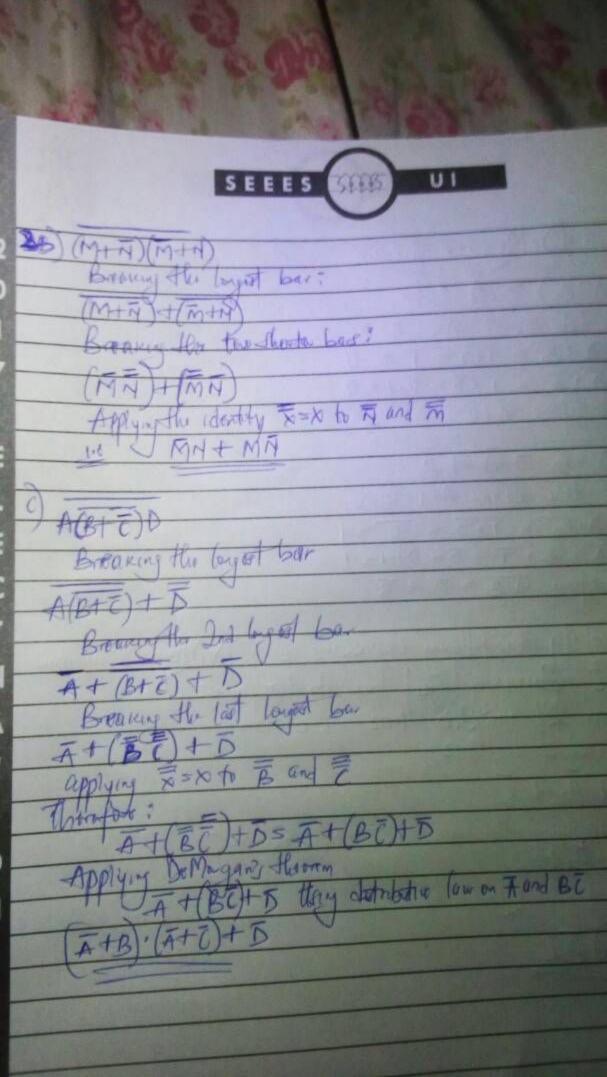
## SEEES SEES UI

1) Prove + De Morganis theory
(A+B) = A - B
(A+B) = **
$\frac{A+B > I+0 = I = 0}{\text{and } A \cdot B = I \cdot 0 = 0 \cdot 1 = 0}$
Wherefore A+B = A · B
B) A - B = A + B
John = Lets aboums A-1, B=0
7.0 = 1.0 = 0 =
and A+B=T+0=0+1=1
Chenton AB = A+B
2) Timplety the following expressions wing DeMargon
The property of the property o
a) A B C Provey Hay longer box and between
Bolivern Ist and Ind strong and believe
2nd and 3nd 1800
Then applying the identity = x to = and =
Apolying DeMongany Hitam
Alban P
ABC



SEEES BOOKS bottoming languat bar Snowingth Shoto bar: Applying 7= 10 Fand B Applying 7= 10 Fand B F(B+C) = A (B+C) Using distributive law? Brown longer bor V pplying \$= x to Frand B 2 By longest bear polyry 8-10 to B )



SEEES STEED UI

30 X=(m+4)(m+p)(n+p) (by the consor (aws (x+y)(x+z)(y+z)=(x+y)(x+z) ... X=(m+4)(m+p)

14= (ABT + ABT+ BED) 14mg associative law attate= at(bt)=(atb)+c 10= ABT b= ABT C-BED

: . 7 a+(btc) Y= ABC+ (ABC+ BED)

30) 2= A(A+B) + (B+AA) (A+B)
Applying Idempotent low and : AA=A

Z= A(A+B)+(B+A)(A+B)

AND RIX= O (complement law)

AA+ (A+B)= O+ (A+B)=A+B

2. 25 (A+B)+ (B+A)(A+B) et a=(A+B) = (A+B) 6=(B+A)

. Z= 9+ 9b

Applying redundancy law (N9+7= N+Y):

: Z= (A+B)+(B+A