COMPUTER ENGINEERING

24/12/2019

CALCULUS I
FINAL EXAM

* SOLVE $\frac{3}{\equiv}$ questions.

1) $\frac{F}{X} = \frac{1}{\int_5^{x^2} \frac{\sin t}{t} dt}$ Find $\frac{dF}{dx}$

2) $\int_{-4}^{4} x^3 e^x dx = ?$

$+ x^3$	e^x
$- 3x^2$	ex
$+ 6x$	ex
$- 6$	ex
0	ex

3) At the first quadrant the region is bounded by $y=\ln x$, the line $x=e$, and x-axis. Find area of given region.

4) The region given above in the 3rd question is rotated about the line $x=e$. Find volume of generated solid.

GOOD LUCK...

45min.

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