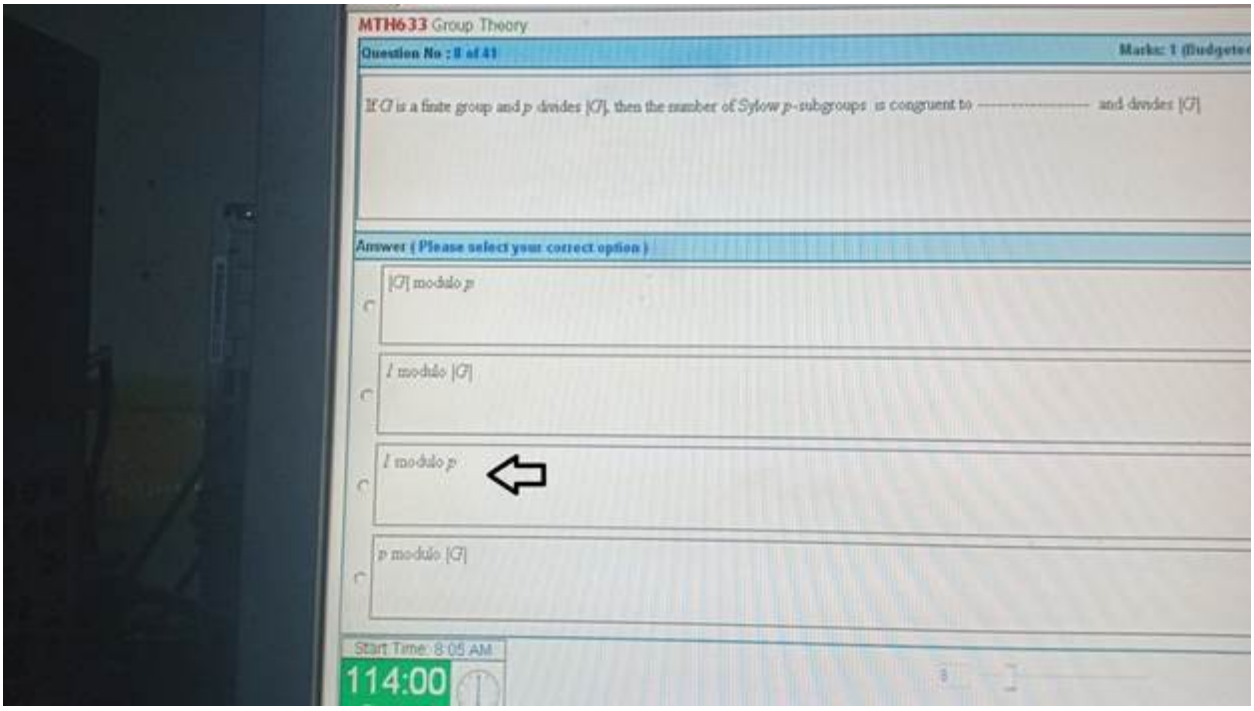
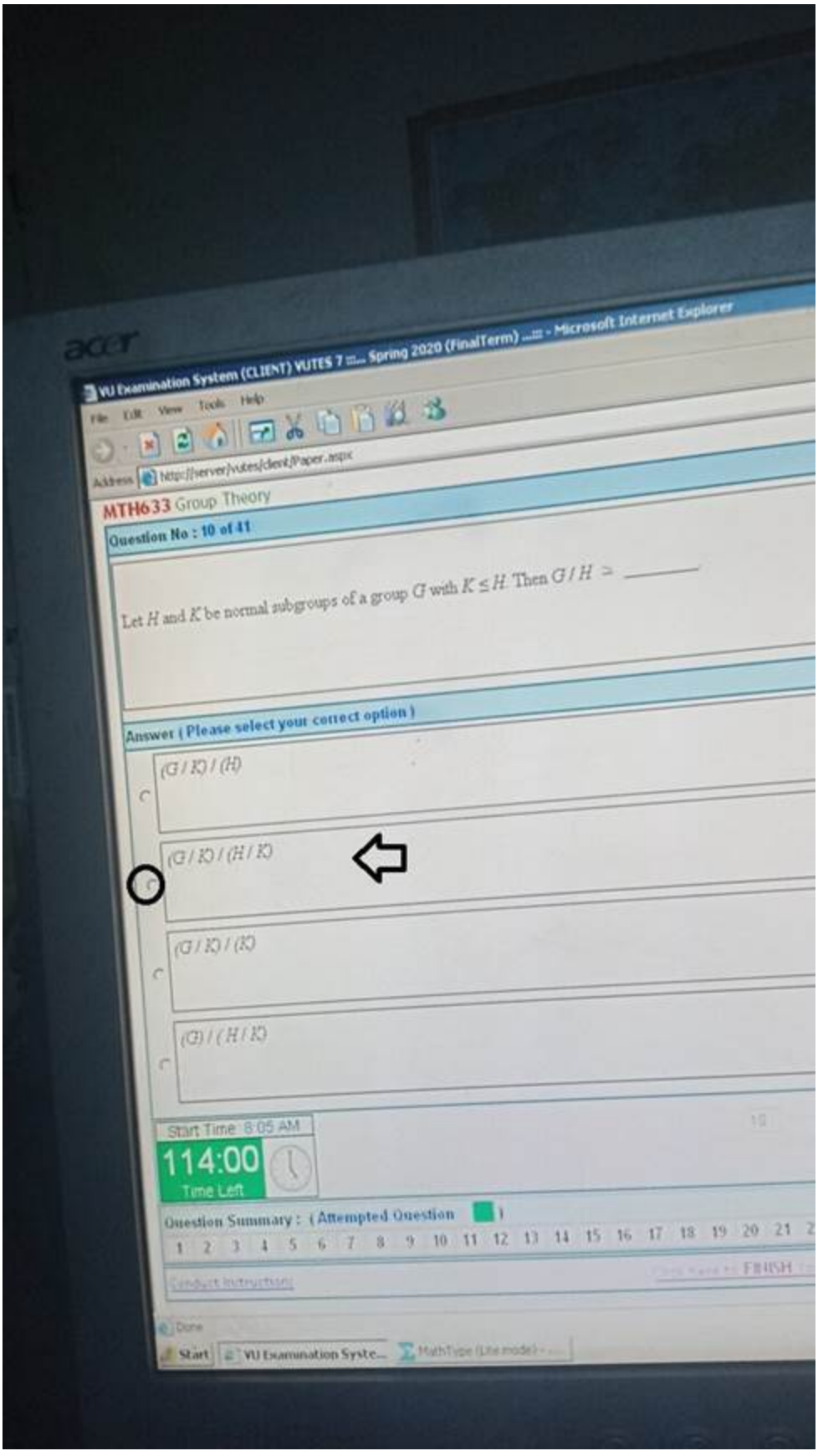
Conduct Instruction
Done
Start
VU Examination Syste...
MathType (Line mode) - ...


MTH633 Group Theory
Question No : 8 of 45
If G is a finite group and p divides |G|, then the number of Sylow p-subgroups is congruent to ---------- and divides |G|
Answer (Please select your correct option)
|G| modulo p
1 modulo |G|
1 modulo p
p modulo |G|
Start Time: 8:05 AM
114:00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MTH633 Group Theory
Question No : 10 of 41
Let H and K be normal subgroups of a group G with K ≤ H. Then G / H ≥ _____
Answer (Please select your correct option)
(G / K) / (H)
(G / K) / (H / K)
(G / K) / (K)
(G) / (H / K)
Start Time 8:05 AM
114:00
Time Left
Question Summary : (Attempted Question)
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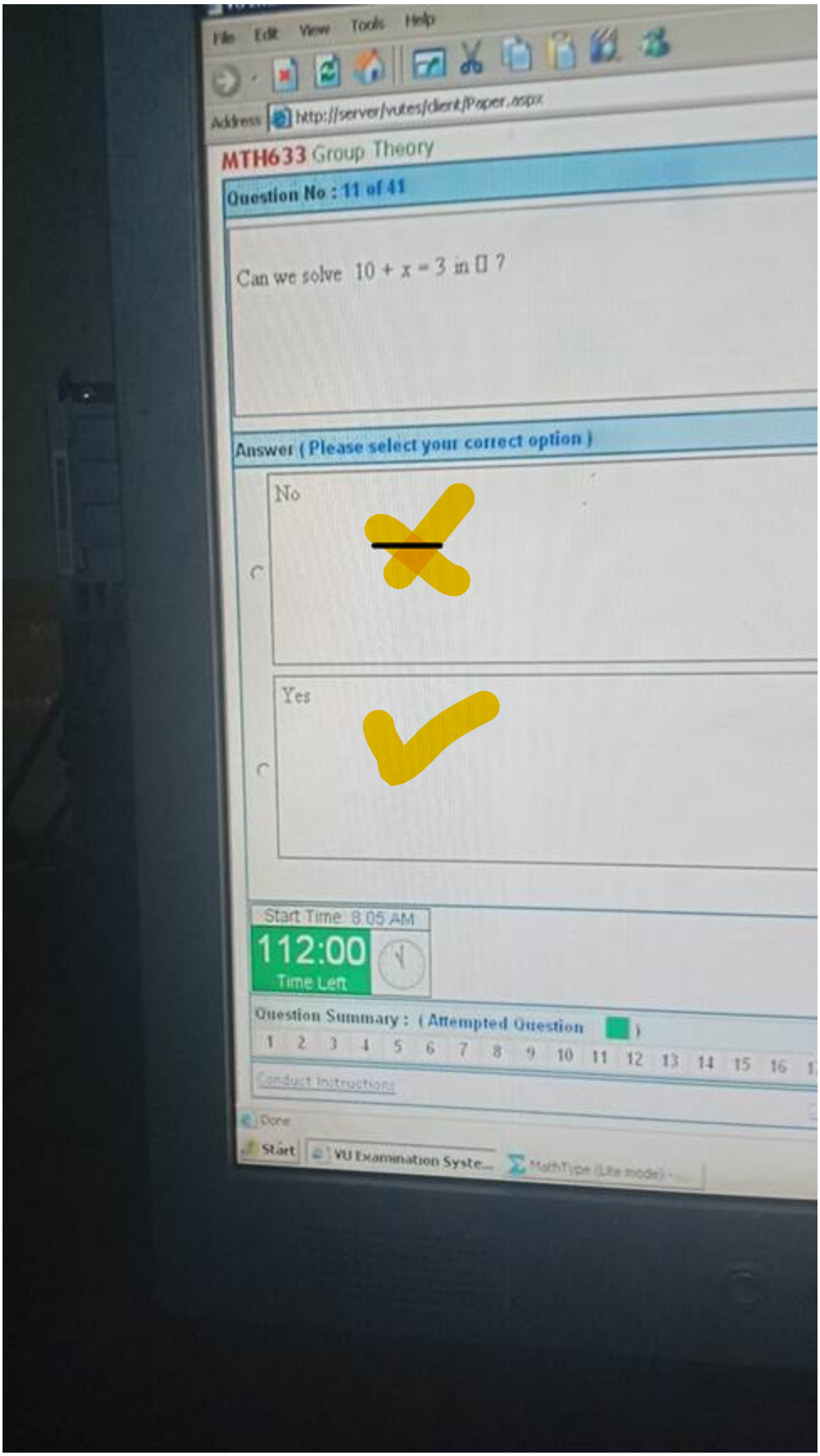
Conduct Instructions
FINISH
Done
Start
VU Examination Syste...
MathType (Line mode) - ...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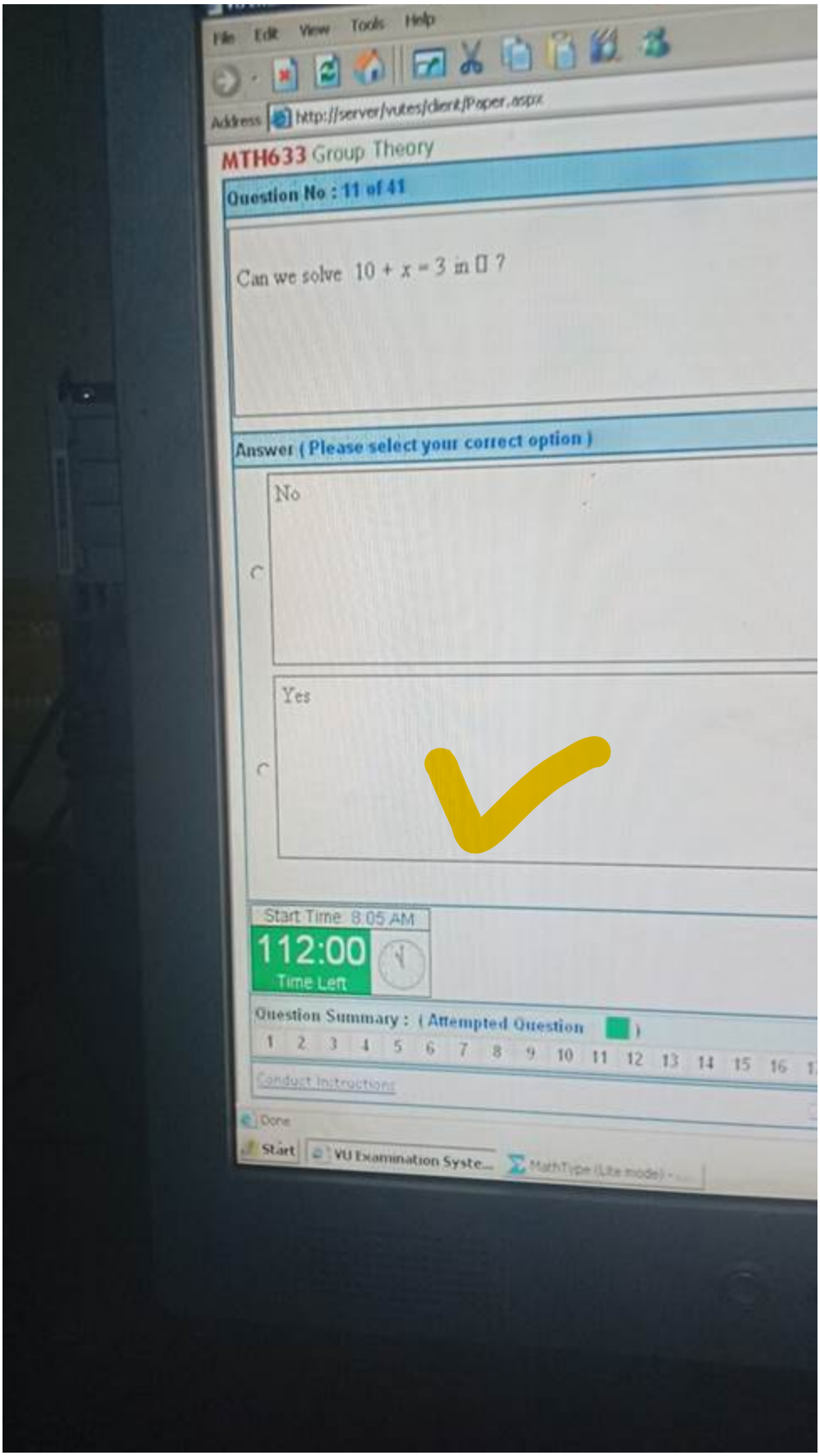
MTH633 Group Theory
Question No : 11 of 41
Can we solve 10 + x = 3 in ? ?
Answer (Please select your correct option)
No
Yes
Start Time 8:05 AM
112:00
Time Left
Question Summary : (Attempted Question)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Conduct Instructions
Done
Start
VU Examination Syste...
MathType (Lite mode) - ...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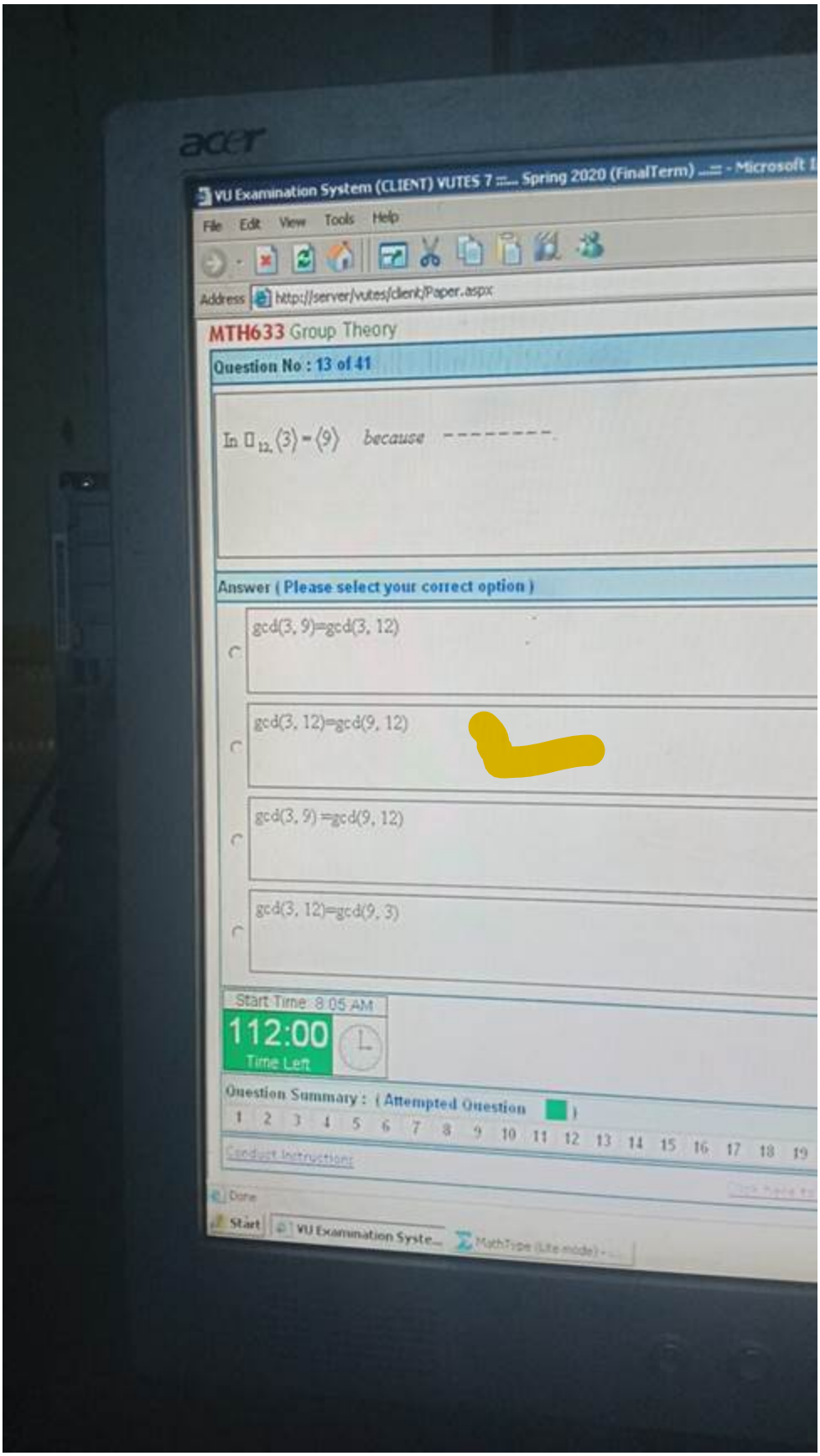
MTH633 Group Theory
Question No : 11 of 41
Can we solve 10 + x = 3 in ? ?
Answer (Please select your correct option)
No
Yes
Start Time 8:05 AM
112:00
Time Left
Question Summary : (Attempted Question)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Conduct Instructions
Done
Start
VU Examination Syste...
