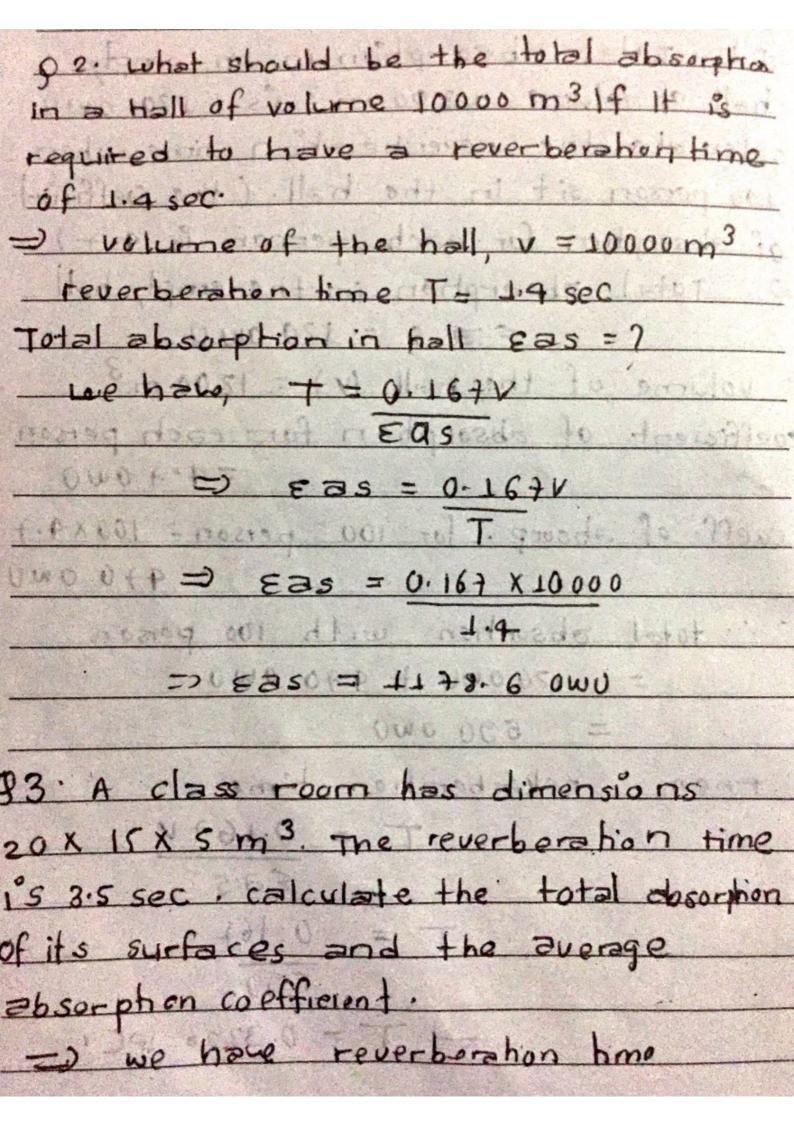
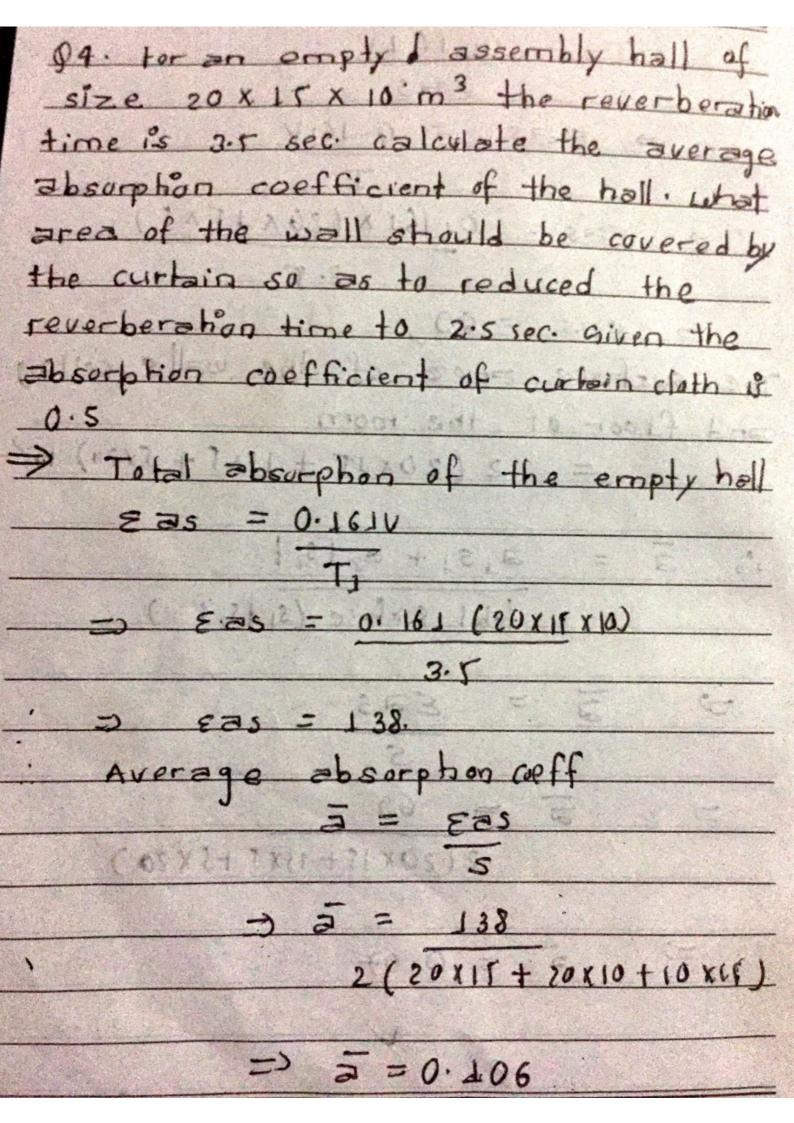
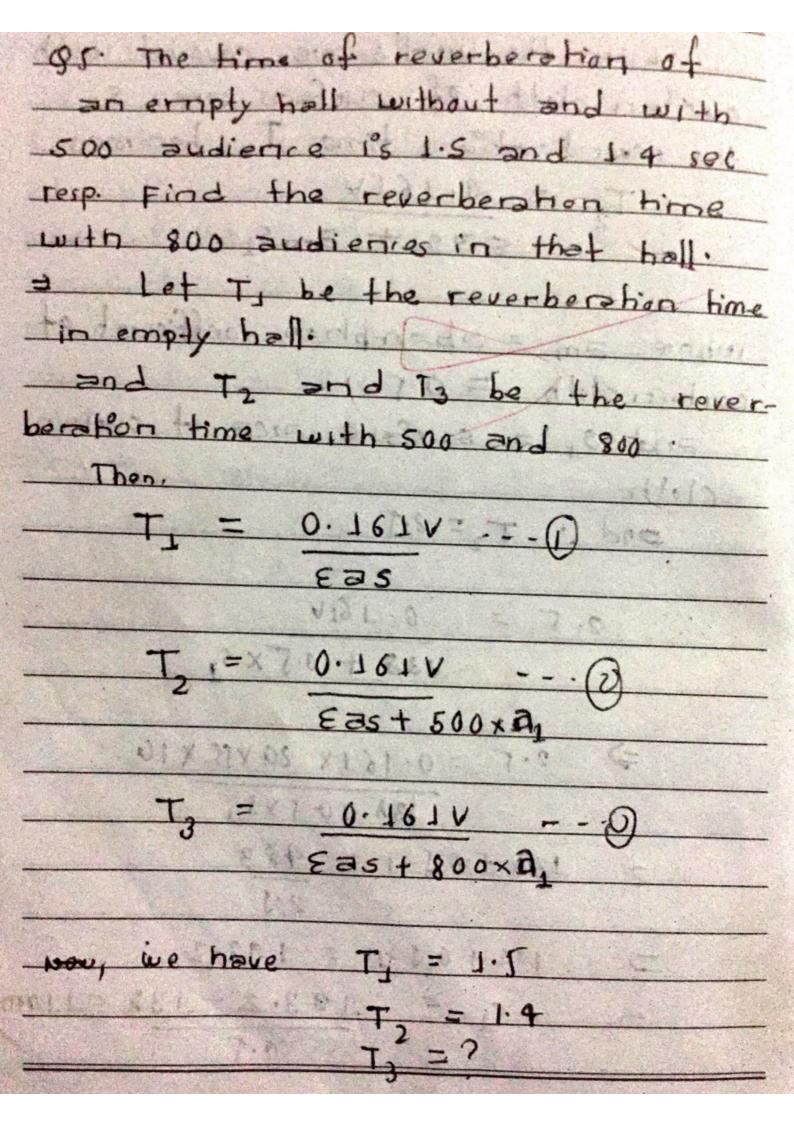
On On Chapter-3 Oate:
ai table absarption in an empty
L-11 of volume 1200 m 3.15 100.000
calculate the reverberation time when
100 person sit in the hall. (the coethicient
of absorption for each person is 4. +)
=> Total absorption in the empty held
E = 150 OWO
volume of the hall (V) = 1200 m3
coefficient of absorption for each person
Omo t.b= =4.4 omo
coeff. of absorp. For 100 person = 100 x 4.7
00001x fd1.0 = 253 = 470 0WU
itotal absortion with 100 porson
= 1200mn + 440 pmn
= 590 0WU
then reverboration time A . 80
To = 0.1.67 V 71 100
my od letot all stehn Eas as as as
0:16+ 1- 0:160
500
T = 0.3396 IPC 1



