

Q1

(C)

Defining Smog

Smog is a combination of smoke and fog produced by pollutants in the air - not Fine Particulate Matter and oxides of sulphur.

Necessary conditions for Smog:

① Temperature Inversion

② Presence of Air pollutants in the air.

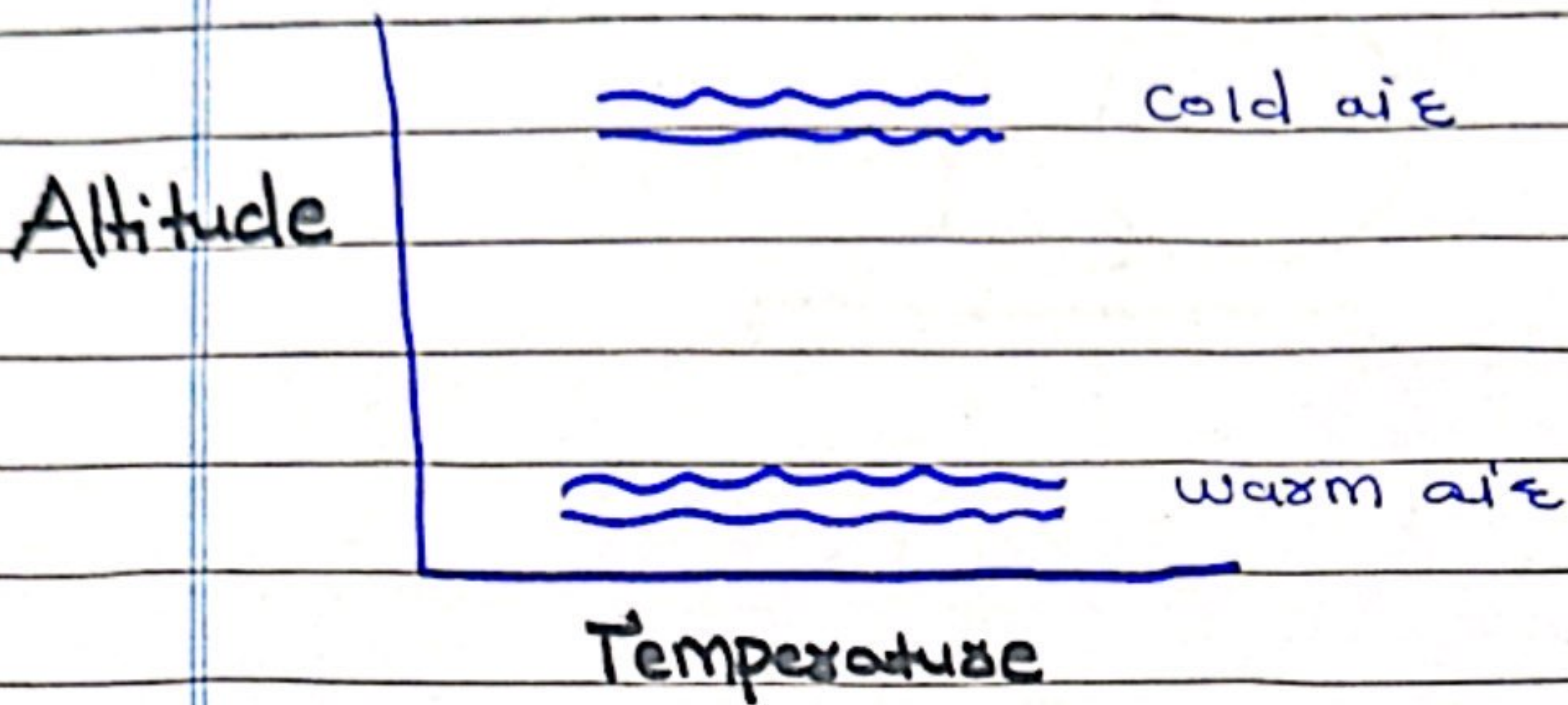
Process of Smog Formation



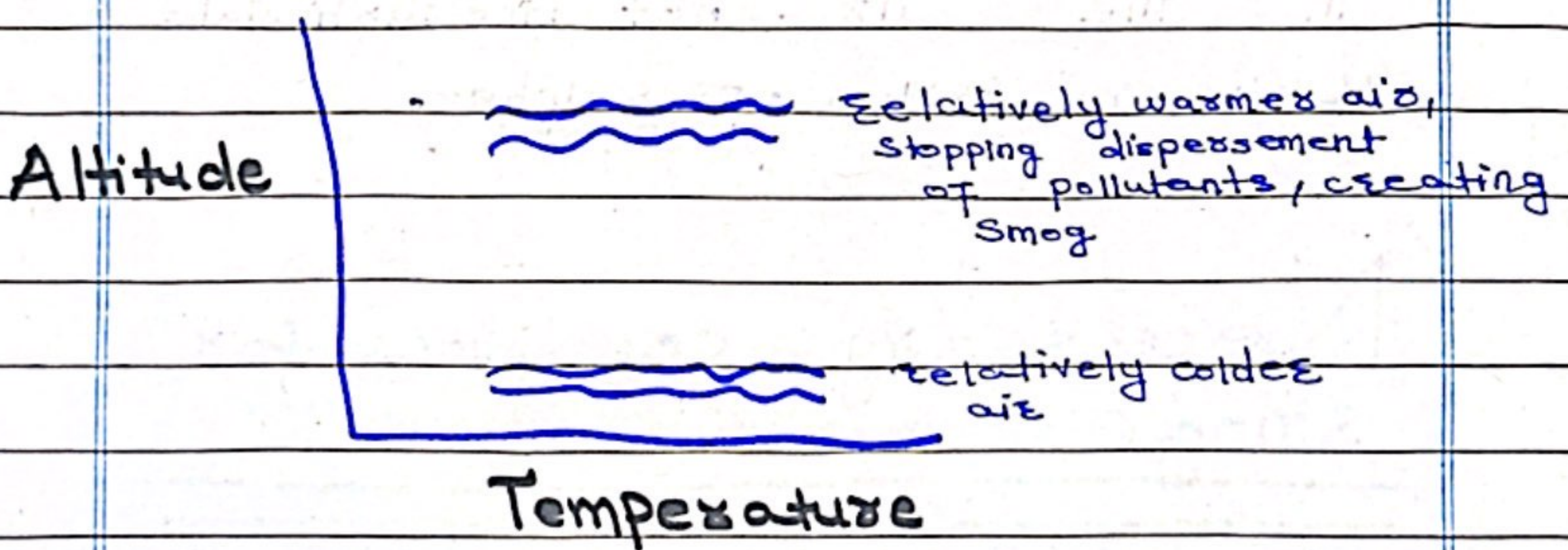
Particulate Matter (>42.5)

are trapped in moist air

DATE: ___/___/___



This reverses in Temperature Inversion



Types of Smog

Classical Smog / London smog

$SO_x + \text{Smoke} + \text{Fog} + \text{Temp (inversion)}$

↓
Oxides of sulphur

↓
Fine particulate matter

DATE: ___/___/___

Photochemical Smog or Chicago Smog

$\text{NO}_x + \text{VOCs} + \text{Smoke} + \text{Temperature (high)}$
↓ ↓
oxides of Nitrogen Volatile Organic Compounds
like CFCs

Preventive measures.

Shift to sustainable energy
resources

There is urgent need
to move towards renewable
energy to avoid emissions creating

Smog
Finding an alternative to expanding
vehicular fleet: Public transportation

Alternative transport mechanism
is central to laying to rest
smog toxic blanket

DATE: ___/___/___

Pollution informed agricultural practices to avoid triggering organic Particulate Matter

It is need of the hour to align agriculture with modern needs of environmental science.

There is need to regulate toxic emissions of industry

Industry should be regulated along the lines of modern sustainable practices.

Climate diplomacy may also help in this regard

In this, engaging with neighbours will serve all. Pakistan and India could collaborate to bring lasting change.