MathType (Lite mode) - ...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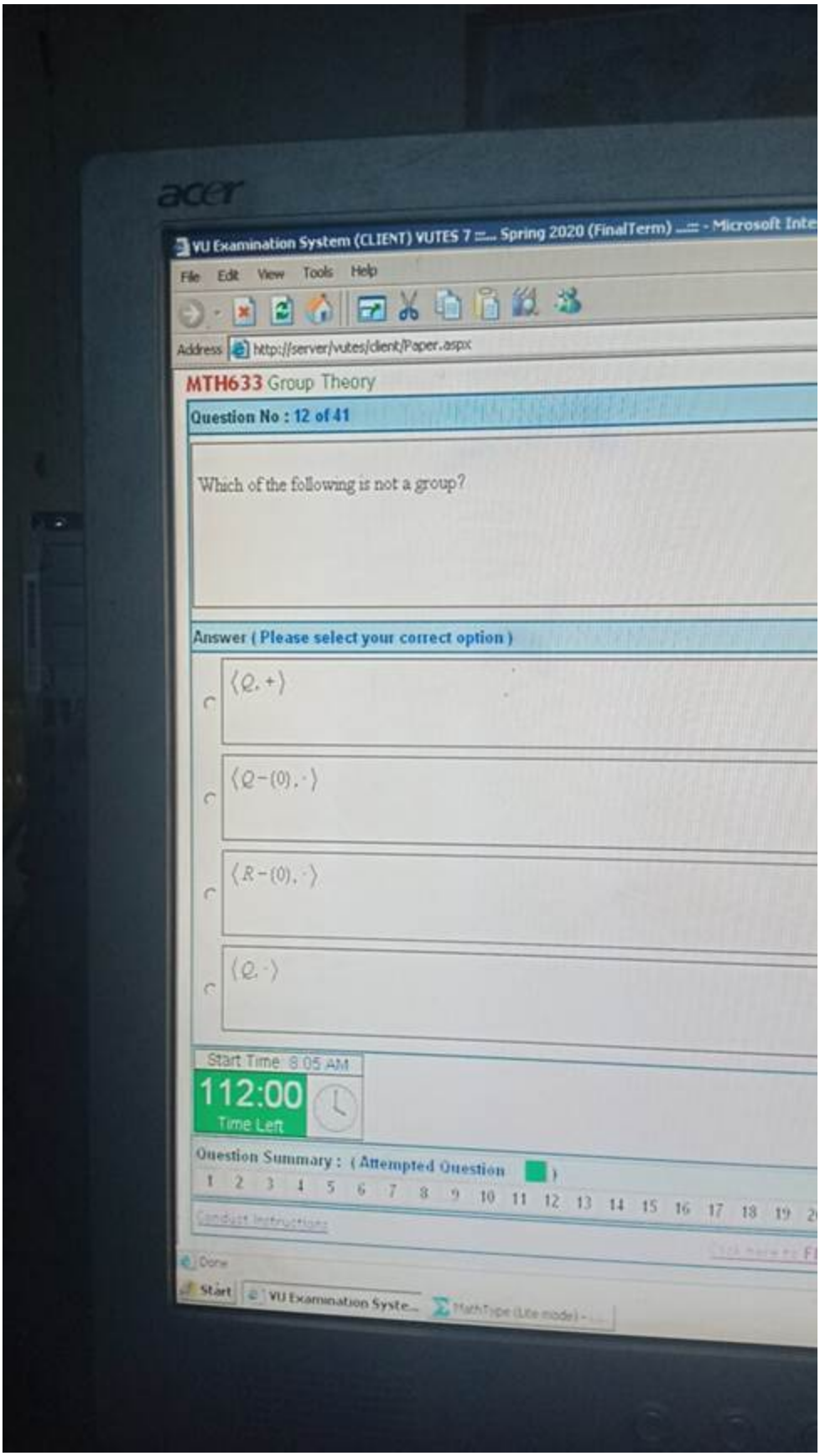
MTH633 Group Theory
Question No : 13 of 41
In $\mathbb{Z}_{12}$, $\langle 3 \rangle = \langle 9 \rangle$ because ---------.
Answer (Please select your correct option)
gcd(3, 9)=gcd(3, 12)
gcd(3, 12)=gcd(9, 12)
gcd(3, 9) =gcd(9, 12)
gcd(3, 12)=gcd(9, 3)
Start Time 8:05 AM
112:00
Time Left
Question Summary : (Attempted Question)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Conduct Instructions
Done
Start
VU Examination Syste...
MathType (Lite mode) - ...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MTH633 Group Theory
Question No : 12 of 41
Which of the following is not a group?
Answer (Please select your correct option)
⟨Q, +⟩
⟨Q−{0}, ·⟩
⟨R−{0}, ·⟩
⟨Q, ·⟩
Start Time 8:05 AM
112:00
Time Left
Question Summary : (Attempted Question)
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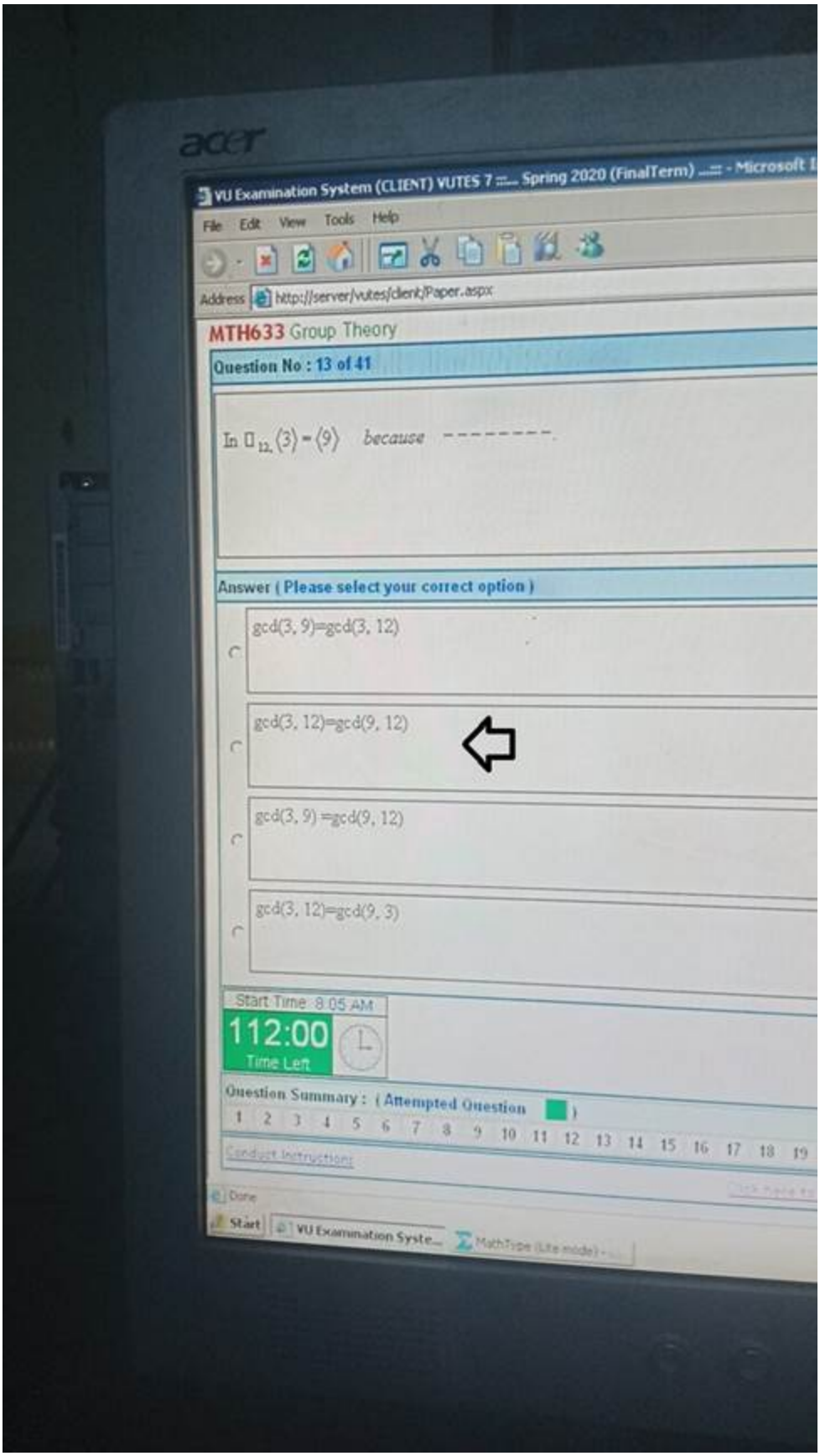
Done
Start
VU Examination Syste...
MathType (Lite mode) - ...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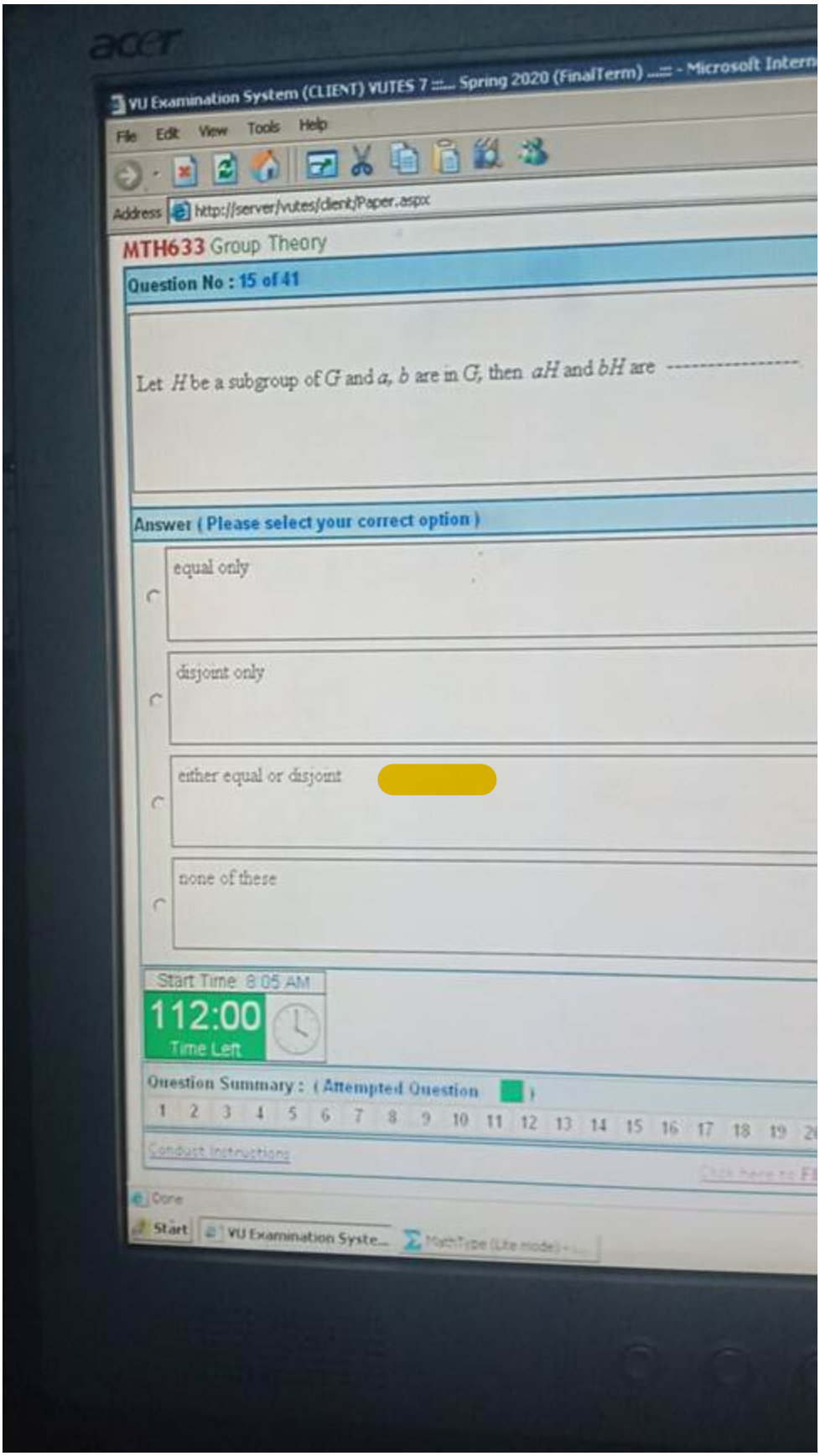
MTH633 Group Theory
Question No : 13 of 41
In $U_{12}\langle 3\rangle = \langle 9\rangle$ because --------.
Answer (Please select your correct option)
gcd(3, 9)=gcd(3, 12)
gcd(3, 12)=gcd(9, 12)
gcd(3, 9) =gcd(9, 12)
gcd(3, 12)=gcd(9, 3)
Start Time 8:05 AM
112:00
Time Left
Question Summary : (Attempted Question)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Conduct Instructions
Done
Start
VU Examination Syste...
MathType (Lite mode) - ...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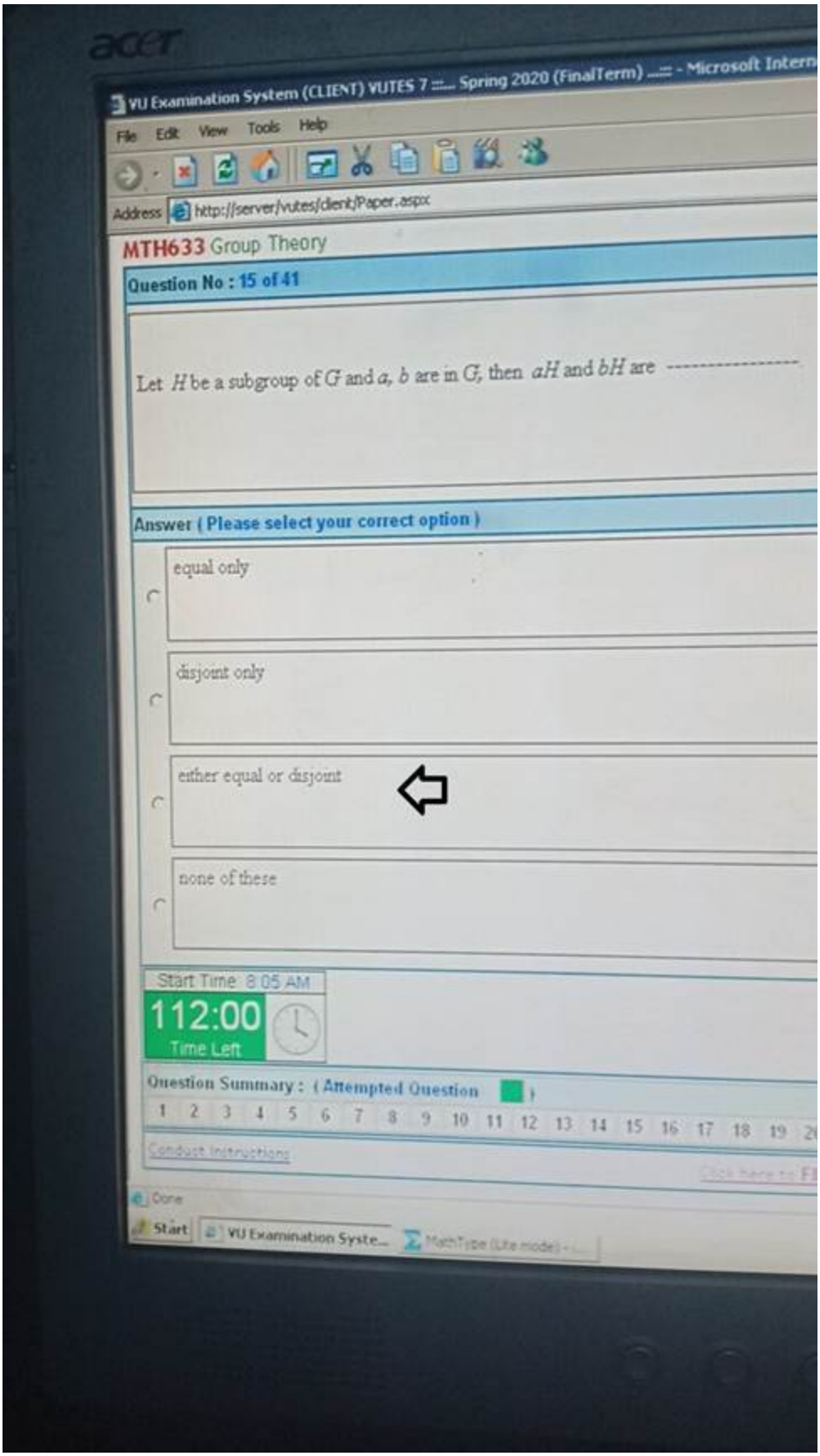
MTH633 Group Theory
Question No : 15 of 41
Let H be a subgroup of G and a, b are in G, then aH and bH are ----------
Answer (Please select your correct option)
equal only
disjoint only
either equal or disjoint
none of these
Start Time 8:05 AM
112:00
Time Left
Question Summary : (Attempted Question)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Conduct Instructions
Done
Start
VU Examination Syste...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MTH633 Group Theory
Question No : 15 of 41
Let H be a subgroup of G and a, b are in G, then aH and bH are ----------
Answer (Please select your correct option)
equal only
disjoint only
either equal or disjoint
none of these
Start Time 8:05 AM
112:00
Time Left
Question Summary : (Attempted Question)
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Conduct Instructions
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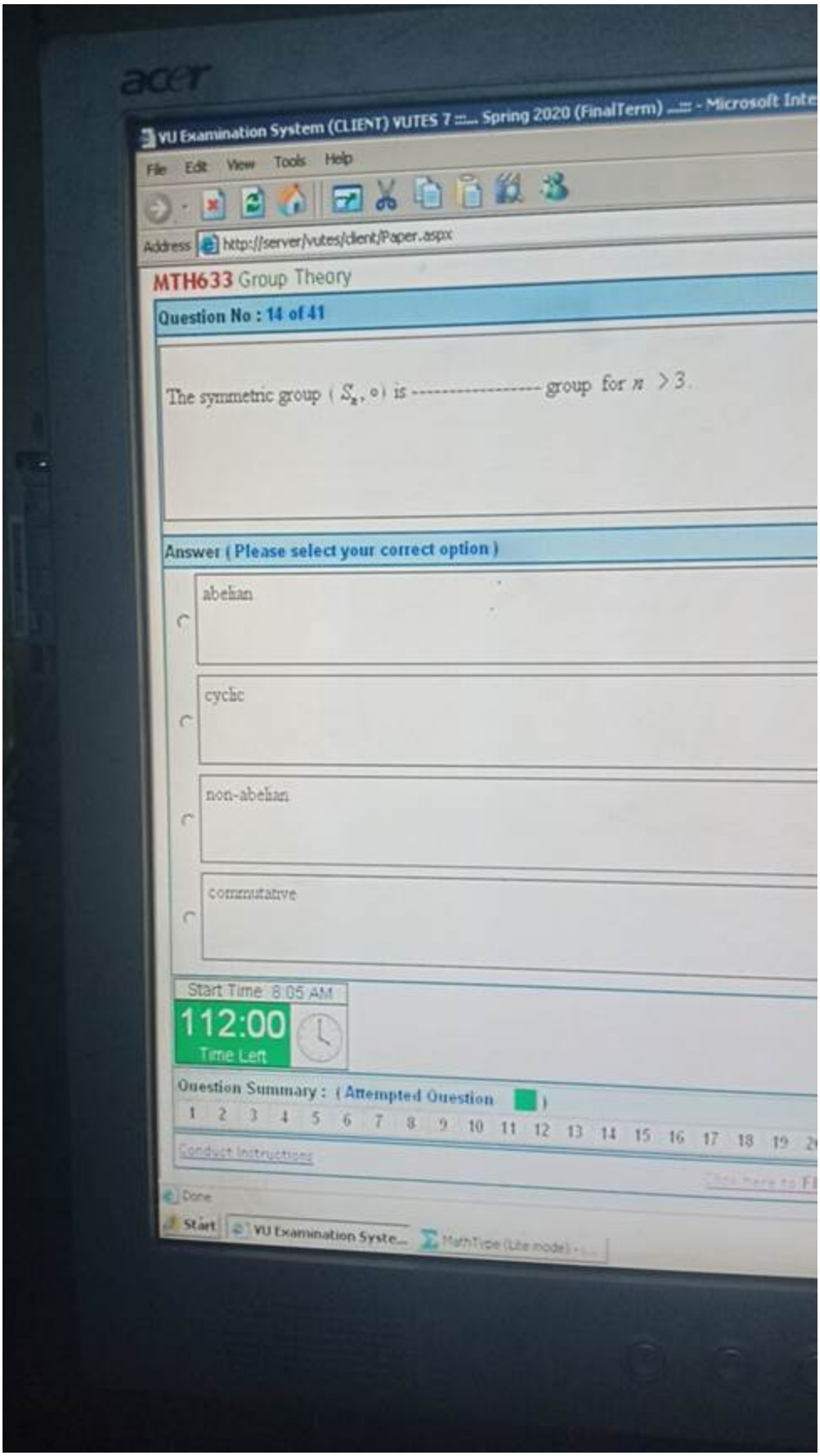
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MTH633 Group Theory
Question No : 14 of 41
The symmetric group $(S_n, \circ)$ is ---------- group for $n > 3$.
