Student's Name:..... Stream.....

BIOLOGY
PAPER 1
(Theory)

A-LEVEL BIOLOGY 2026
SENIOR SIX
WEEKLY ITEM EXERCISE

In Hoima District, oil exploration activities increased habitat fragmentation in forest reserves. A butterfly species important for pollination shows colour inheritance with incomplete dominance (RR red, Rr orange, rr yellow; F_2 1:2:1).
Dihybrid crosses between wing size (W) and resistance to fungal infection (F) produced 9:3:3:1. Recently, small-winged butterflies dominate isolated patches. Carbon sequestration decreased after forest clearing.
Energy flow analysis shows fewer herbivores and predators. Quadrats indicate plant diversity falling annually. Farmers complain of reduced bean yields due to poor pollination.

Task: Analyse how habitat fragmentation, inheritance patterns, reduced gene flow, and ecosystem energy imbalance are linked in Hoima, and design a conservation and restoration strategy that increases carbon sequestration, maintains genetic variation, and secures crop production.

END

TAP THE LINK BELOW TO FOLLOW
https://www.youtube.com/@bioclasshub-h3b?sub_confirmation=1