0. 161V ⇒ E 35 = 0.161V . > Eas = 10.181 x (50 x 72 x () 1 3. F - 110 EBS - 69 1 71:57 The surface area of the walls, celling and floor of the room = 12 (20x15 + 15x5 + 5x20) m2 a151+ 22+51+ .. (A) 1 Hobbl surface (5) +5++) 2 (20x15+15x5+5x20) A = 0.07



when the wells are covered with
curtain cloth of surface area s,
the neverboration time To becomes
T_ = 0.161,V
White sas transport
and Address of the first
whome am = absorphin coefficient of
curpin cloth = 0.21
and s = surface area of cyclain
- cloth.
and i) T = 12:50
2.5 = 0.161V
138 + 10.5 x s, T
F35+ 500x 01
=> 5.2 = 0.191x 50 x12 x 10
10 - VII38:40 5 XS-1 -
2 138 + 00551 = 483
2.5
= 138.4 0.55 = 193.2
$= -193.2 - 138 = 1100^{2}$
0.5



we get: T3 = 1.3 sec 96. Given that the velocity of who sound in sea water is equal to 1440 m/s. Find the depth of submend submarine if an ultrasona pulse reflected from the surface is received 0.33 sec after sending out the ultrasonic wave s. = velocity of ultrasonic wave in -sea water > V = 1940 m/s. Time elapsed bet the emission of uttrasour and reception of 41trasound t = 0.33 sec total distance travelled = vt = 1998 X 0.33 = 480 m The distance travelled by ultrasound in goining from source to the submarine and back after reflection is equal to twice the depth of submarine

 i. depth of the submarine
F 480 T 100
2 244 5
= 240 m
A property and the Language of the transfer