

Scope Of Microbiology =>

Lecture = 2

① Food & Dairy Industry ->

eg -> Lactobacillus, Yeast.

Lactobacillus



Milk (Casein Protein)
First

After attack of Lactobacillus
Casein protein convert
into Irregular form
Now Called Curd.

[DEPTH OF BIOLOGY]

-> Curd = Which are formed from
Lactobacillus Improves our digestive system.

Yeast = Are used to Make Bread or other food products
in dairy industry.

[DEPTH OF BIOLOGY]

-> Support fermentation process.

of CO₂ & Ethanol or Alcohol
Et

[DEPTH OF BIOLOGY]

Used in Alcohol
Production.



Date: / /

⑥ Agriculture ⇒ Microorganism play a great role in our Agriculture.

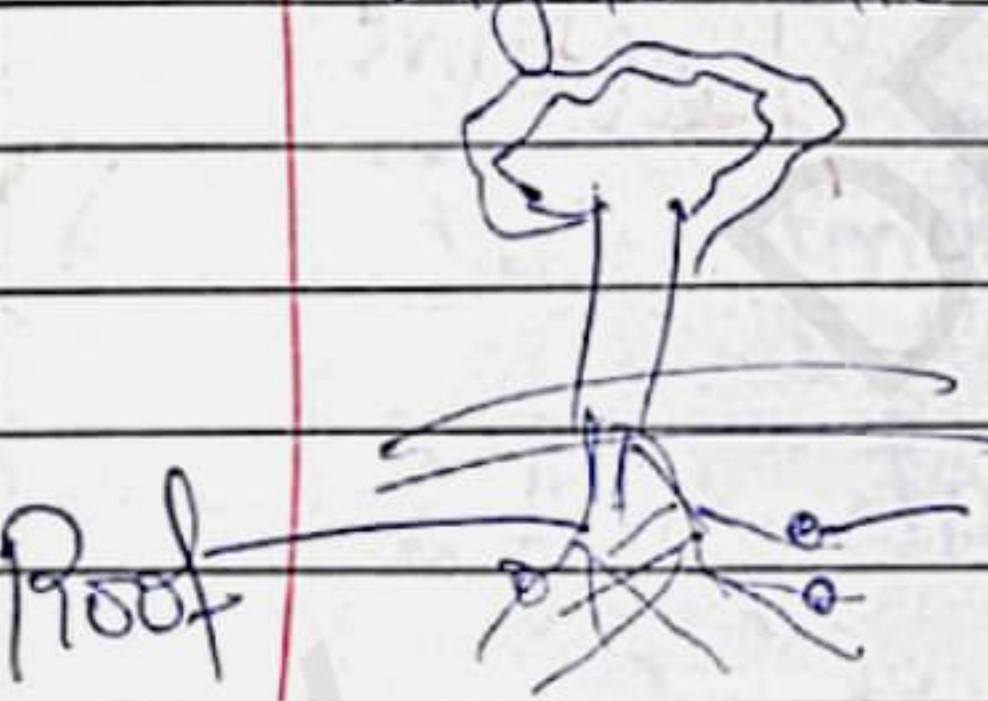
Branch of Science in which we improve crop fertiliser

quantity; multiply the crop, here we use animal

also → so called Animal Microbiology. Or we can say

Plant Microbiology: [DEPTH OF BIOLOGY]

Agric. Microbiology → Microorganism use → Soil fertility (↑)



bacteria (N₂-fixation)

& also help in plant growth improvement

[DEPTH OF BIOLOGY]