Answer (Please select your correct option)
abelian
cyclic
non-abelian
commutative
Start Time 8:05 AM
112:00
Time Left
Question Summary : (Attempted Question)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Conduct Instructions
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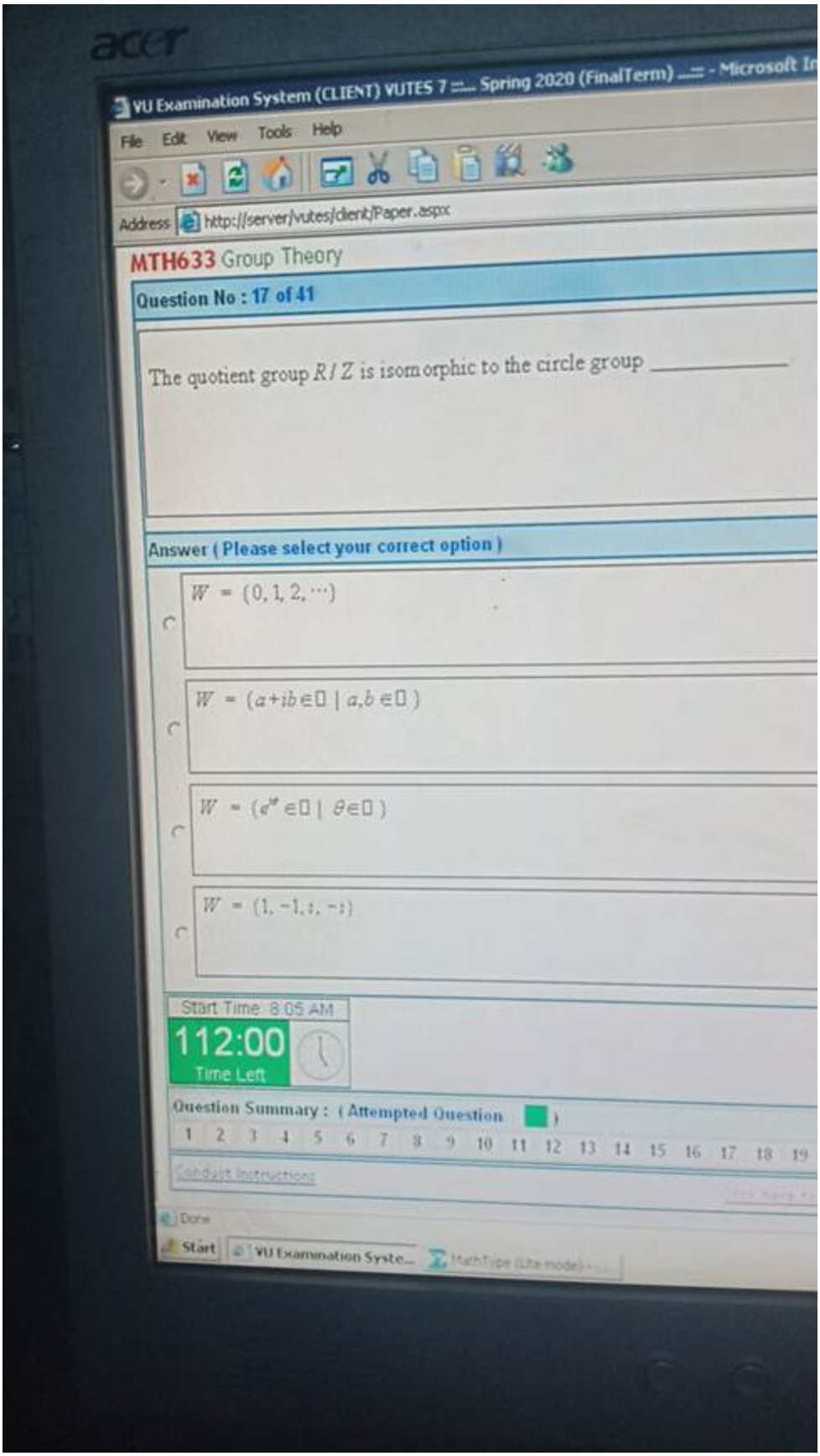
VU Examination Syste...
MathType (Lite mode) - ...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MTH633 Group Theory
Question No : 17 of 41
The quotient group R / Z is isomorphic to the circle group _____
Answer (Please select your correct option)
W = (0, 1, 2, ···)
W = (a+ib∈□ | a,b ∈□)
W = (e^iθ ∈□ | θ∈□)
W = (1, −1, i, −i)
Start Time 8:05 AM
112:00
Time Left
Question Summary : (Attempted Question)
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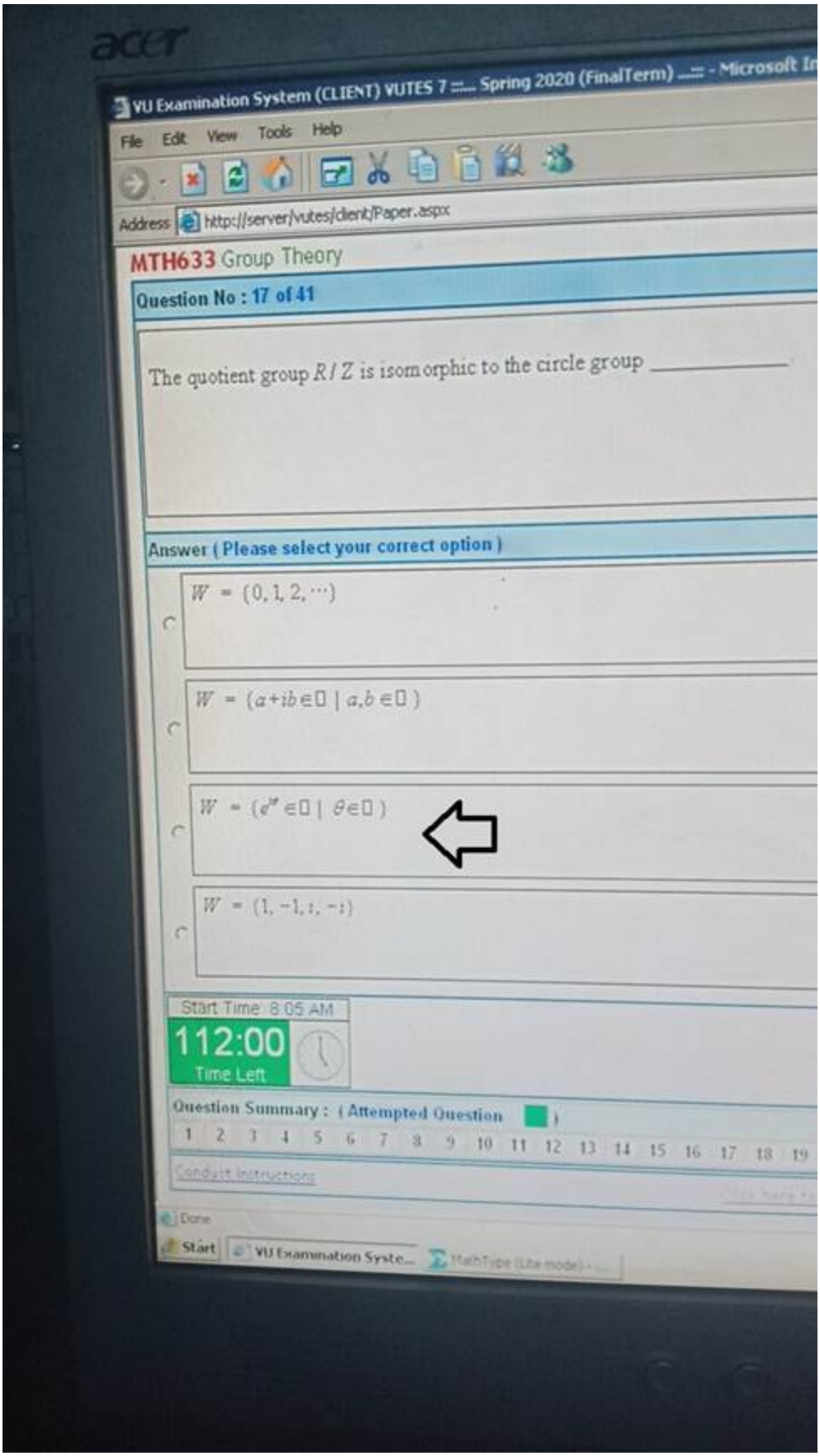
Conduct Instructions
Done
Start
VU Examination Syste...
MathType (Lite mode) - ...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File Edit View Tools Help
Address http://server/vutes/client/Paper.aspx
MTH633 Group Theory
Question No : 17 of 41
The quotient group R / Z is isomorphic to the circle group _____
Answer (Please select your correct option)
W = (0, 1, 2, ···)
W = (a+ib∈□ | a,b ∈□)
W = (e^θ ∈□ | θ∈□)
W = (1, −1, i, −i)
Start Time 8:05 AM
112:00
Time Left
Question Summary : (Attempted Question)
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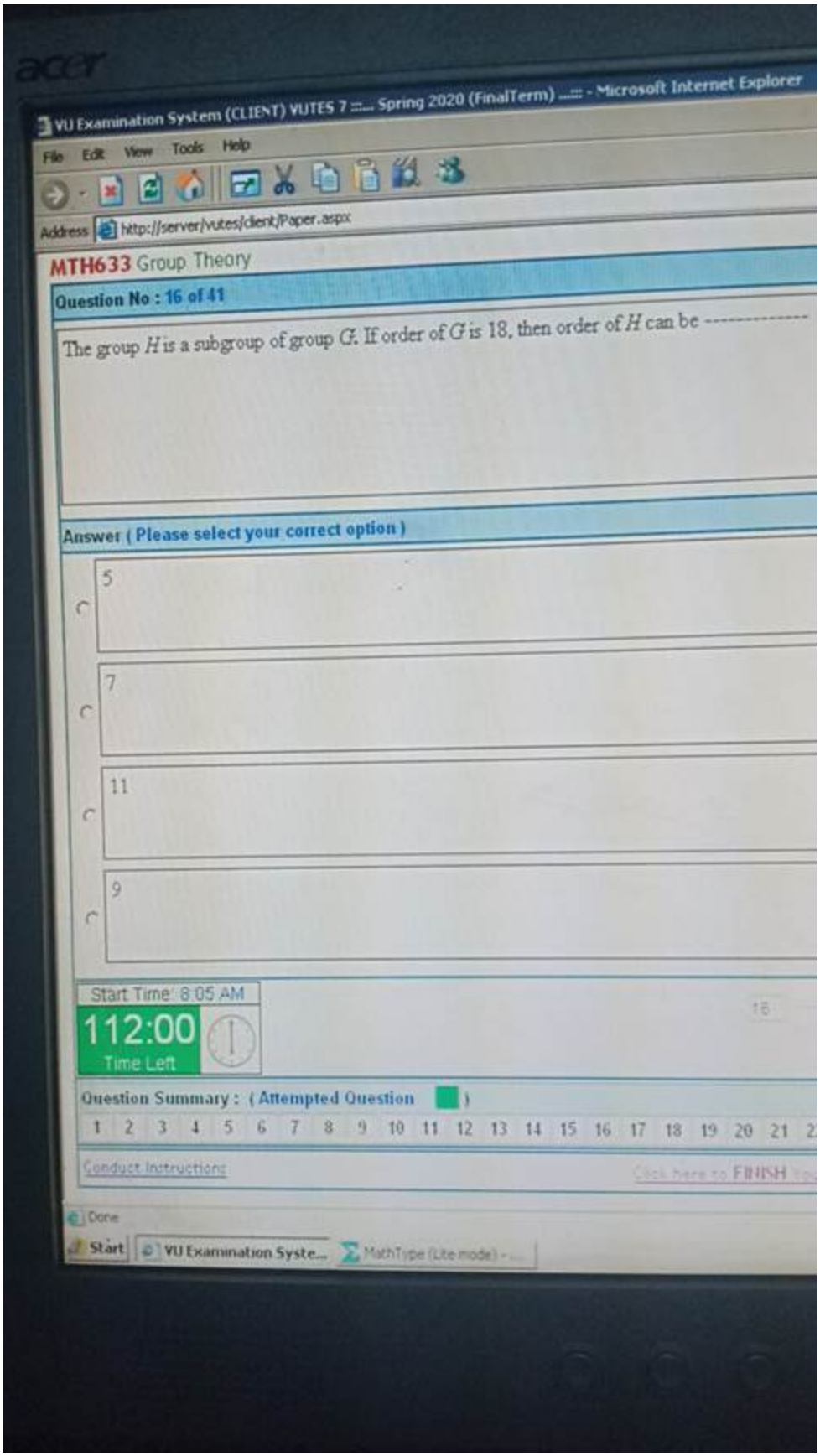
Conduit Instructions
Done
Start
VU Examination Syste...
MathType (Lite mode) - ...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MTH633 Group Theory
Question No : 16 of 41
The group H is a subgroup of group G. If order of G is 18, then order of H can be ----------
Answer (Please select your correct option)
5
7
11
9
Start Time: 8:05 AM
112:00
Time Left
Question Summary : (Attempted Question)
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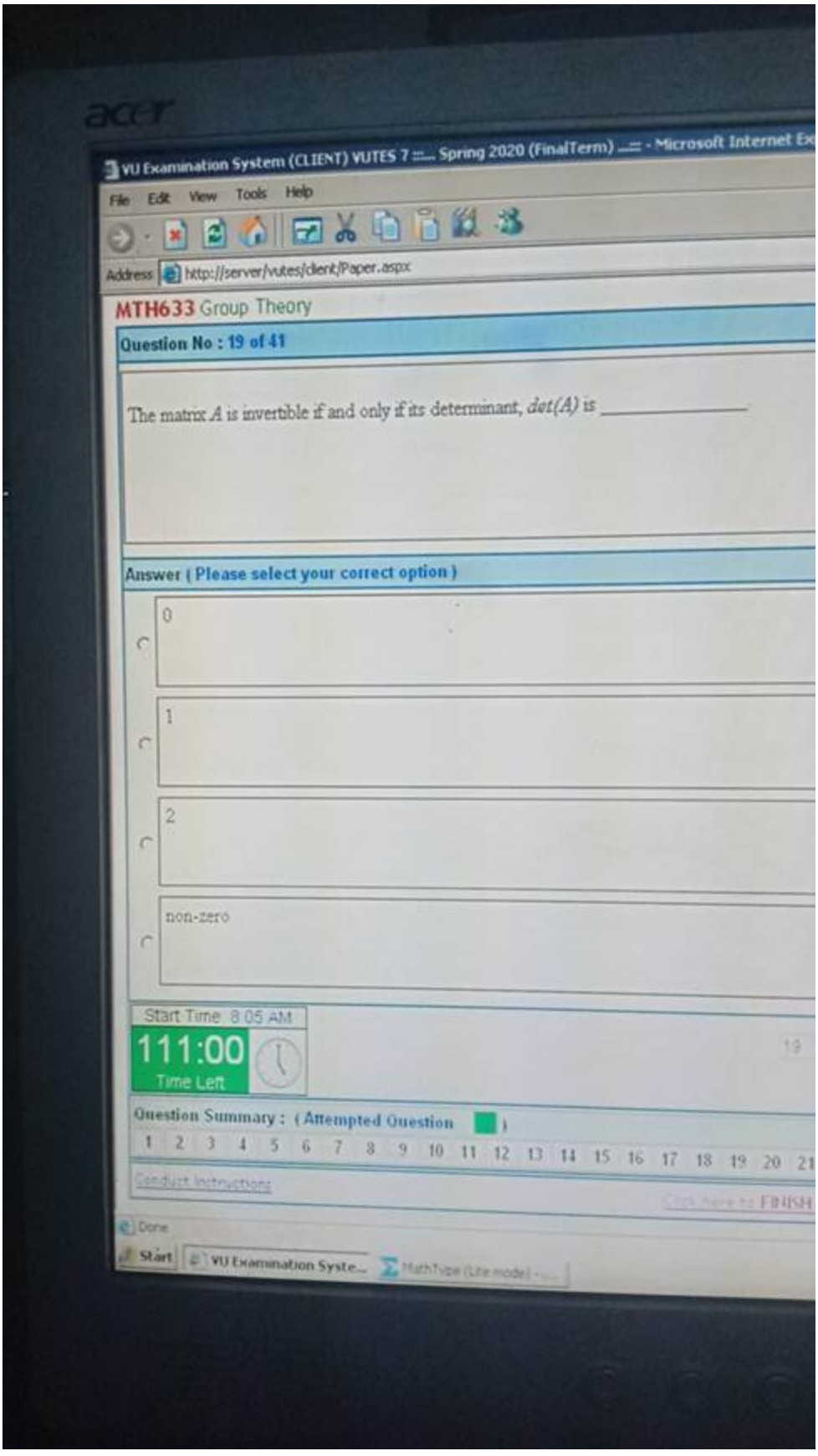
Conduct Instructions
Done
Start
VU Examination Syste...
