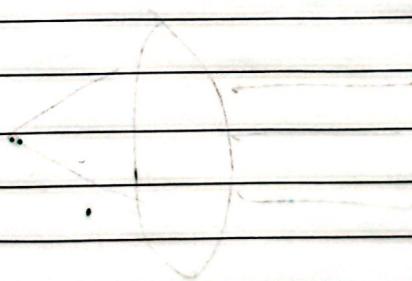
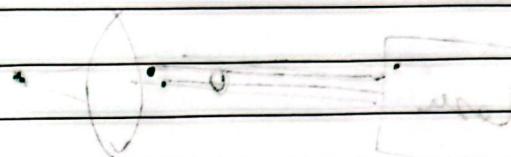


- High power lasers
- Beam delivery - importance of HCFs
- Faceted reflection
- Low loss angled splices



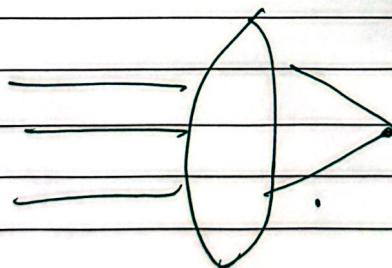
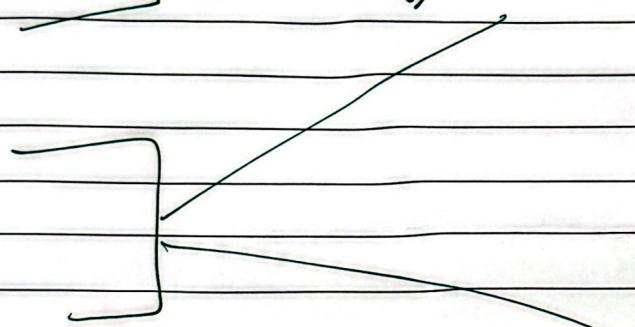
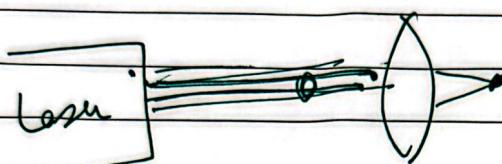
Author: [unclear] Date: [unclear]

Author: [unclear]

Laser beam delivery

Fiber lasers

collimated



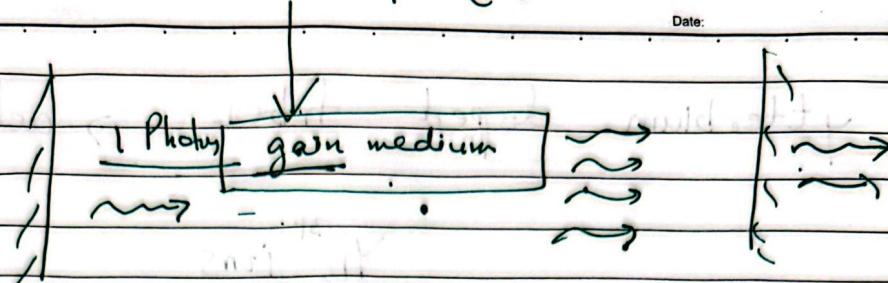
Lasers are important

Fiber lasers

Pump (light/electric)

Date:

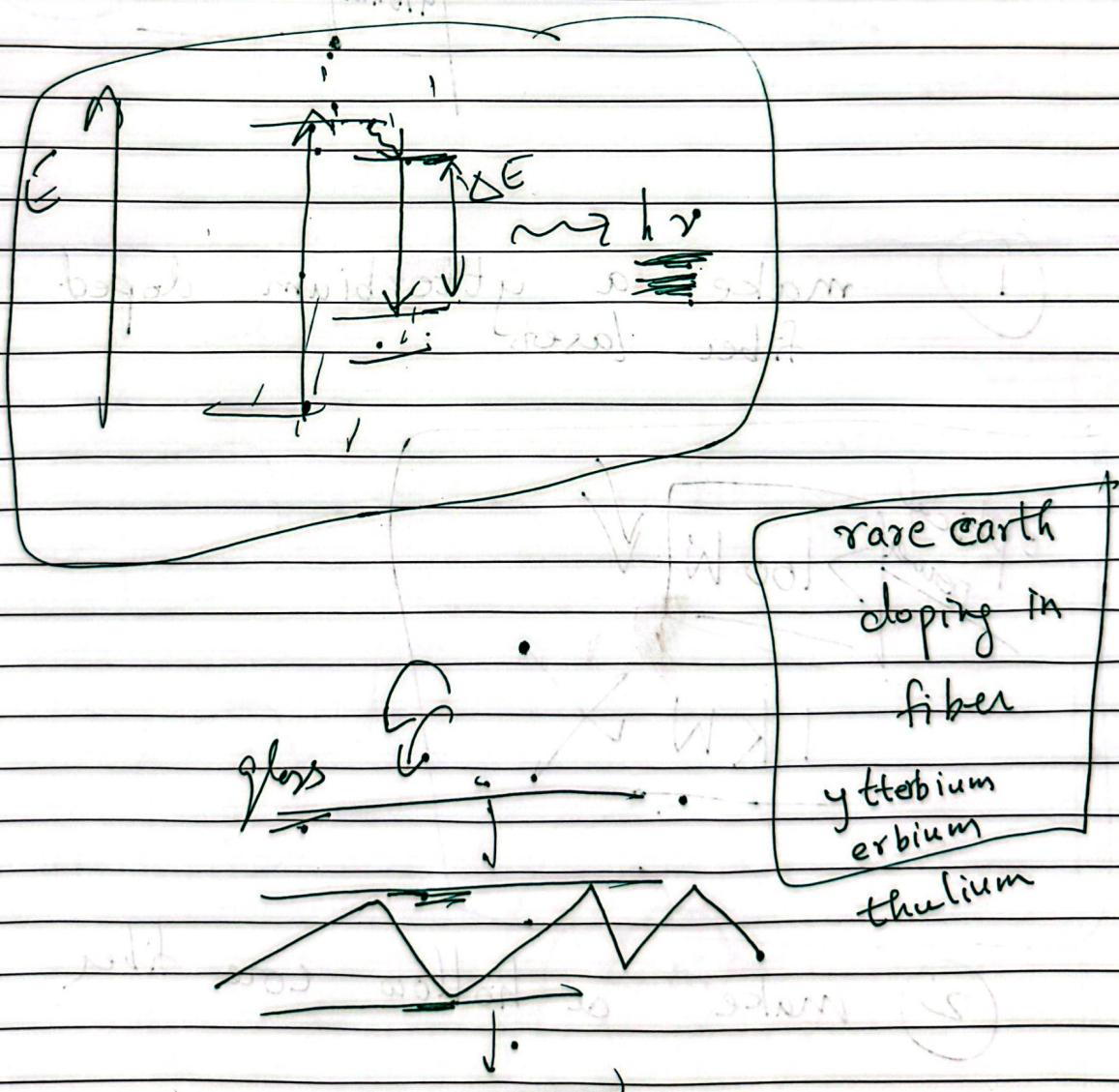
No.



