

GREEN HOUSE EFFECT - FULL MIND MAP

Topic-wise | Hinglish | SSC / BPSC / BSSC / Railway

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3. Greenhouse / Non-Greenhouse Gas Identification
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1. Greenhouse Effect - Meaning & Basic Concept

- greenhouse effect ek natural process hai jo Earth ki surface ko garam karti hai. jab Sun ki energy Earth ke atmosphere tak pahunchati hai, to uska kuchh hissa vapas antariksh mein paravartit ho jata hai aur baaki hissa greenhouse gases dwara absorbed aur dobara vikrit kiya jata hai. [Q1]
- greenhouse effect ek natural process hai jo Earth ki surface ko garam karti hai. jab Sun ki energy Earth ke atmosphere tak pahunchati hai, to uska kuchh hissa vapas antariksh mein paravartit ho jata hai aur baaki hissa greenhouse gases dwara absorbed aur dobara vikrit kiya jata hai. [Q2]
- greenhouse effect environmental gason (mainly carbon dioxide) dwara avarakt radiation ke avashoshan ke reason hota hai. yeh parighatana environment ke temperature ko badhati hai. [Q3]
- greenhouse gases/greenhouse effect ki avadharana Joseph Fourier ne 1820 ke dashak mein pratipadit ki thi. [Q4]

2. Major Greenhouse Gases & Their Contribution

- greenhouse effect environmental gason dwara avarakt radiation ke avashoshan ka result hai. main greenhouse gases carbon dioxide, methane, nitrous oxide aur chlorofluorocarbon hain. [Q5]

EXAM TRAP carbon tetraphloraid (CF_4) ek paraphlorokarban hai aur greenhouse gas hai; nitrous oxide (N_2O) bhi greenhouse gas hai. carbon dioxide (CO_2) aur methane (CH_4) bhi main greenhouse gases hain. isliye option (C) aur (D) dono mein aisi gases hain jo greenhouse effect mein contribution karti hain; isliye dono option svikary hain. [Q6]

EXAM TRAP options mein diye fixed percent "global warming mein contribution" ka koi universal ya abhi scientific vibhajan nahi hain. sapeksh contribution is bat par dependent karta hai ki kis measure aur samayavadhi ka use kiya ja raha hai, jaise vikiraniy bal, effective vikiraniy bal, emissions ya atmospheric sandrata. abhi akalanon mein CO_2 ko long-lived manavajanit tapan ka sabse bada factor mana jata hai, parantu is sawal ke fixed percent-yugmon ko ekamatr sahi comparison nahi mana ja sakata. [Q7]

- Carbon-di-oxide - diye gaye options mein carbon dioxide abhi human-janit ushmikaran mein sabse bada contribution deti hai, kyunki iski concentration mein ullekhaney increase hui hai aur long-lived greenhouse gases mein iska vikiraniy effect sabse main hai. methane, nitrous oxide aur hailojanikrit gases bhi ushmikaran mein contribution deti hain, lekin abhi human-janit effect mein inmein se koi bhi akeli carbon dioxide se zyada nahi hai. [Q8]

- $\text{CO}_2 > \text{CH}_4 > \text{CFCs} > \text{N}_2\text{O}$ - human-janit greenhouse gas effect mein diye gaye options mein carbon dioxide ka contribution sabse zyada hai aur uske baad methane ka place ata hai. CFCs jaisi hailojanikrit gaison ka sanyukt contribution methane se kam, lekin is sawal mein used traditional comparison mein nitrous oxide se zyada mana gaya hai. [Q9]
- American antariksh ejensi NASA ke ke mutabik, water vapour Earth ki sabse prachur greenhouse gas hai. yeh Earth ke lagbhag adhe greenhouse effect ke liye uttaradayi hai - woh process [Q10]
- diye gaye options mein carbon dioxide main long-lived human-janit greenhouse gas hai aur human-janit greenhouse effect mein iska contribution sabse zyada hai. water vapour natural roop se sabse zyada amount mein payi jane wali greenhouse gas hai, lekin woh options mein nahi hai aur climate system mein mainly pratipushti ke roop mein work karti hai. [Q11]

3. Greenhouse / Non-Greenhouse Gas Identification

- Galat kathan: Argon; carbon dioxide, methane aur nitrous oxide jaisi greenhouse gases ki parat Earth ke liye tapiy kanbal ki tarah work karti hai, heat ko absorbed kar surface ko garam karti hai, jise global warming kaha jata hai. isliye argon global warming ke liye uttaradayi nahi hai. [Q12]
- Galat kathan: Argon; atmosphere mein heat ko rokane wali gaison ko greenhouse gases kaha jata hai. Earth se released greenhouse gases atmosphere mein heat ko rokati hain aur Earth ko garam karti hain. [Q13]
- Increase in global temperature - atmosphere mein heat ko rokane wali gaison ko greenhouse gases kaha jata hai. Earth se released greenhouse gases atmosphere mein heat ko rokati hain aur Earth ko garam karti hain. [Q14]
- Galat kathan: Oxides of Sulphur and Nitrogen; sulfur aur nitrogen ke oxide direct roop se global warming mein contribution nahi karte, jabki options mein di gayi dusre gases global warming mein contribution karti hain. [Q15]
- Galat kathan: Nitrogen oxide; greenhouse gas mein Earth ki surface se released avarakt radiation ko absorbed karne aur use dobara Earth ki surface ki taraf vikrit karne ka gun hota hai. carbon dioxide, methane (dhan ke kheton se paida), ozone aur water vapour atmosphere mein natural roop se payi jane wali sabse important greenhouse gases hain. [Q16]