MathType (Lite mode) - ...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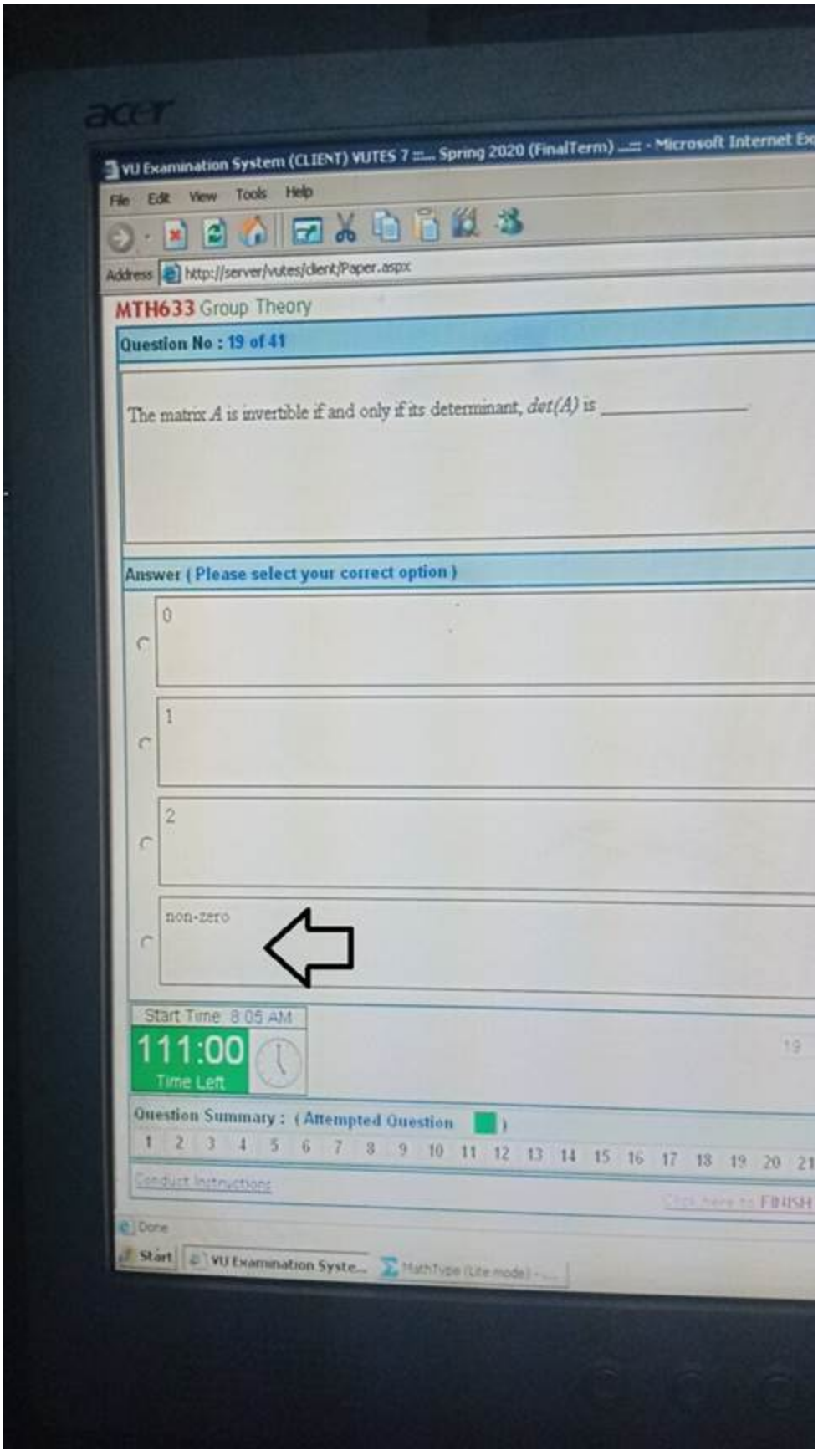
MTH633 Group Theory
Question No : 19 of 41
The matrix A is invertible if and only if its determinant, det(A) is _____
Answer (Please select your correct option)
0
1
2
non-zero
Start Time 8:05 AM
111:00
Time Left
Question Summary : (Attempted Question)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
Conduct Instructions
Click here to FINISH
Done
Start
VU Examination Syste...
MathType (Lite mode) - ...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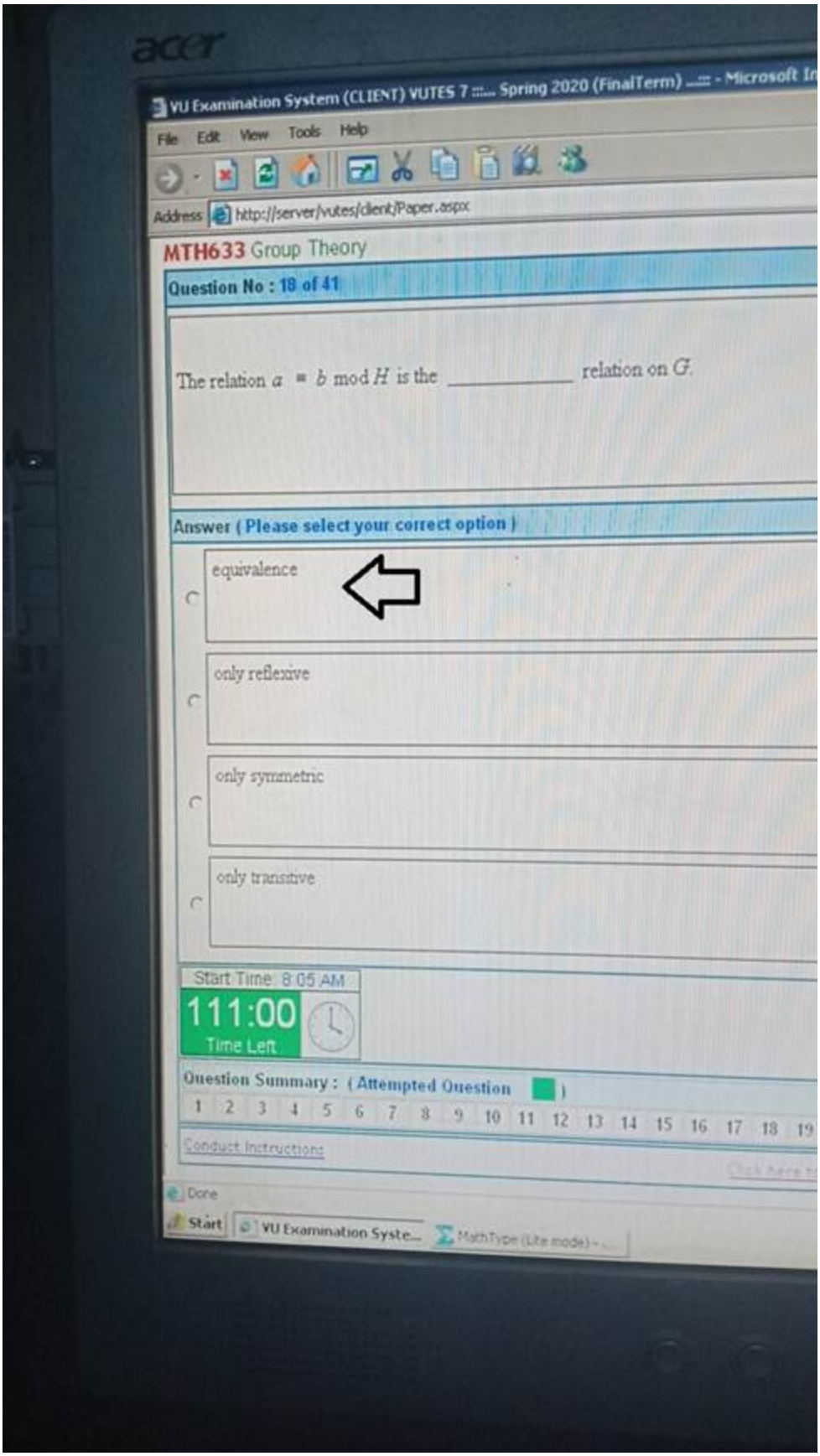
MTH633 Group Theory
Question No : 19 of 41
The matrix A is invertible if and only if its determinant, det(A) is _____.
Answer (Please select your correct option)
0
1
2
non-zero
Start Time 8:05 AM
111:00
Time Left
Question Summary : (Attempted Question)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
Conduct Instructions
Done
Start
VU Examination Syste...
MathType (Lite mode) - ...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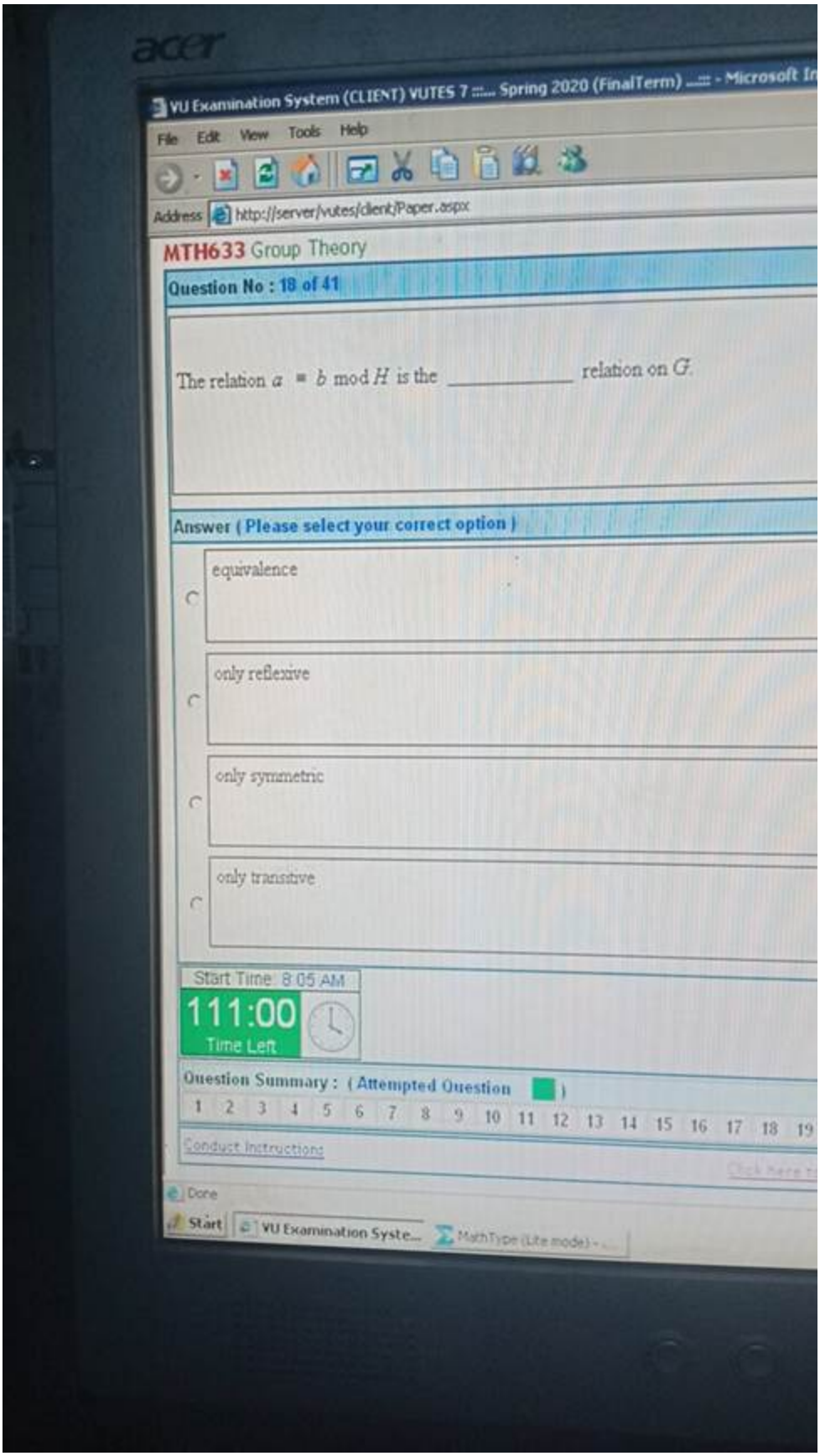
File Edit View Tools Help
Address http://server/vutes/client/Paper.aspx
MTH633 Group Theory
Question No : 18 of 41
The relation $a \equiv b \bmod H$ is the _____ relation on G.
Answer (Please select your correct option)
equivalence
only reflexive
only symmetric
only transitive
Start Time 8:05 AM
111:00
Time Left
Question Summary : (Attempted Question)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Conduct Instructions
Done
Start
VU Examination Syste...
MathType (Lite mode) - ...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MTH633 Group Theory
Question No : 18 of 41
The relation $a \equiv b \bmod H$ is the _____ relation on G.
Answer (Please select your correct option)
equivalence
only reflexive
only symmetric
only transitive
Start Time 8:05 AM
111:00
Time Left
Question Summary : (Attempted Question)
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Conduct Instructions
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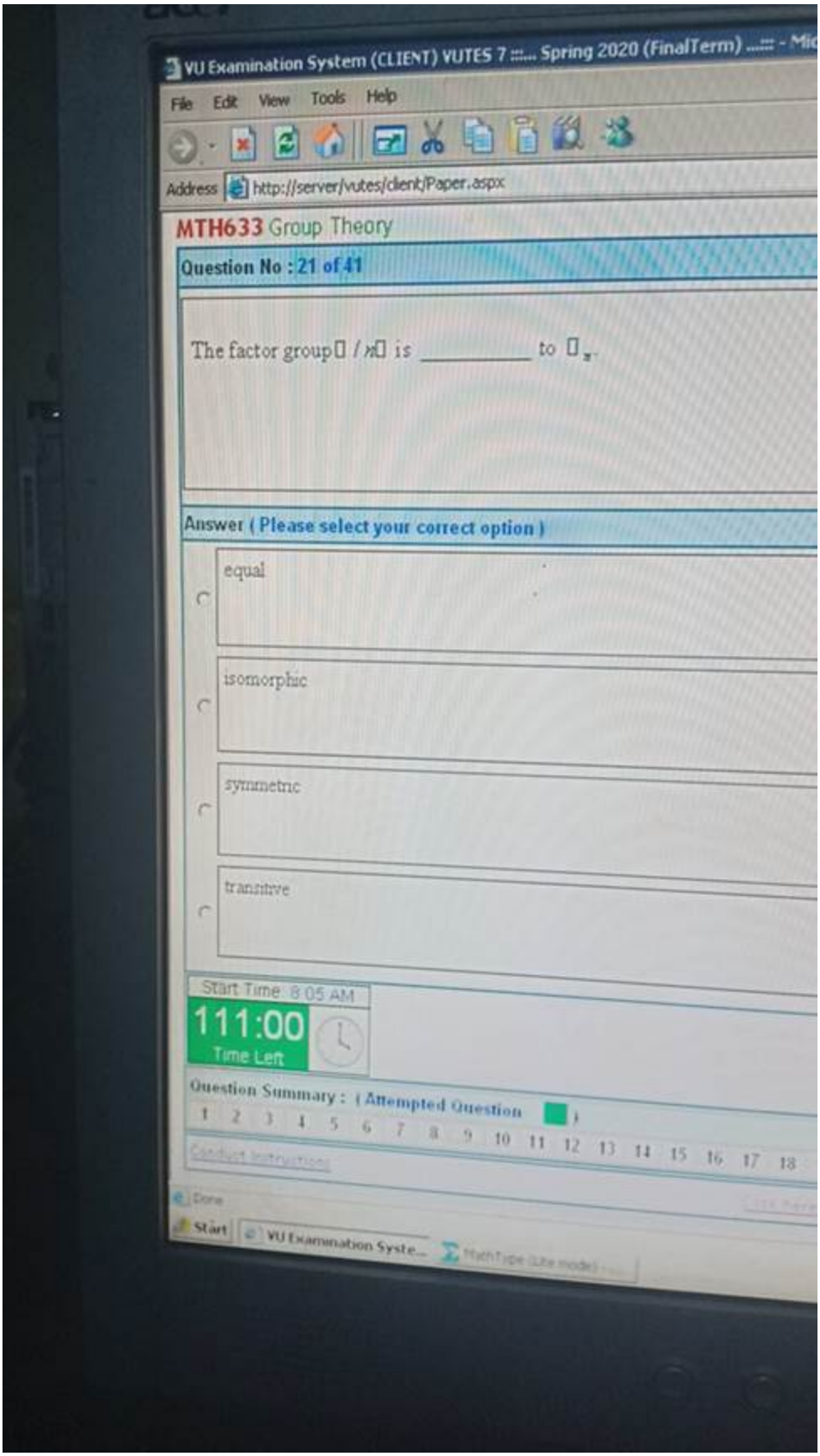
VU Examination Syste...
MathType (Lite mode) - ...


VU Examination System (CLIENT) VUTES 7 ..... Spring 2020 (FinalTerm) .....
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Address http://server/vutes/client/Paper.aspx
MTH633 Group Theory
Question No : 21 of 41
The factor group □ / ⊴□ is _____ to □ₓ.
Answer (Please select your correct option)
equal
isomorphic
symmetric
transitive
Start Time: 8:05 AM
111:00
Time Left
Question Summary : (Attempted Question
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Start
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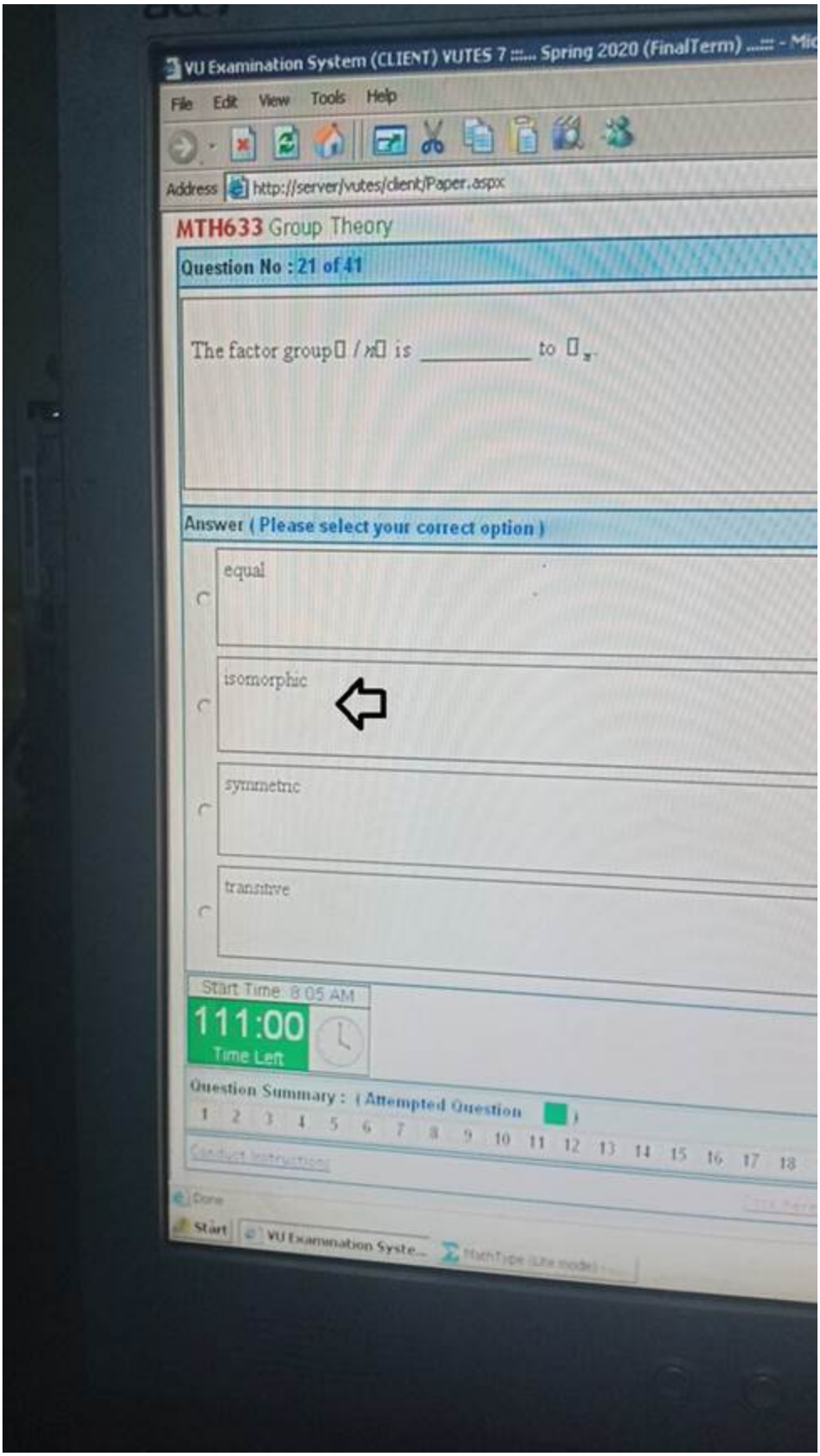
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Address http://server/vutes/client/Paper.aspx
MTH633 Group Theory
Question No : 21 of 41
The factor group □ / ⋊□ is _____ to □ₓ.