⑦ Environmental Microbiology ⇒

With the help of Microorganism → How we resolve

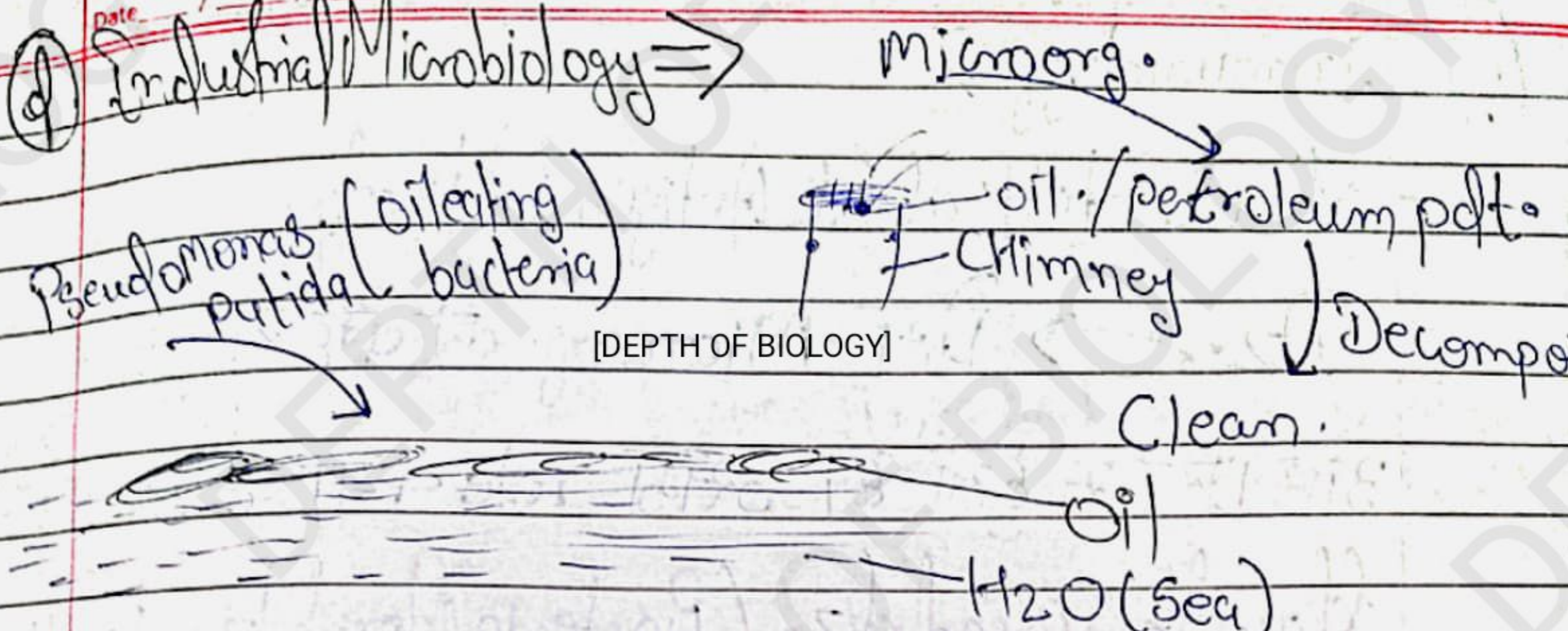
the contaminant from Biodegradable, Non-Biodegradable

or Petroleum Industry.

[DEPTH OF BIOLOGY]