4. Methane, Paddy Fields & Major Warming Gases

- greenhouse gas mein Earth ki surface se released avarakt radiation ko absorbed karne aur use dobara Earth ki surface ki taraf vikrit karne ka gun hota hai. carbon dioxide, methane (dhan ke kheton se paida), ozone aur water vapour atmosphere mein natural roop se payi jane wali sabse important greenhouse gases hain. [Q17]
- Carbon dioxide, Methane, Nitrous oxide, Water vapour. - jab Earth Sun se heat obtained karne ke baad thandi hone lagati hai, tab heat Earth se bahar nikalati hai. lekin carbon dioxide, nitrous oxide, water vapour aur methane jaisi gases is heat ka kuchh hissa absorbed kar leti hain, jiske is wajah se atmosphere ke lower hissa mein kuchh extra heat sanchit ho jati hai. [Q18]
- Carbon dioxide and Methane - jab Earth Sun se heat obtained karne ke baad thandi hone lagati hai, tab heat Earth se bahar nikalati hai. lekin carbon dioxide, nitrous oxide, water vapour aur methane jaisi gases is heat ka kuchh hissa absorbed kar leti hain, jiske is wajah se atmosphere ke lower hissa mein kuchh extra heat sanchit ho jati hai. [Q19]
- jab Earth Sun se heat obtained karne ke baad thandi hone lagati hai, tab heat Earth se bahar nikalati hai. lekin carbon dioxide, nitrous oxide, water vapour aur methane jaisi gases is heat ka kuchh hissa absorbed kar leti hain, jiske is wajah se atmosphere ke lower hissa mein kuchh extra heat sanchit ho jati hai. [Q20]

- Carbon-di-oxide and Methane - jab Earth Sun se heat obtained karne ke baad thandi hone lagati hai, tab heat Earth se bahar nikalati hai. lekin carbon dioxide, nitrous oxide, water vapour aur methane jaisi gases is heat ka kuchh hissa absorbed kar leti hain, jiske is wajah se atmosphere ke lower hissa mein kuchh extra heat sanchit ho jati hai. [Q21]

5. Repeated Exam Traps - Which Gas Is NOT a GHG?

- Galat kathan: Propane; main greenhouse gases hain - water vapour, carbon dioxide, methane, nitrous oxide, chlorofluorocarbon aur ojona. gaisolin aur fuel oil jaise dusre indhanon ke place par propen ka use clean air ki disha mein ek kiphayati aur vyavahary kadam hai. [Q22]
- Galat kathan: Nitrogen; main greenhouse gases hain - water vapour, carbon dioxide, methane, nitrous oxide, chlorofluorocarbon aur ojona. gaisolin aur fuel oil jaise dusre indhanon ke place par propen ka use clean air ki disha mein ek kiphayati aur vyavahary kadam hai. [Q23]
- Galat kathan: Nitrogen; main greenhouse gases hain - water vapour, carbon dioxide, methane, nitrous oxide, chlorofluorocarbon aur ojona. gaisolin aur fuel oil jaise dusre indhanon ke place par propen ka use clean air ki disha mein ek kiphayati aur vyavahary kadam hai. [Q24]
- Galat kathan: Hydrogen; main greenhouse gases hain - water vapour, carbon dioxide, methane, nitrous oxide, chlorofluorocarbon aur ojona. gaisolin aur fuel oil jaise dusre indhanon ke place par propen ka use clean air ki disha mein ek kiphayati aur vyavahary kadam hai. [Q25]
- Galat kathan: Oxygen; main greenhouse gases hain - water vapour, carbon dioxide, methane, nitrous oxide, chlorofluorocarbon aur ojona. gaisolin aur fuel oil jaise dusre indhanon ke place par propen ka use clean air ki disha mein ek kiphayati aur vyavahary kadam hai. [Q26]
- Galat kathan: SO₂; methane (CH₄), chlorofluorocarbon (CFCs) aur nitrous oxide (N₂O) greenhouse gases hain kyunki ve Earth se nikalane wale avarakt radiation ko absorbed karti hain. sulfur dioxide (SO₂) ko greenhouse gas nahi mana jata; atmosphere mein yeh mainly salphet erosol banati hai, jinaka common effect shitalan ka hota hai. SO₂ ek important air pollutant aur acid-rainfall ka agradut bhi hai. [Q27]

6. Atmospheric Warming Mechanism

EXAM TRAP Earth ke environment mein present greenhouse gases ek cover ki tarah vyavahar karti hain, jisse Sun se ane wala laghutarang radiation gujar sakta hai, lekin Earth se lautane wala dirghatarang radiation use par nahi kar pata. is wajah se Earth ka atmospheric temperature badhata hai. is process ko greenhouse effect kaha jata hai. [Q28]

- The infrared part of the solar radiation - carbon dioxide Earth ki surface aur lower atmosphere se nikalane wale dirghatarang avarakt radiation ke ek hissa ko absorbed kar dobara released karti hai. isse antariksh ki taraf heat ke nikalane ki dar kam hoti hai aur lower atmosphere aur surface par ushmikaran ka effect paida hota hai. [Q29]