Answer (Please select your correct option)
equal
isomorphic
symmetric
transitive
Start Time: 8:05 AM
111:00
Time Left
Question Summary : (Attempted Question
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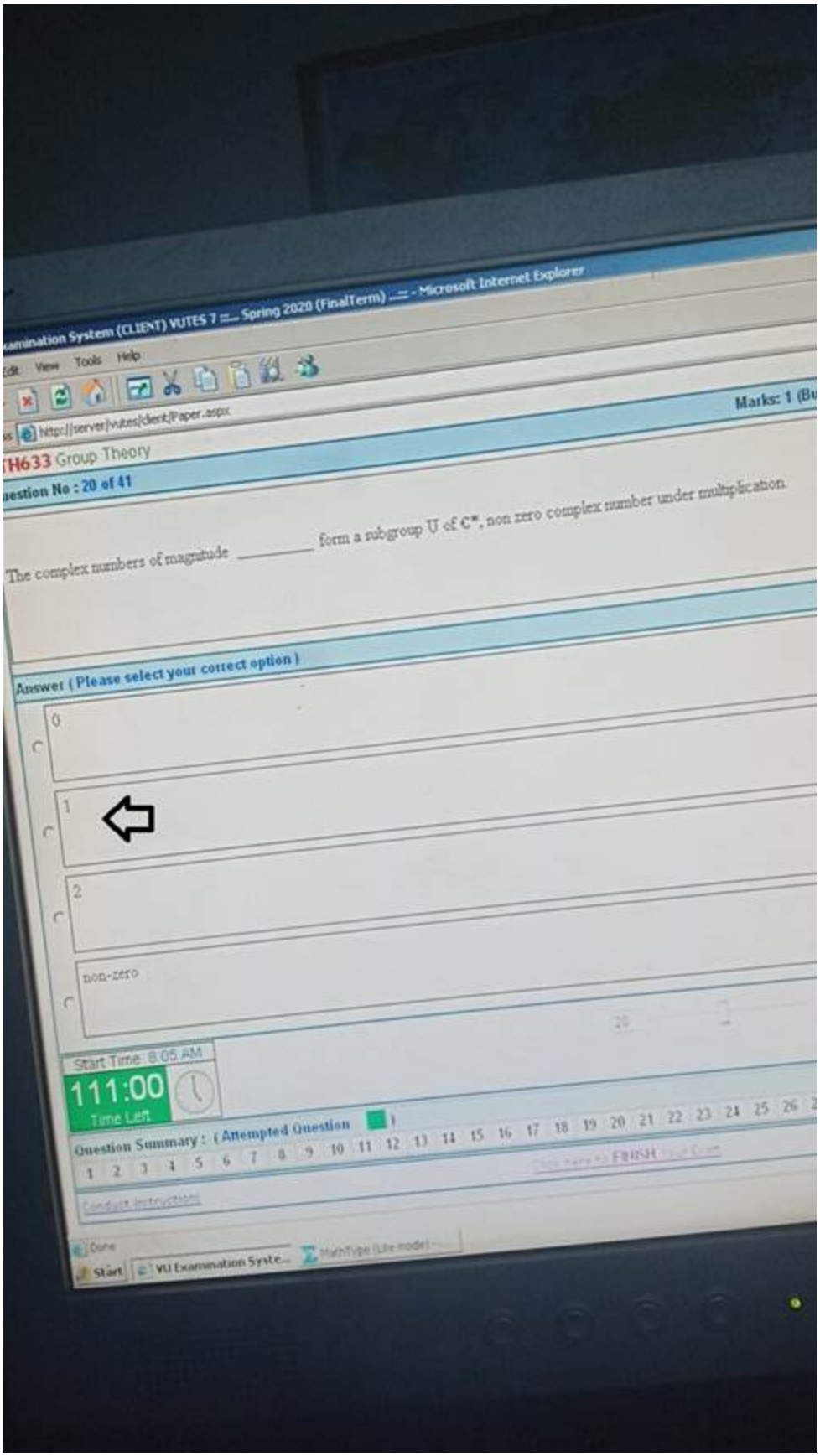
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http://server/vutes/client/Paper.aspx
MTH633 Group Theory
Question No : 20 of 41
Marks: 1
The complex numbers of magnitude _____ form a subgroup U of C*, non zero complex number under multiplication.
Answer (Please select your correct option)
0
1
2
non-zero
Start Time 8:05 AM
111:00
Time Left
Question Summary : (Attempted Question)
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Conduct Instructions
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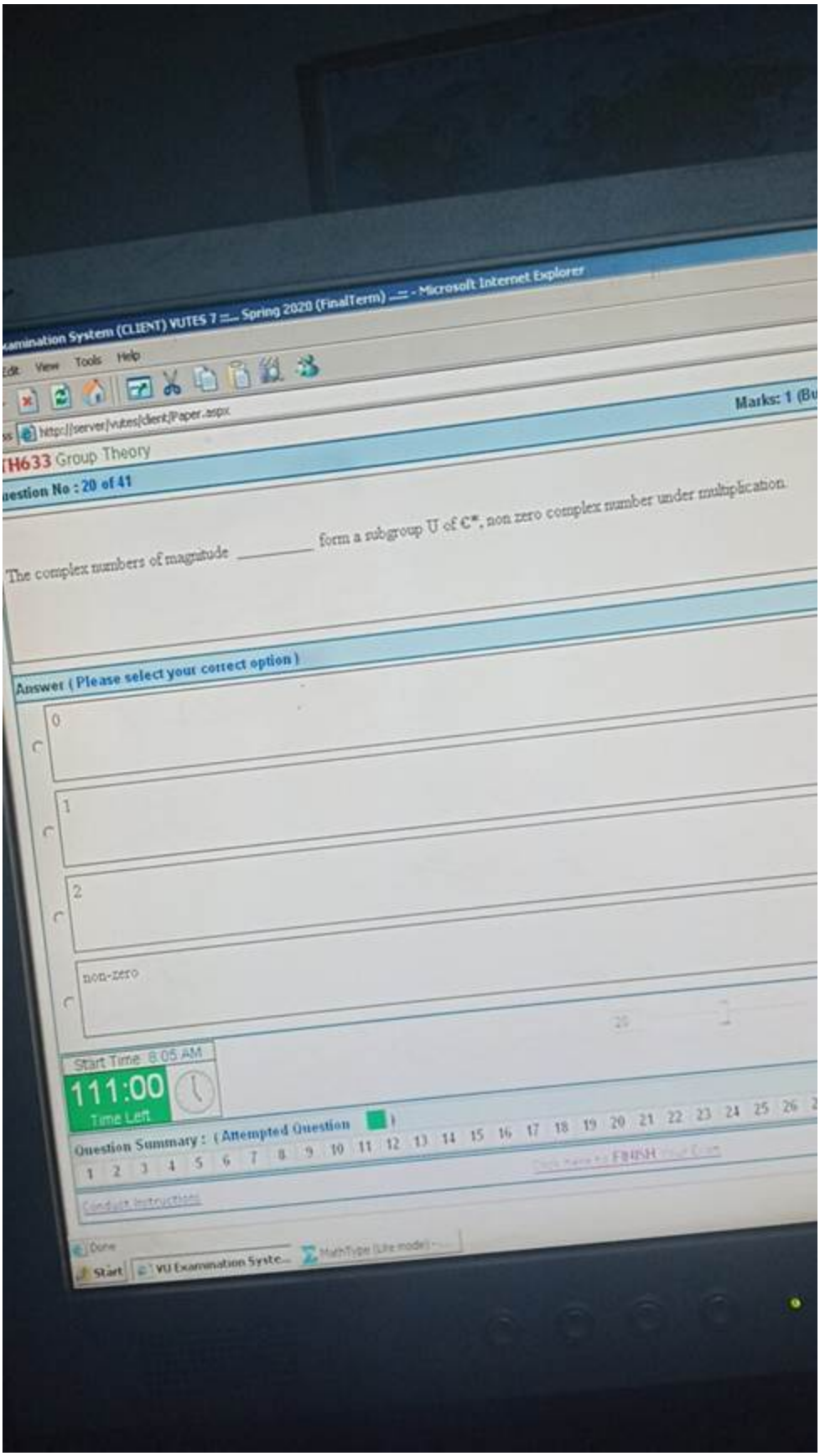
VU Examination Syste...
MathType (Lite mode)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MTH633 Group Theory
Question No : 20 of 41
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1
2
non-zero
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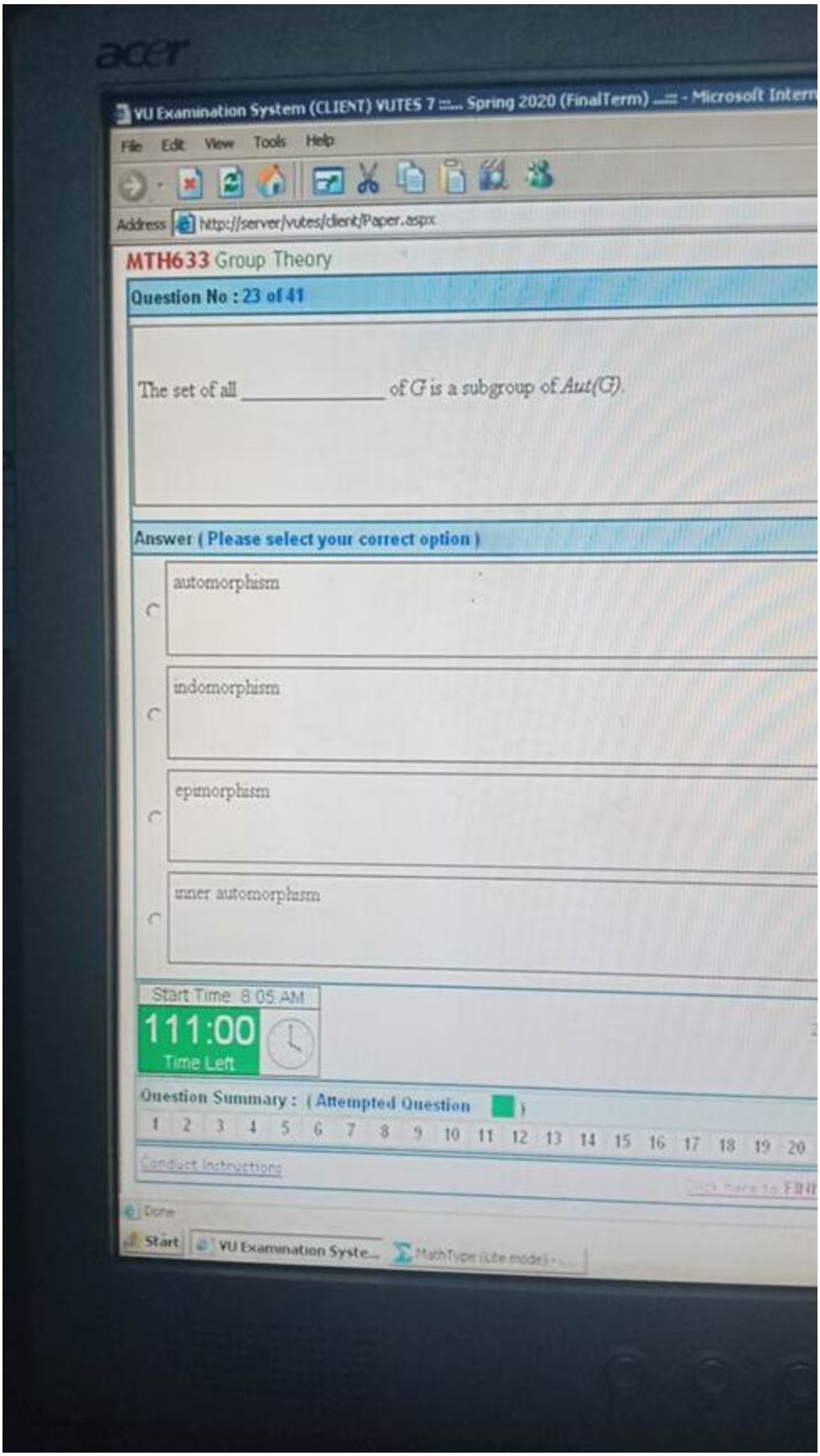
MathType (Lite mode)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MTH633 Group Theory
Question No : 23 of 41
The set of all _____ of G is a subgroup of Aut(G).
Answer (Please select your correct option)
automorphism
indomorphism
epimorphism
inner automorphism
Start Time 8:05 AM
111:00
Time Left
Question Summary : (Attempted Question)
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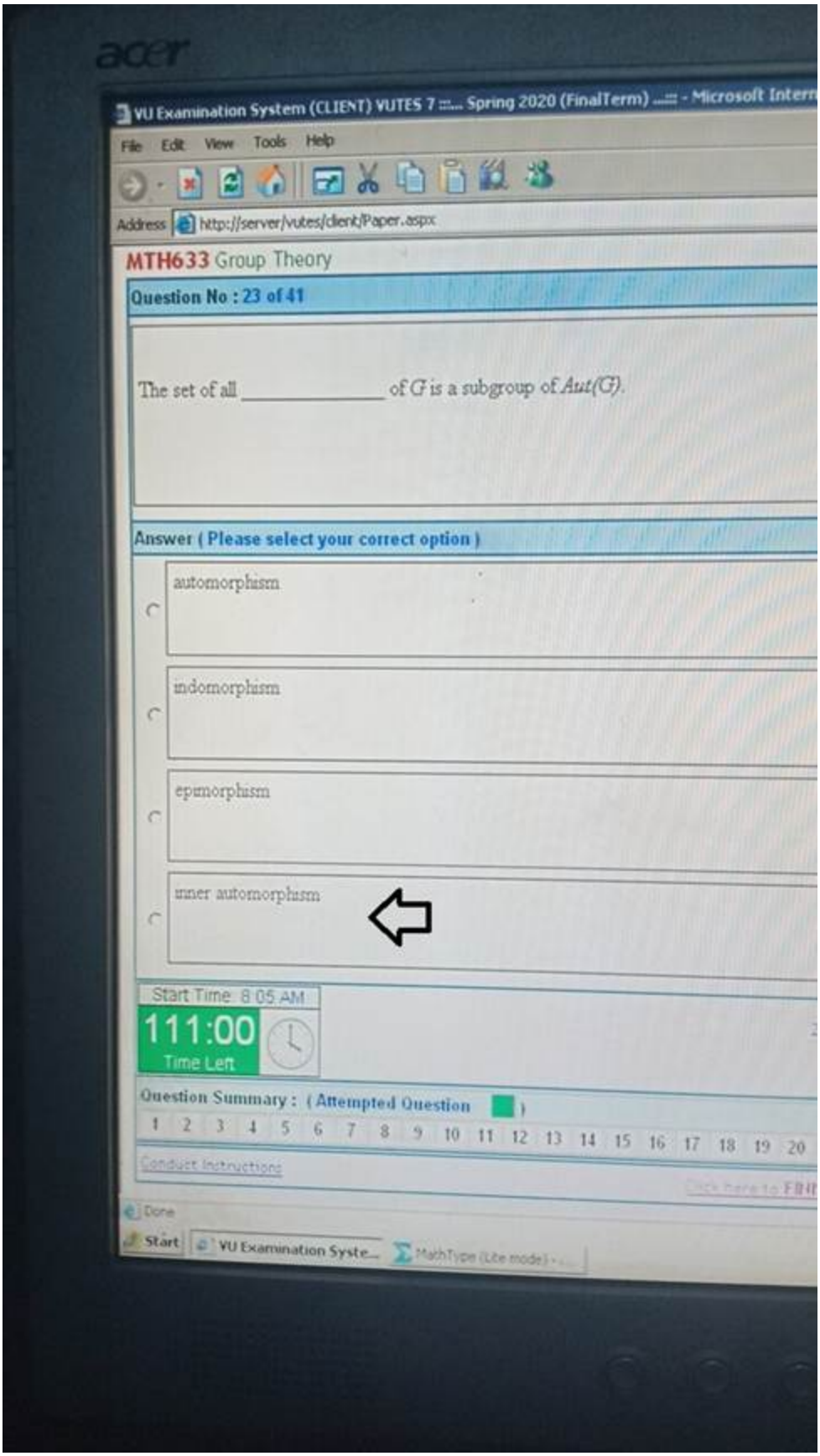
Conduct Instructions
Done
Start
VU Examination Syste...
MathType (Lite mode) - ...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Question No : 23 of 41
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indomorphism
epimorphism
inner automorphism
Start Time: 8:05 AM
111:00
Time Left
Question Summary : (Attempted Question)
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Conduct Instructions
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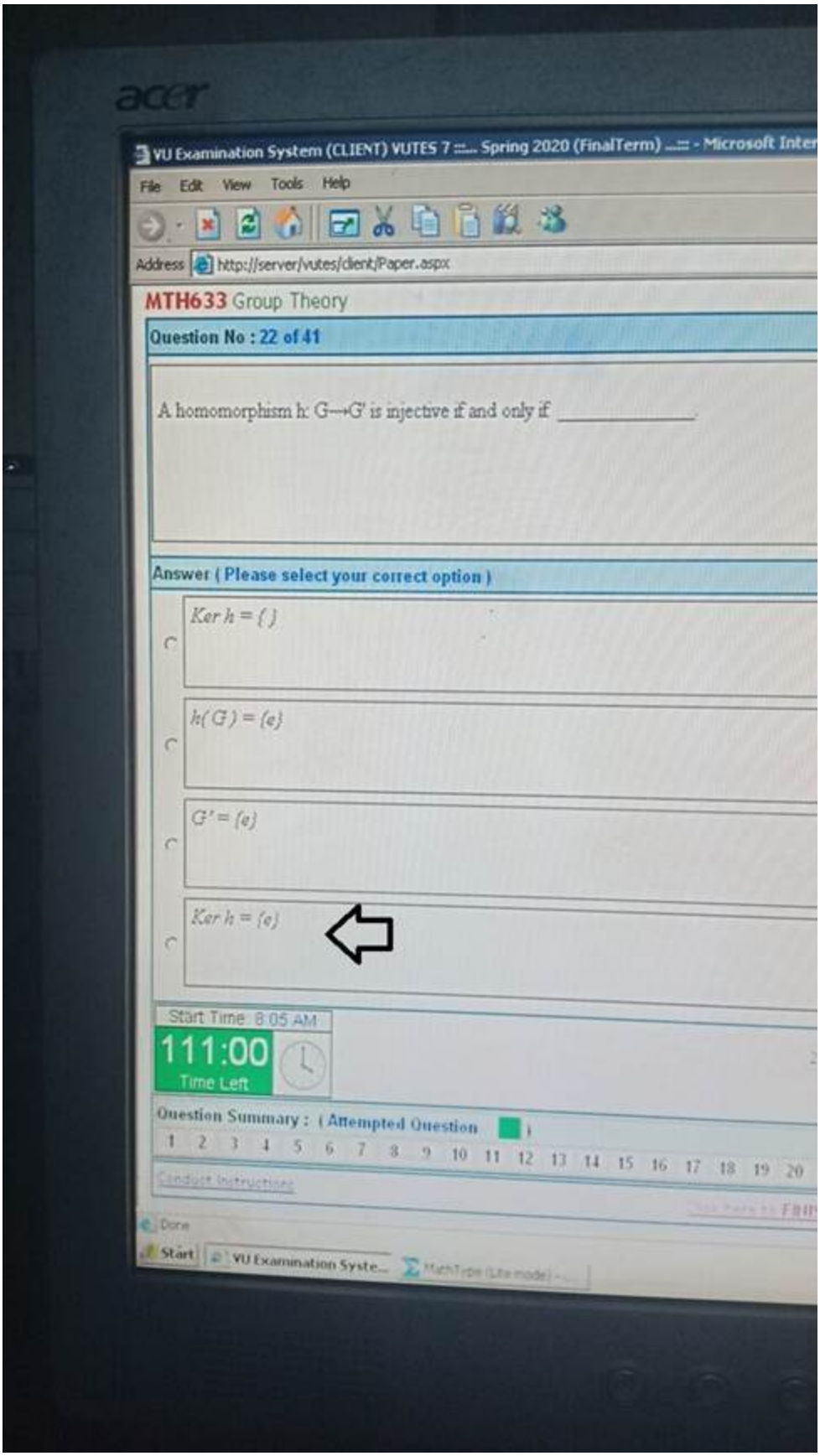
VU Examination Syste...
MathType (Lite mode) - ...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MTH633 Group Theory
Question No : 22 of 41
A homomorphism h: G→G' is injective if and only if _____.