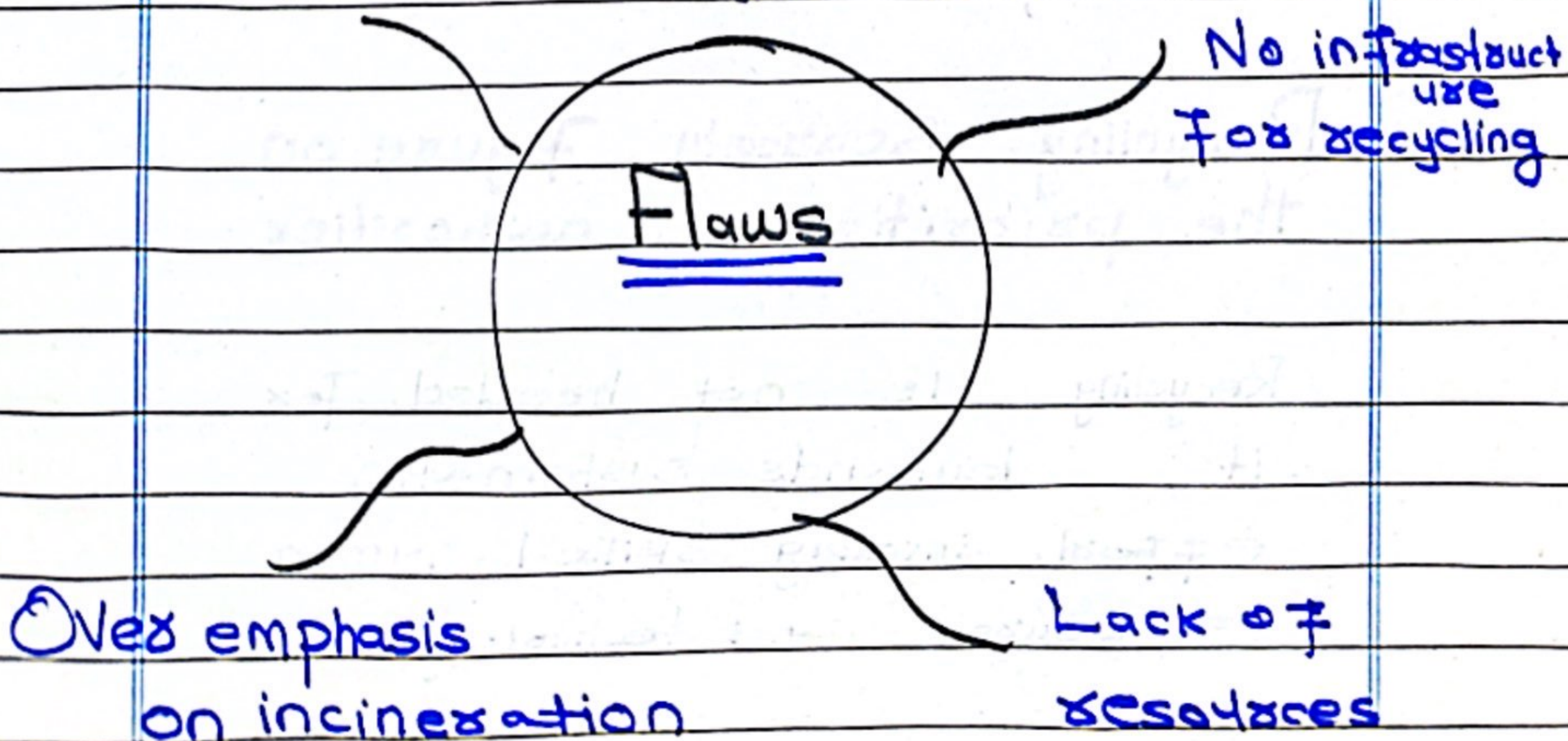
▷ What is SWM...

Solid Waste Management -
a definition:

Solid Waste Management (SWM) is a systemic attempt at collecting, transporting and recycling of solid waste - industrial as well as sanitary.

Examining Flaws in Approach of Pakistan

dysfunctional local government



DATE: ___/___/___

Incineration is openly favoured.

Solid waste is burned out in the open - much to the detriment of air health and environment.

Local governments are paralysed. Although the responsibility for managing SWM lies with LGs, they are ineffective and inoperational.

Limited resources are invested, despite rising volume of solid waste.

The country has no preference for investing in civic facilities.

Recycling scarcely figure on the priorities of authorities.

Recycling is not heeded, for it demands systematic effort, involving skilled human resource and technology.