$\sim 100\text{J}$

$< 100\text{J}$

Block diagram of laser

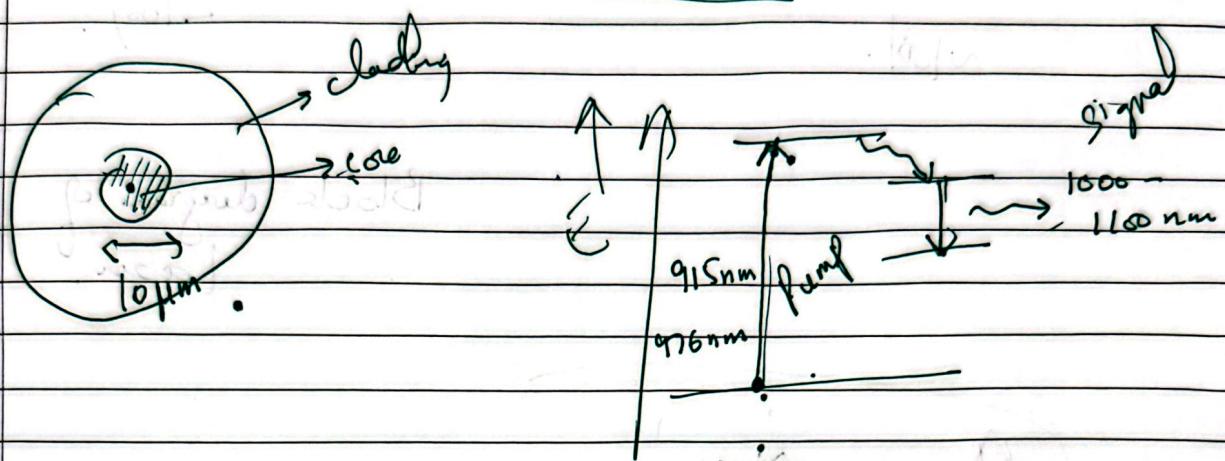


without losses

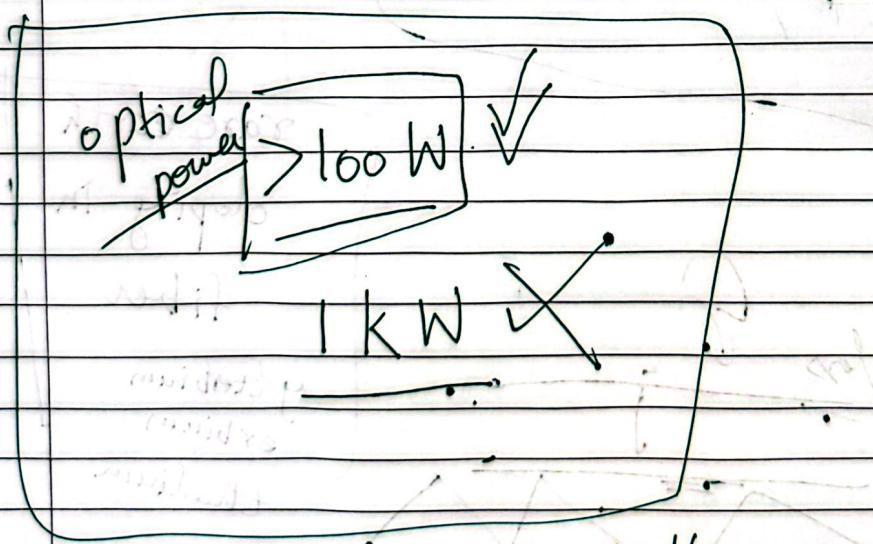
AZOR

ytterbium doped fiber \rightarrow active fiber

Yb^{3+} ions



- make a ytterbium doped fiber laser



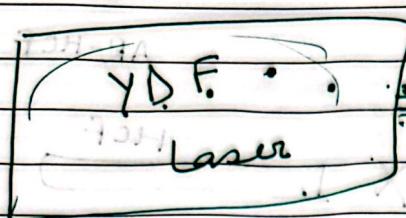
- make a hollow core fiber

- connect hollow fiber to glass fiber for beam delivery

glas 1M

Date:

No.



passive

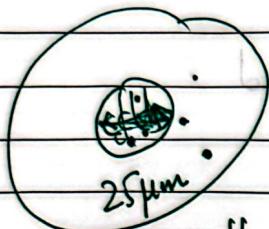
fiber

mod



all glass fiber

nonlinear
optical
effects

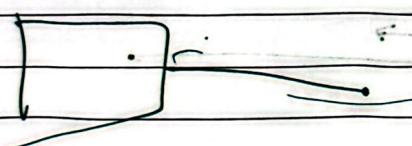


KW

all glass fibers

Inter-Power
area

25 μm



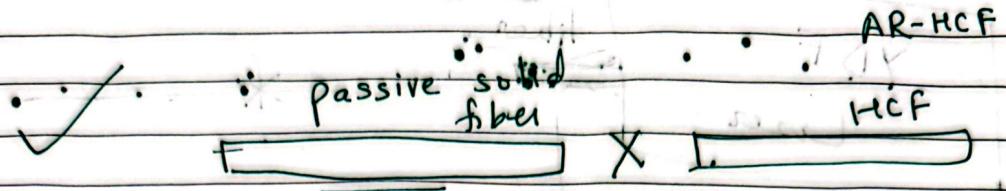
antiresonant

hollow core
fiber

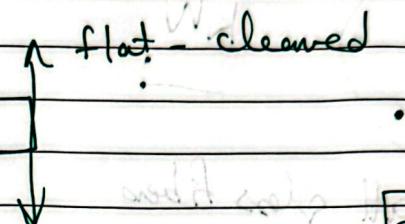


5' - 10' m

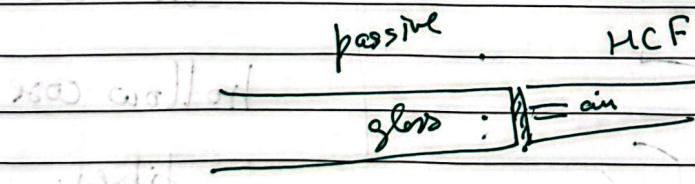
AZONE



fusion splicing \rightarrow splicer

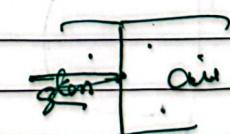


birefringence



Snell's

Fresnel
reflection



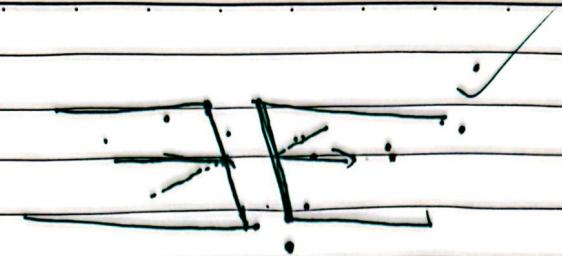
KD

10 kW

10,000 W

100 W

AZONE



angled splice