Answer (Please select your correct option)
Ker h = { }
h(G) = {e}
G' = {e}
Ker h = {e}
Start Time 8:05 AM
111:00
Time Left
Question Summary : (Attempted Question
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Conduct Instructions
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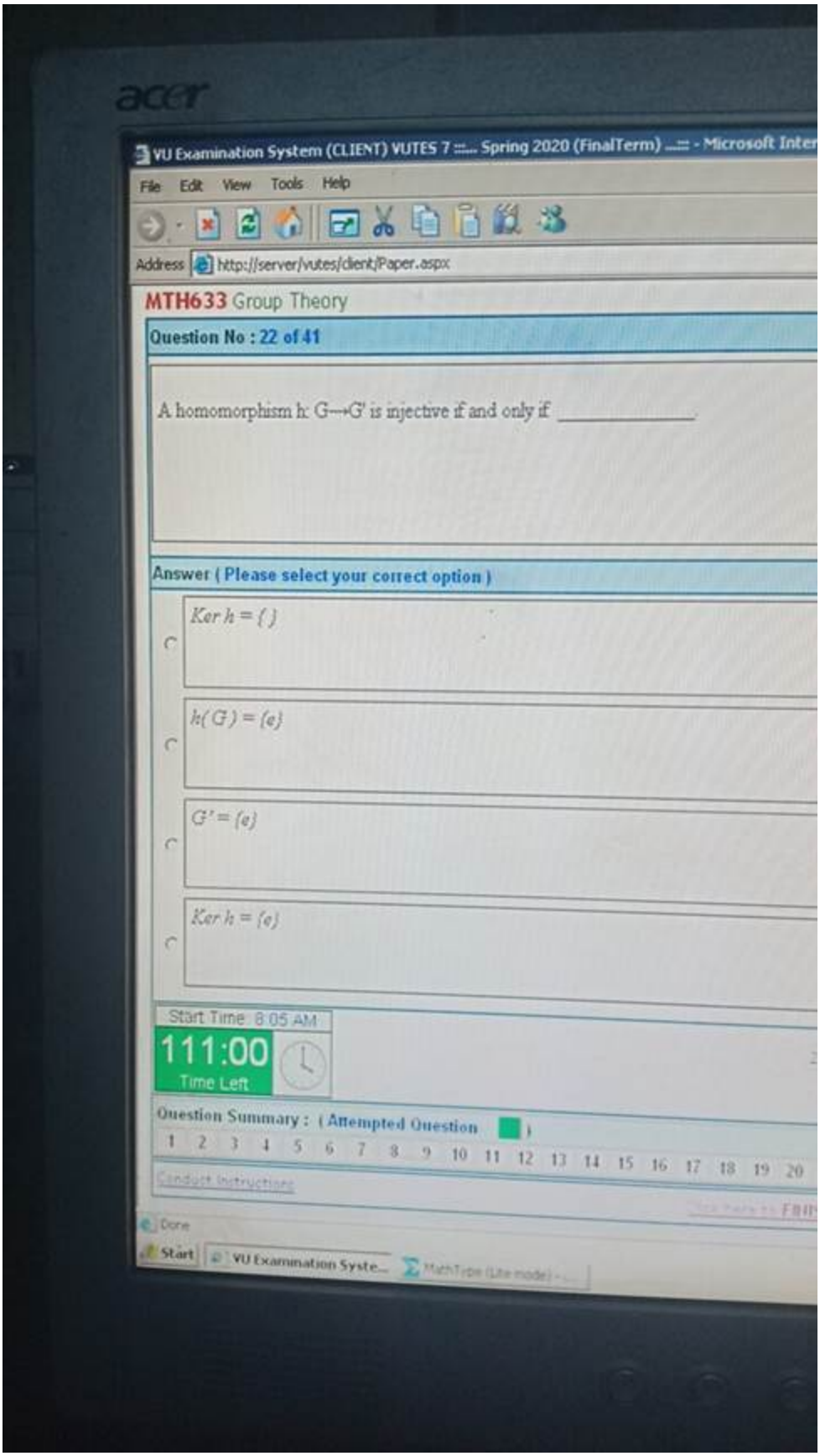
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MTH633 Group Theory
Question No : 22 of 41
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Answer (Please select your correct option)
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h(G) = {e}
G' = {e}
Ker h = {e}
Start Time 8:05 AM
111:00
Time Left
Question Summary : (Attempted Question)
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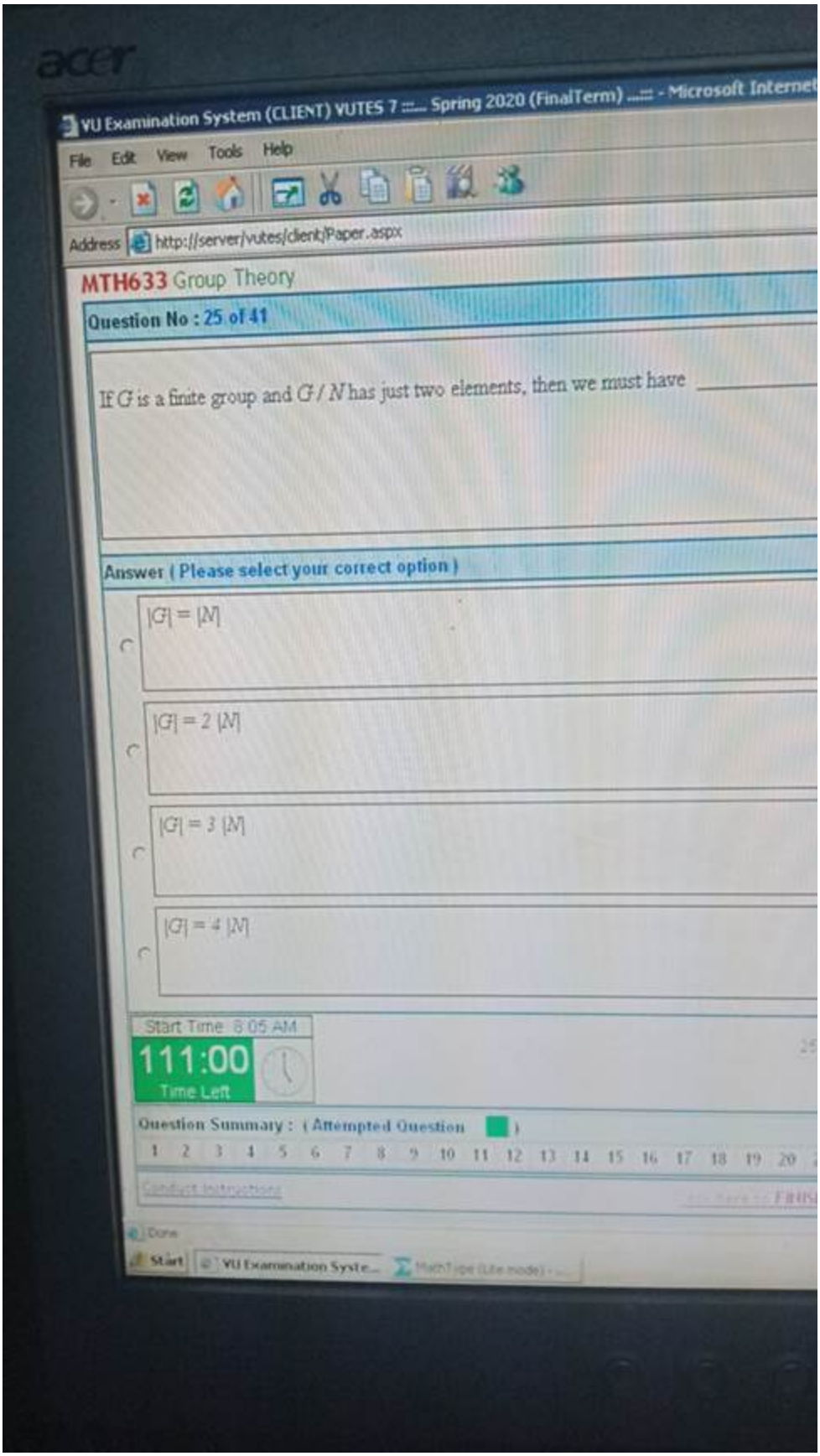
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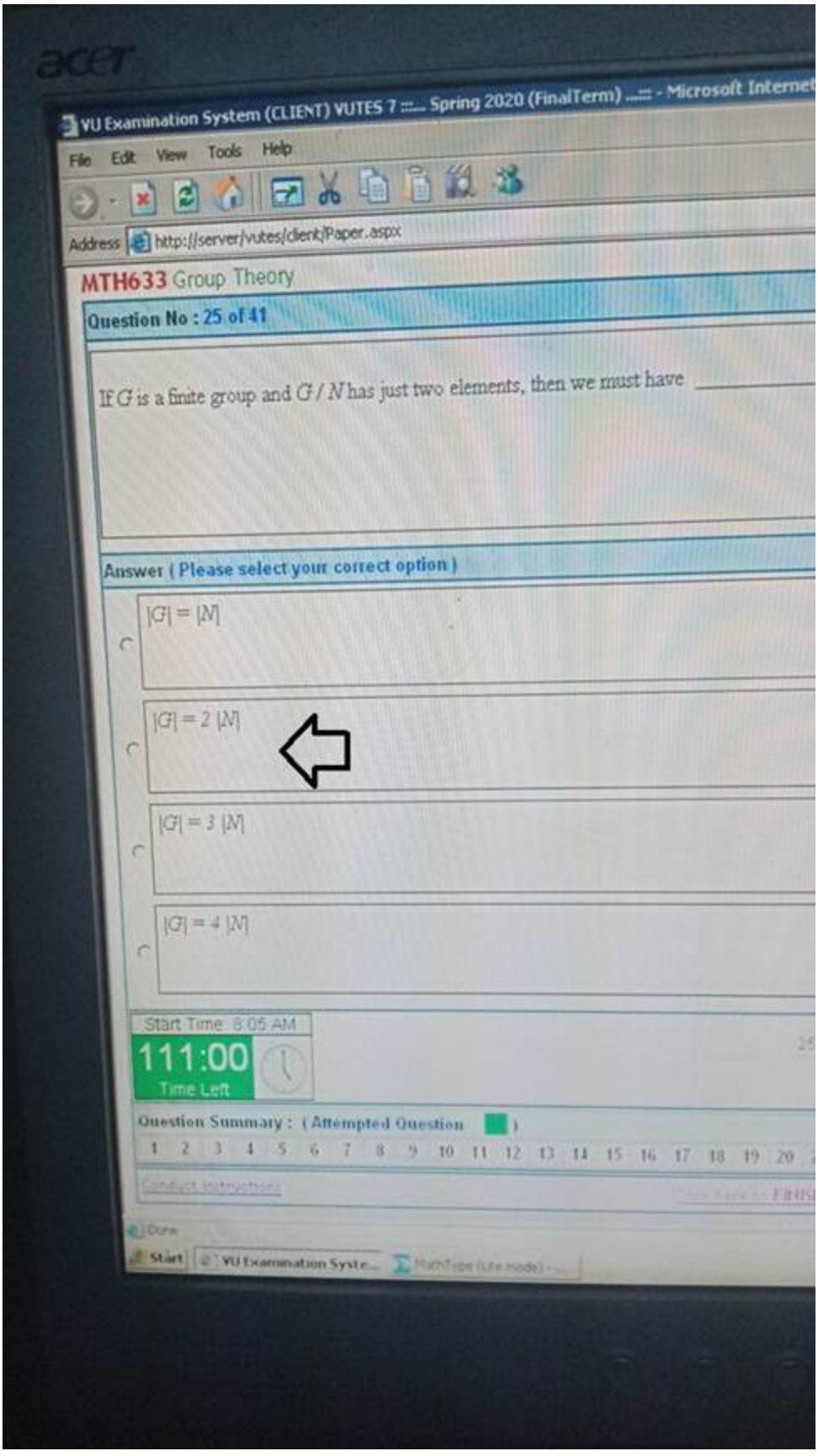
MTH633 Group Theory
Question No : 25 of 41
If G is a finite group and G / N has just two elements, then we must have _____
Answer (Please select your correct option)
|G| = |N|
|G| = 2 |N|
|G| = 3 |N|
|G| = 4 |N|
Start Time 8:05 AM
111:00
Time Left
Question Summary : (Attempted Question)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Conduct Instructions
Done
Start
VU Examination Syste...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MTH633 Group Theory
Question No : 25 of 41
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Answer (Please select your correct option)
|G| = |N|
|G| = 2 |N|
|G| = 3 |N|
|G| = 4 |N|
Start Time 8:05 AM
111:00
Time Left
Question Summary : (Attempted Question)
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Conduct Instructions
Done
Start
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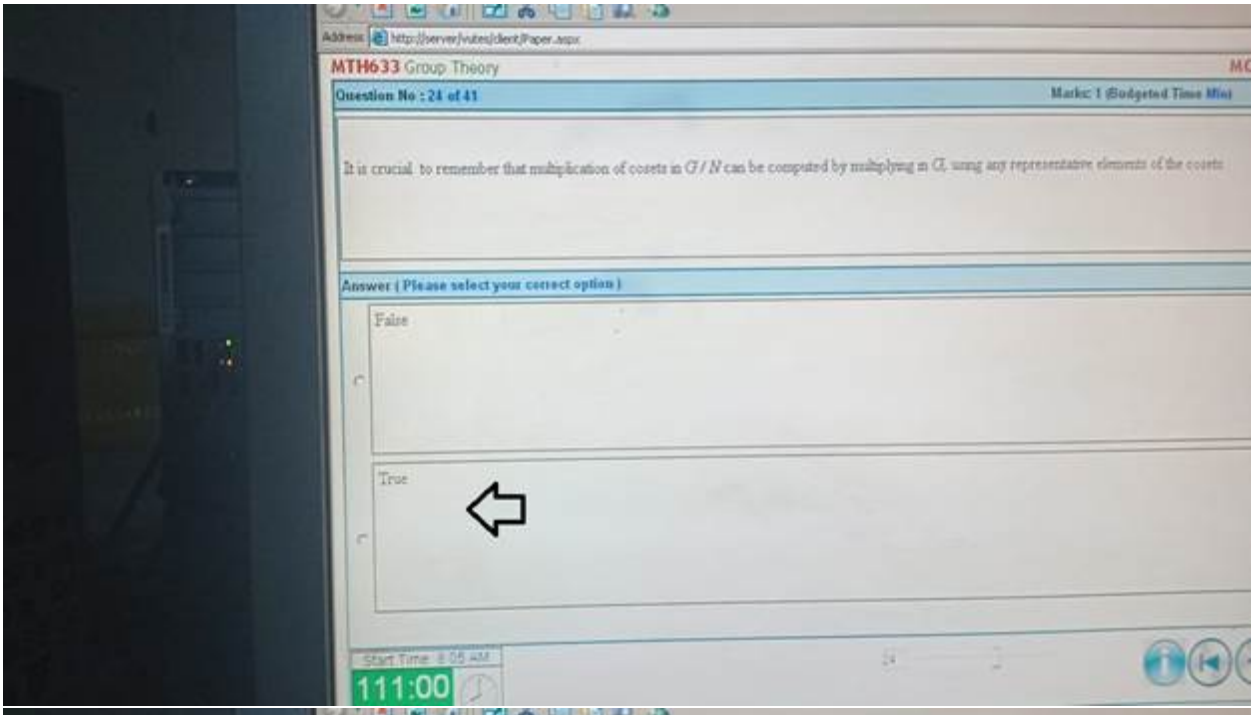
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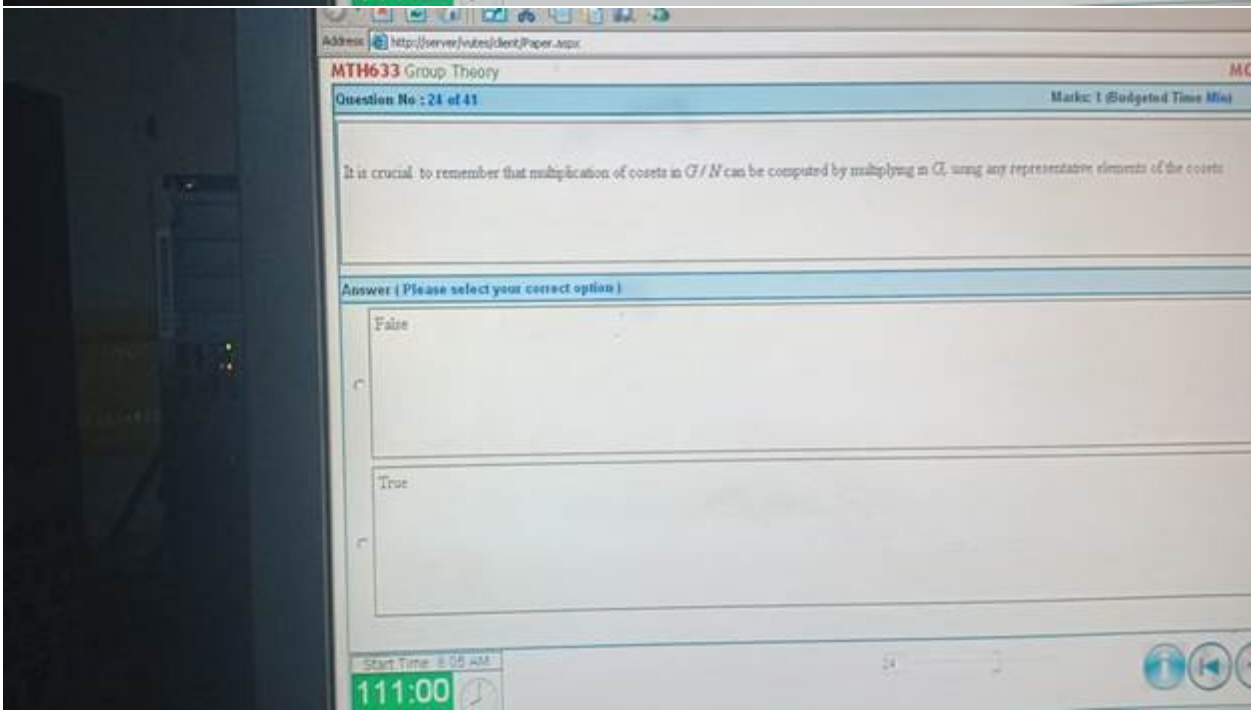
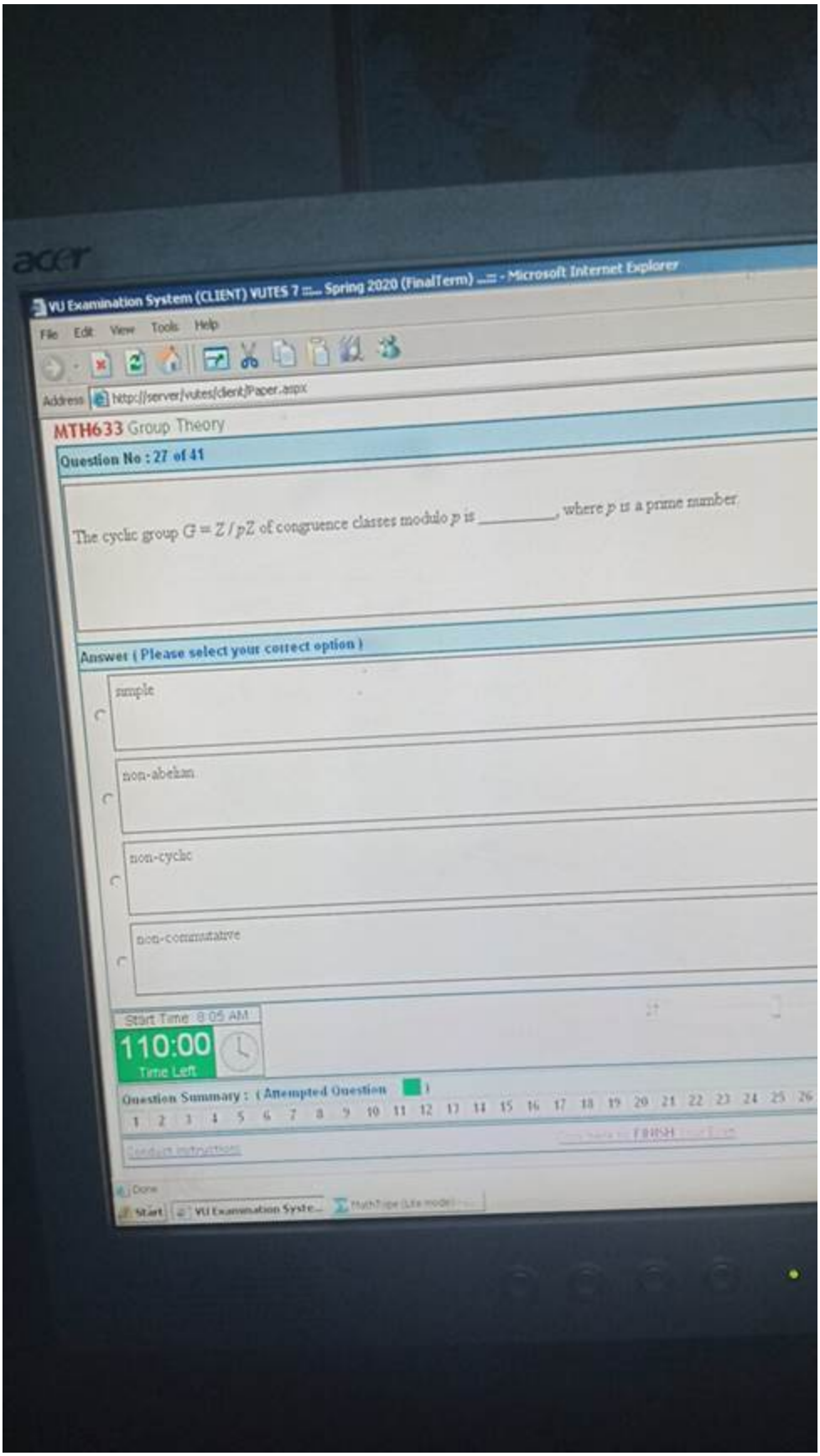
MTH633 Group Theory
Question No : 24 of 41
Marks: 1 (Budgeted Time Min)
It is crucial to remember that multiplication of cosets in G / N can be computed by multiplying in G, using any representative elements of the cosets
Answer (Please select your correct option)
False
True
Start Time: 8:05 AM
111:00


Address http://server/vutes/client/Paper.aspx
MTH633 Group Theory
Question No : 24 of 41
Marks: 1 (Budgeted Time Min)
It is crucial to remember that multiplication of cosets in G / N can be computed by multiplying in G, using any representative elements of the cosets
Answer (Please select your correct option)
False
True
Start Time: 8:05 AM
111:00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MTH633 Group Theory
Question No : 27 of 41
The cyclic group $G = Z/pZ$ of congruence classes modulo p is _____, where p is a prime number.