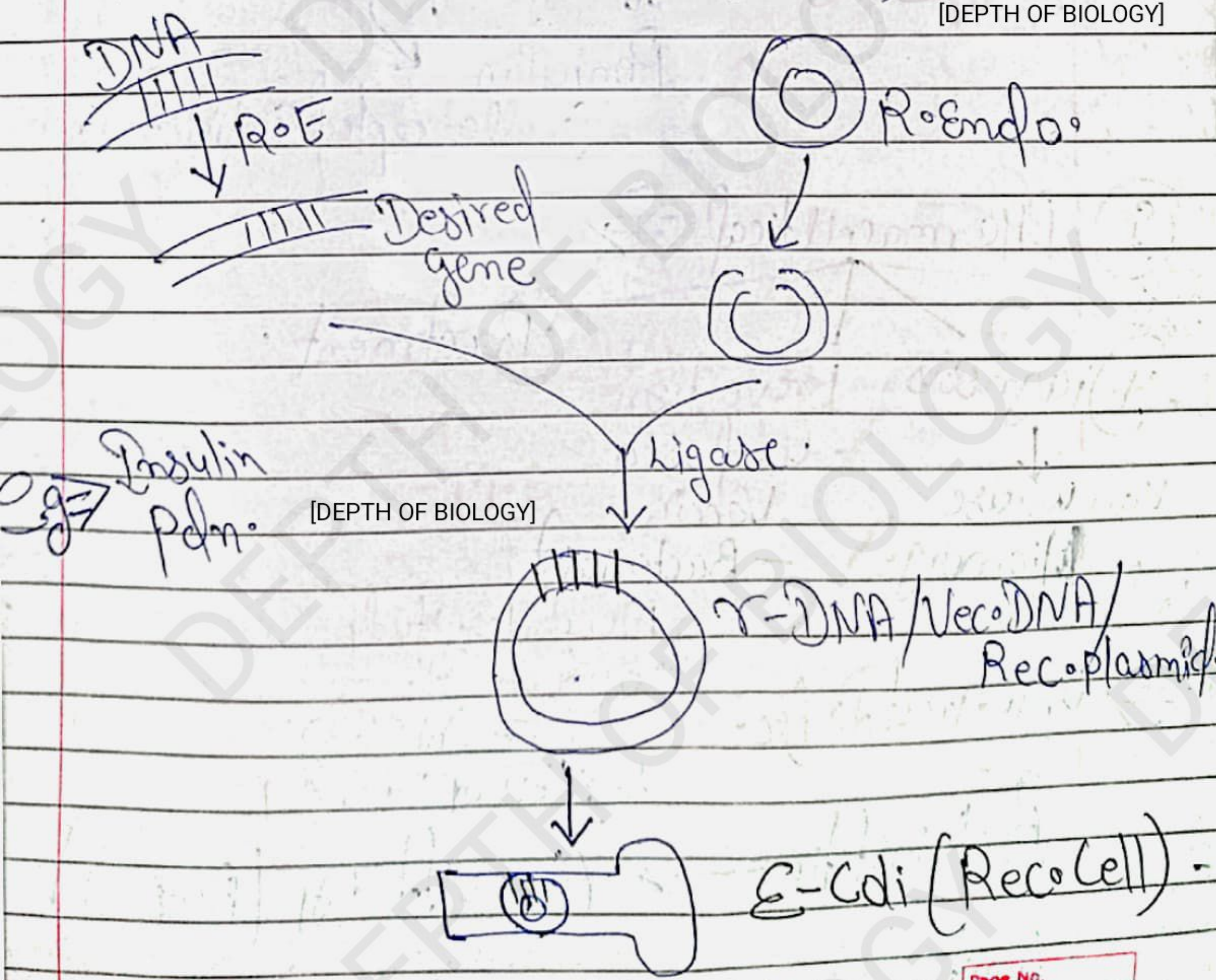
eg ⇒ BOD, COD

used to check water purity or Microorganism
water ke sth chust
to sample ke jai jai
check ke liye



② Genetics \Rightarrow Microorganism use $\uparrow \uparrow \uparrow$
 r-DNA Technology or Genetic Engineering

Here we use bacteria E-coli (Vector).



8 Immunology =>

- Here we talk about Antigen & Antibody.
- DZ. -> किस Microorg. की वजह से हुआ है और किस से हुआ है। उसका role क्या है। DZ के लिए How the spread of Z. (Bacteria Morphology, Its Phase of Reproductive Cycle). How we inhibit bacterial growth.

Eg => Diff. Type of Antibiotics

Penicillin (well accepted antibiotic).

9 Pharmaceutical =>

Identification

Diagnosis

Prevention

Treatment

Here we use

Microorg.

Indirectly.

- Used as a Vaccine

- Bacteria की

Morphology study.

& उसकी Growth

को कैसे Inhibit करे

इसमें हम बात करते हैं।

Eg => Urin. Tract Infec.

Bacteriostatic ->

Growth को रोकना (Bacteriostatic)

Bacteriocidal ->

पहली फुरसा में निरमल

h) Investigational Microbiology =>

[DEPTH OF BIOLOGY]

Anything -> we get as evidence -> then that contain

which type of Microorg. (Mean its locality) -> confirm or not

[DEPTH OF BIOLOGY]

Some bacto survive at high;
Some at low & some on Moderate.