darker lines:

colors > brightness-contrast > contrast = 40

filters > generic > erode

filters > artistic > cartoon > mask radius = 50 / percent black = 0.7

filters > artistic > oilify > mask radius = 1

thicker lines:

colors > brightness-contrast > contrast = 40

select by color tool > click white background > ctrl+i

select > grow > amount = 4

pencil tool > maximum size > draw over lines

increase contrast [colors>brightness/contrast] <- this removes "graininess"

use oilify [filters>artistic>oilify> set amount to 1]

use erode [filters>generic>erode] <- this one worked best on your picture

use the cartoon filter [just try different settings]