Answer (Please select your correct option)
simple
non-abelian
non-cyclic
non-commutative
Start Time: 8:05 AM
110:00
Time Left
Question Summary : (Attempted Question)
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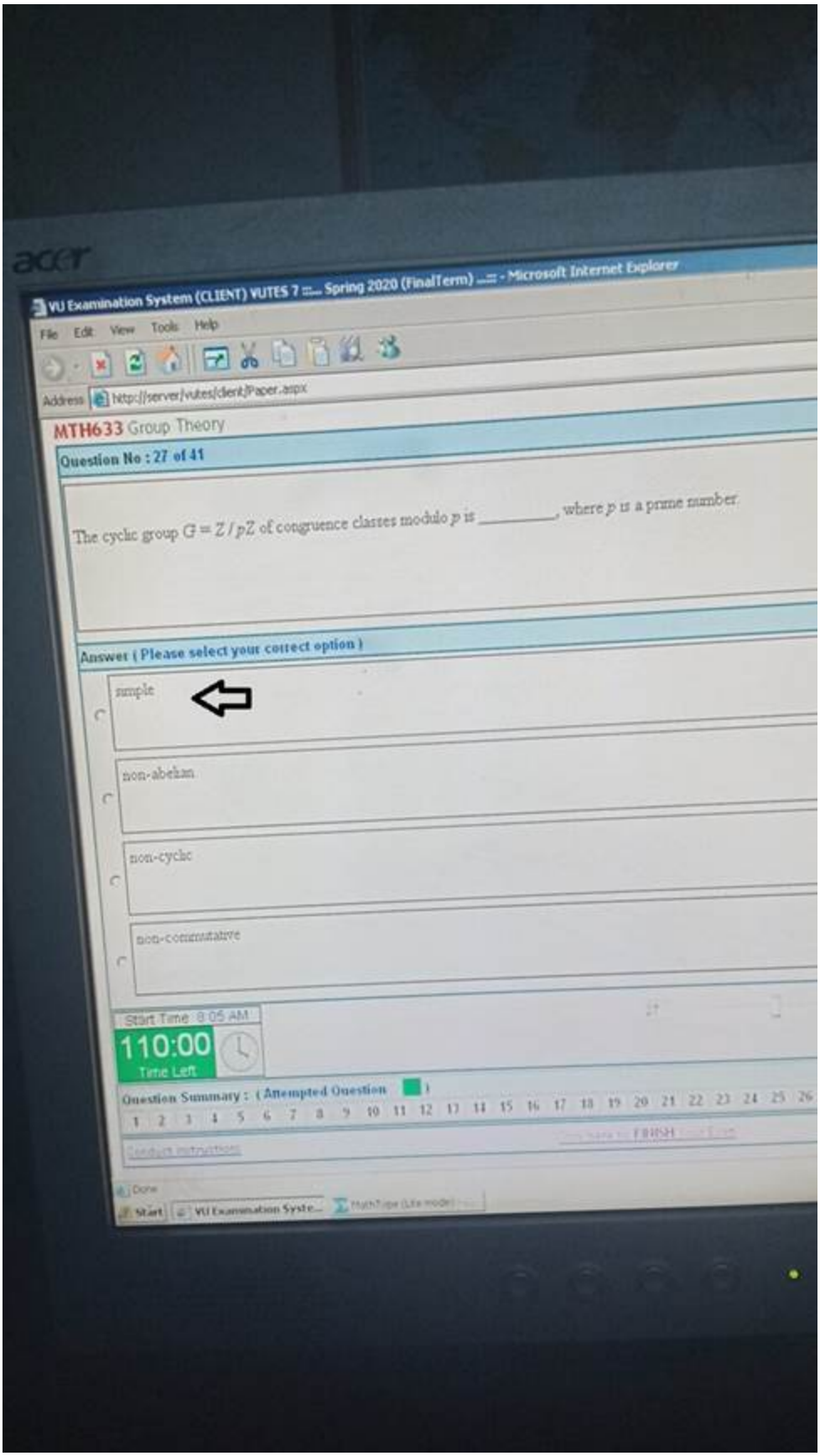
Done
Start
VU Examination Syste...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MTH633 Group Theory
Question No : 27 of 41
The cyclic group G = Z / pZ of congruence classes modulo p is _____, where p is a prime number.
Answer (Please select your correct option)
simple
non-abelian
non-cyclic
non-commutative
Start Time: 9:05 AM
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Question Summary : (Attempted Question)
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Start
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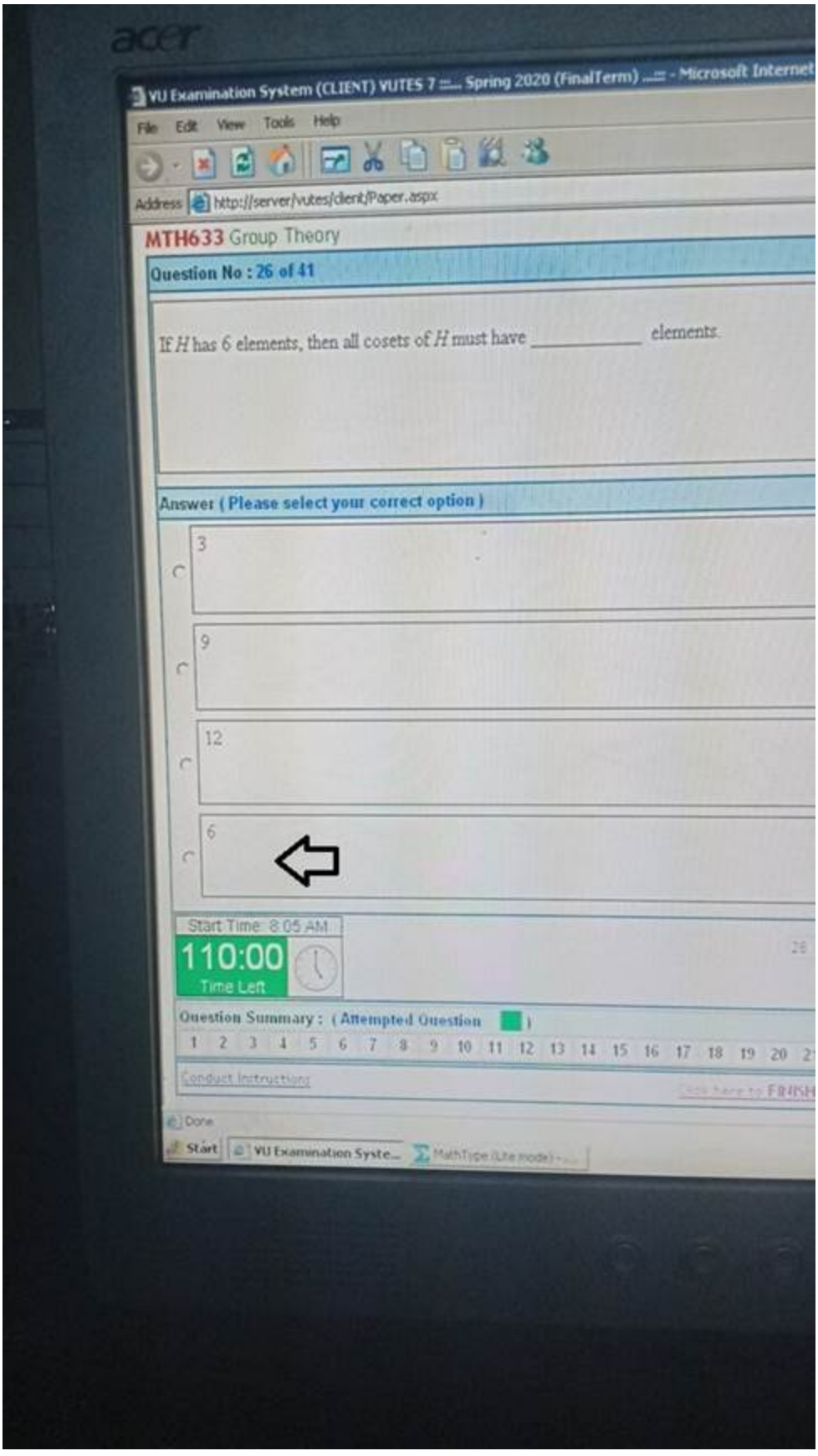
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MTH633 Group Theory
Question No : 26 of 41
If H has 6 elements, then all cosets of H must have _____ elements.
Answer (Please select your correct option)
3
9
12
6
Start Time 8:05 AM
110:00
Time Left
Question Summary : (Attempted Question)
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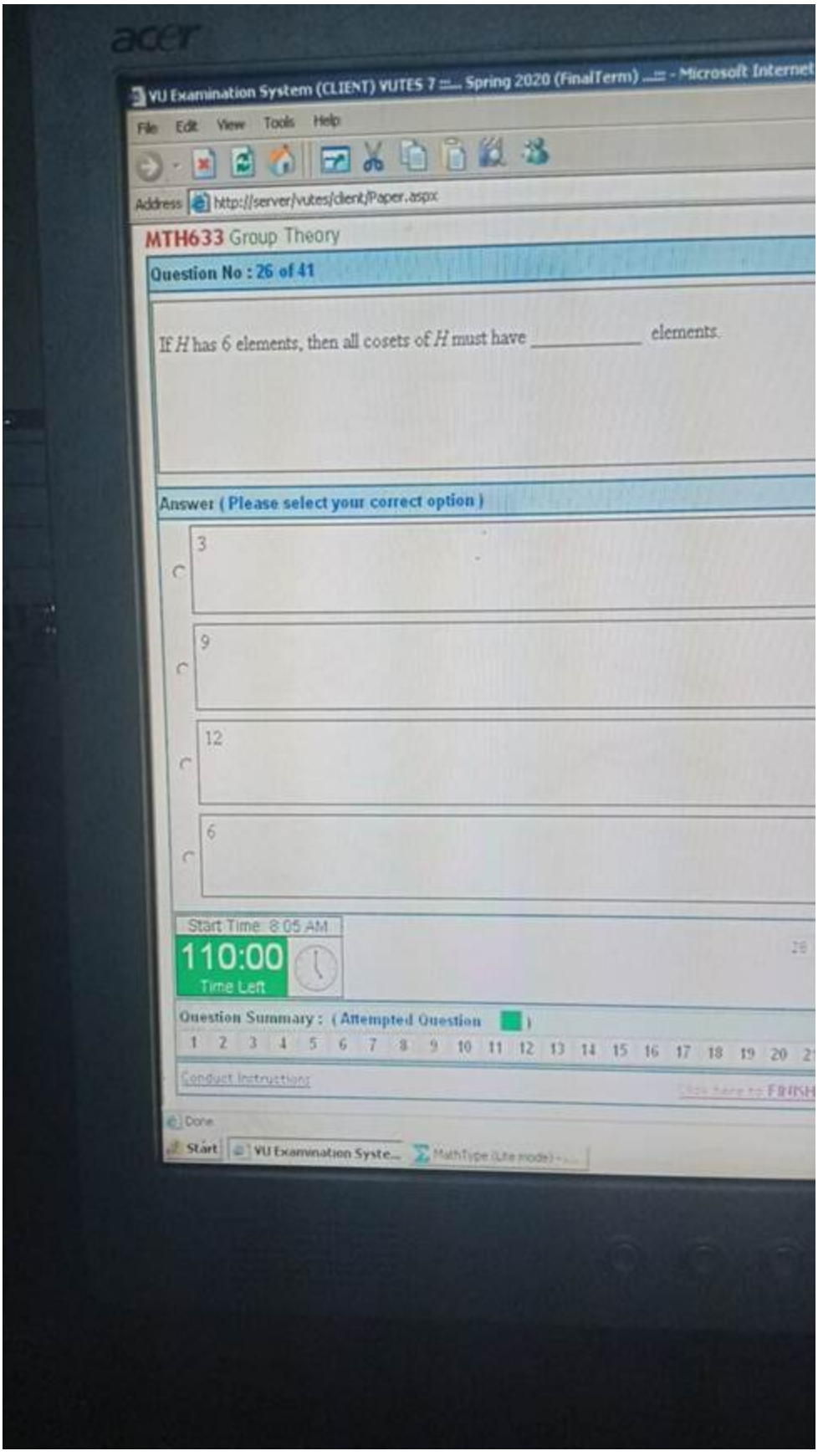
Conduct Instructions
Done
Start
VU Examination Syste...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MTH633 Group Theory
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Answer (Please select your correct option)
3
9
12
6
Start Time 8:05 AM
110:00
Time Left
Question Summary : (Attempted Question)
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Conduct Instructions
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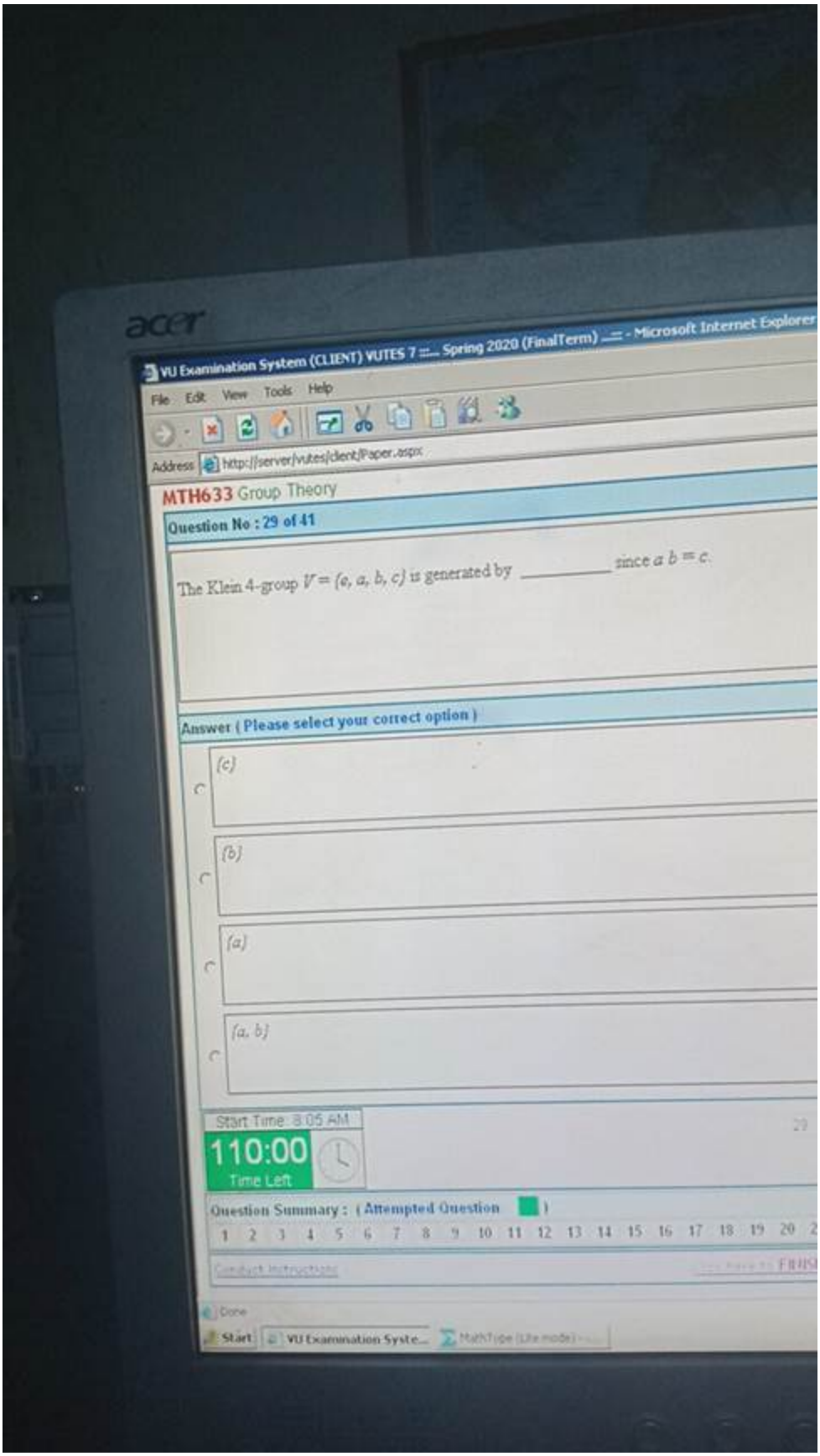
MathType (Lite mode)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MTH633 Group Theory
Question No : 29 of 41
The Klein 4-group V = {e, a, b, c} is generated by _____ since a b = c.
Answer (Please select your correct option)
{c}
{b}
{a}
{a, b}
Start Time 8:05 AM
110:00
Time Left
Question Summary : (Attempted Question)
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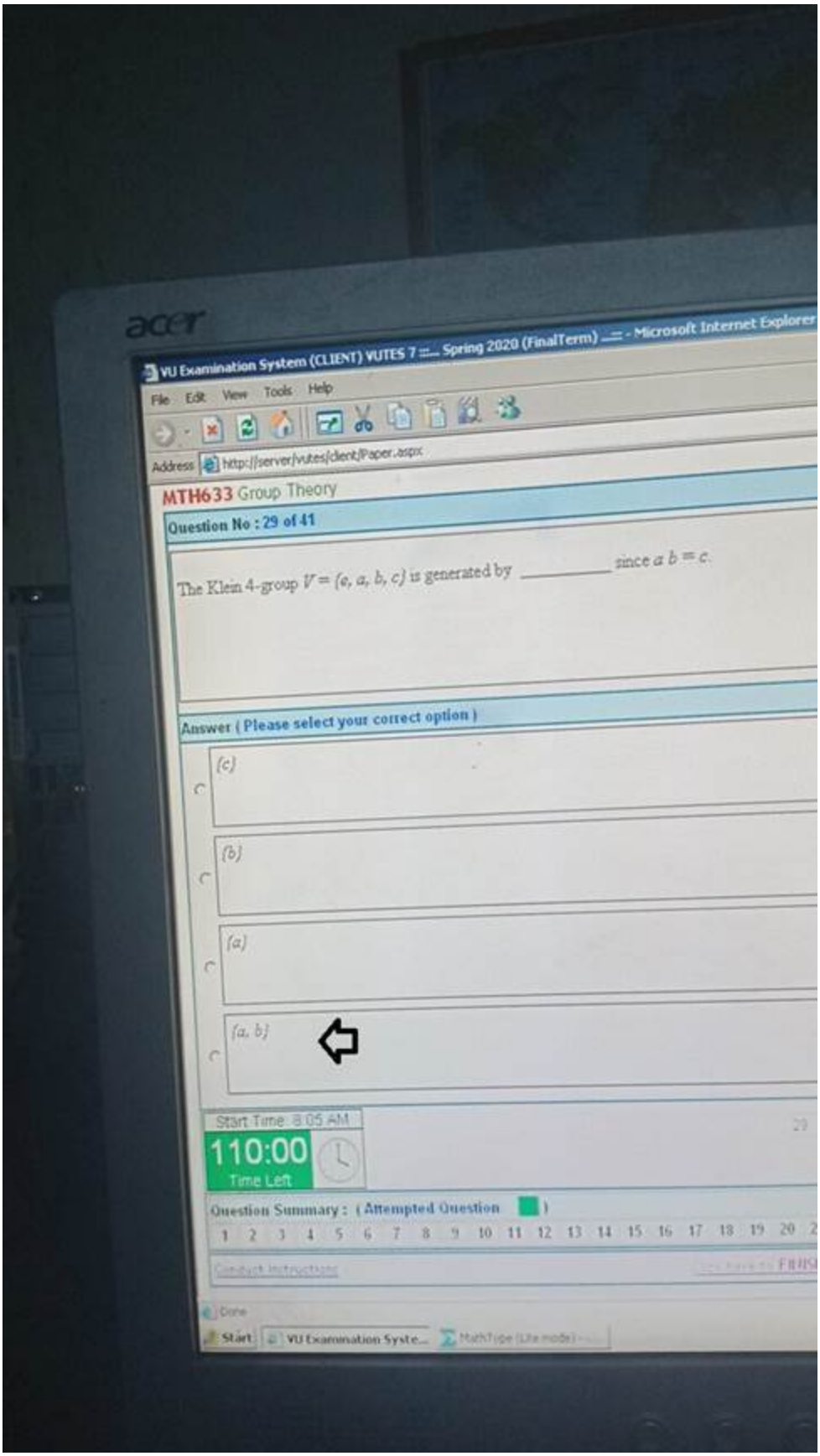
Conduct Instructions
Done
Start
VU Examination Syste...
MathType (Lite mode)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MTH633 Group Theory
Question No : 29 of 41
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Answer (Please select your correct option)
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{b}
{a}
{a, b}
Start Time 8:05 AM
110:00
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Question Summary : (Attempted Question)
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Conduct Instructions
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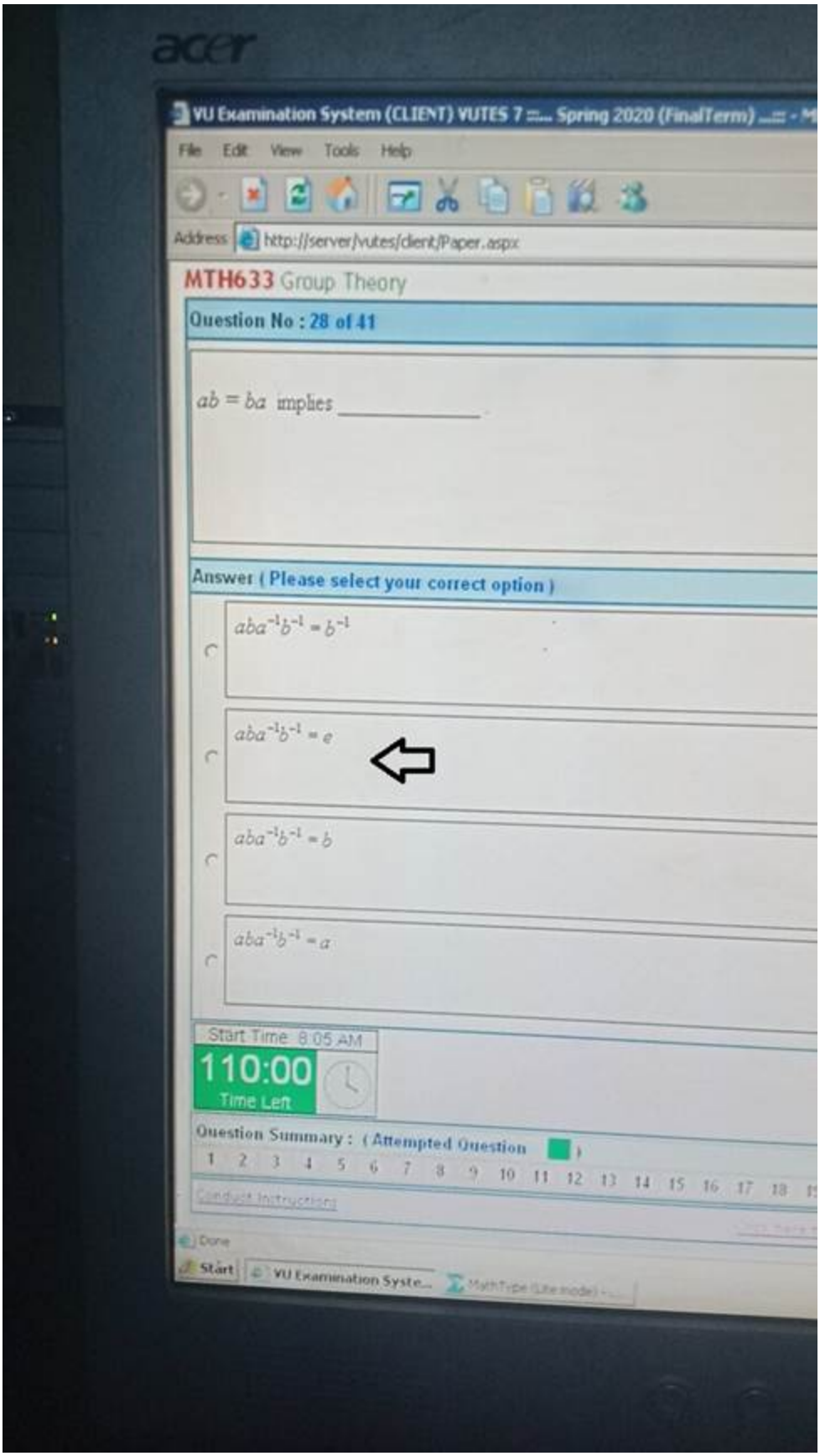
VU Examination Syste...
MathType (Lite mode)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MTH633 Group Theory
Question No : 28 of 41
$ab = ba$ implies _____
Answer (Please select your correct option)
$aba^{-1}b^{-1} = b^{-1}$
$aba^{-1}b^{-1} = e$
$aba^{-1}b^{-1} = b$
$aba^{-1}b^{-1} = a$
Start Time 8:05 AM
110:00
Time Left
Question Summary : (Attempted Question
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
Done
Start
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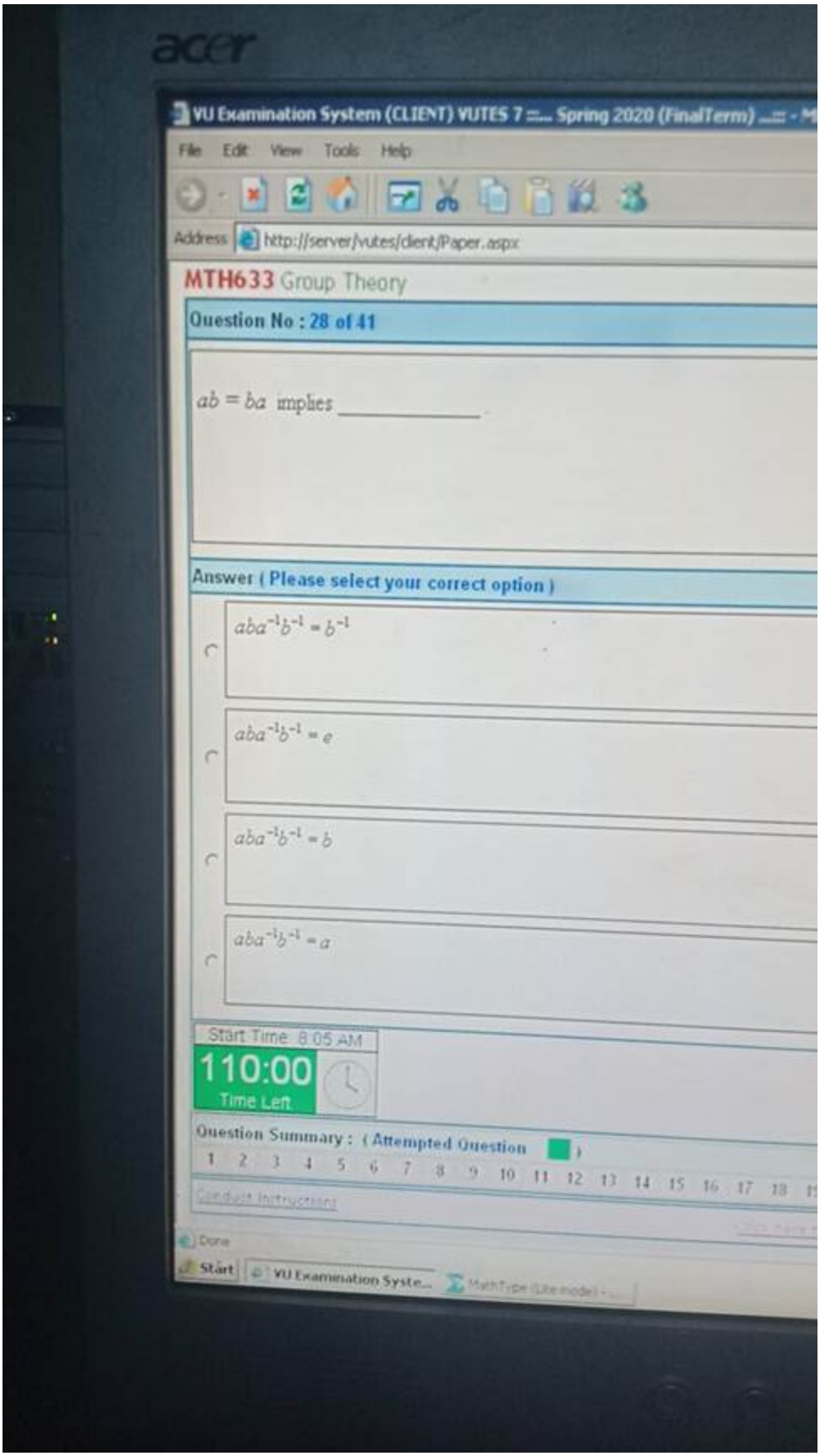
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$aba^{-1}b^{-1} = e$
$aba^{-1}b^{-1} = b$
$aba^{-1}b^{-1} = a$
Start Time 8:05 AM
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Question Summary : (Attempted Question
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Conduct Instructions
Done
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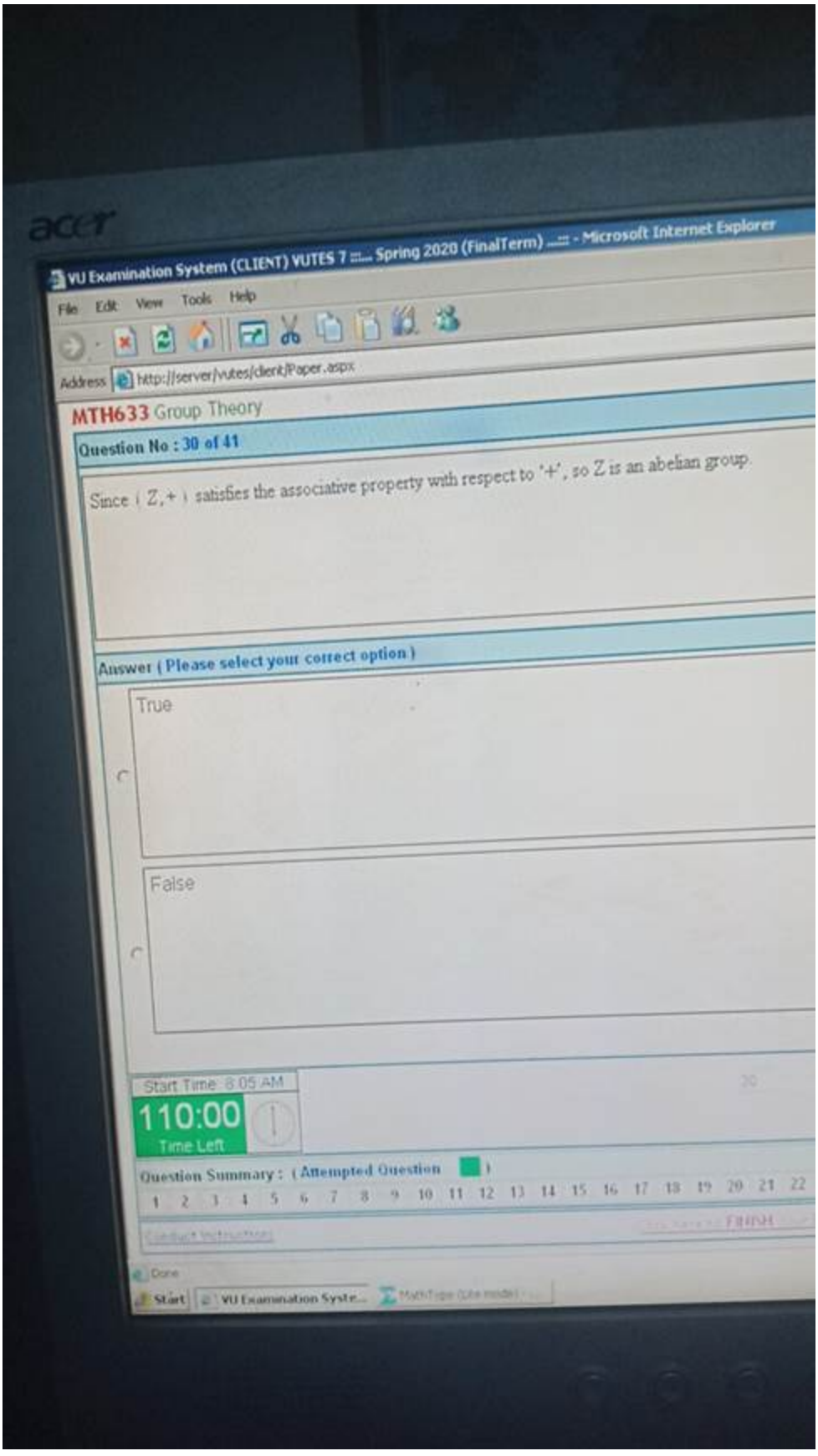
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MTH633 Group Theory
Question No : 30 of 41
Since (Z,+) satisfies the associative property with respect to '+', so Z is an abelian group.
Answer (Please select your correct option)
True
False
Start Time 8:05 AM
110:00
Time Left
Question Summary : (Attempted Question)
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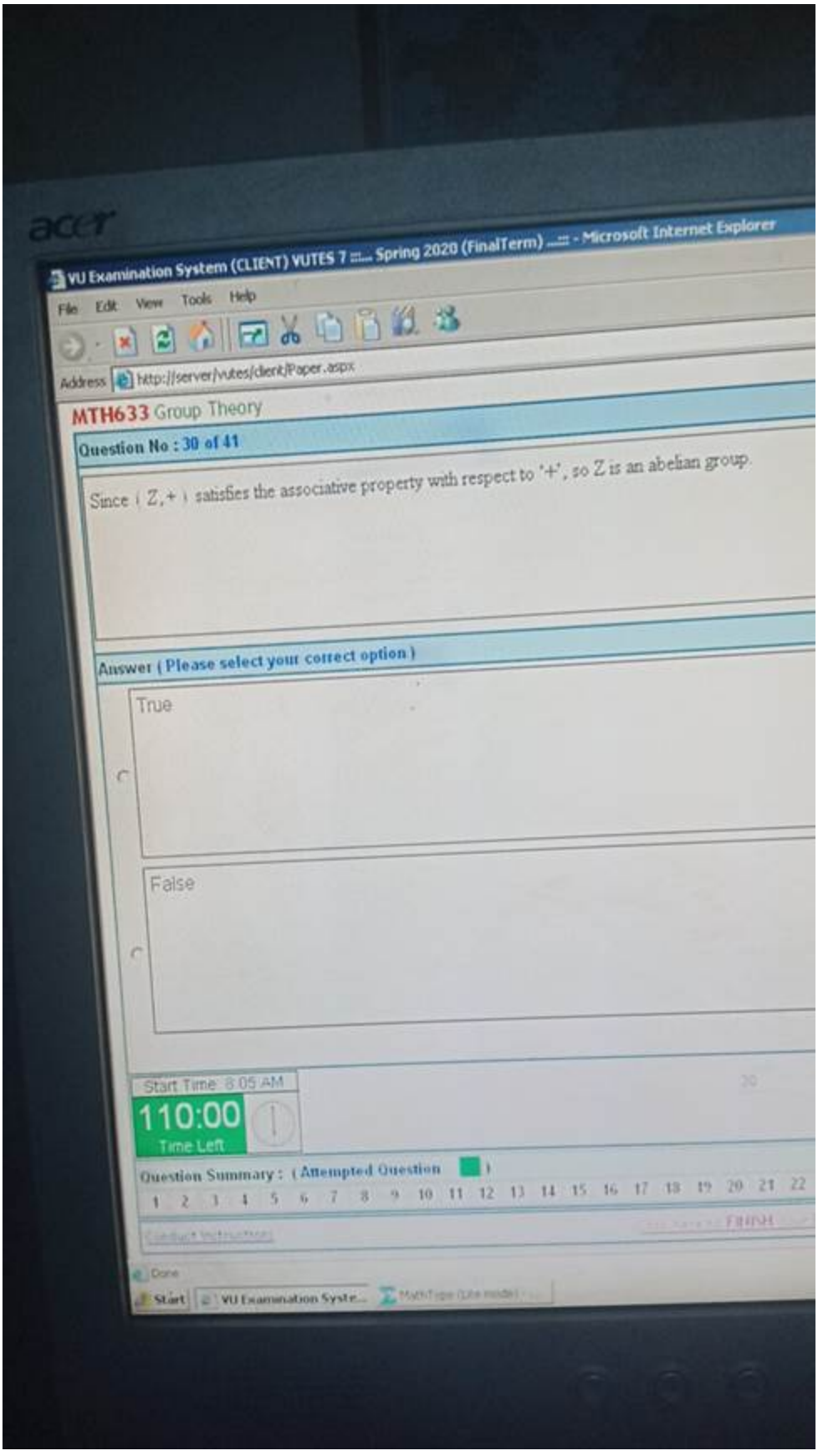
Done
Start
VU Examination Syste...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