

Seat  
No.

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मजल - 052

**ELECTIVE-II**

**Industrial Water Pollution & Control**

**(New) (1313)**

P. Pages : 2

Time : Three Hours

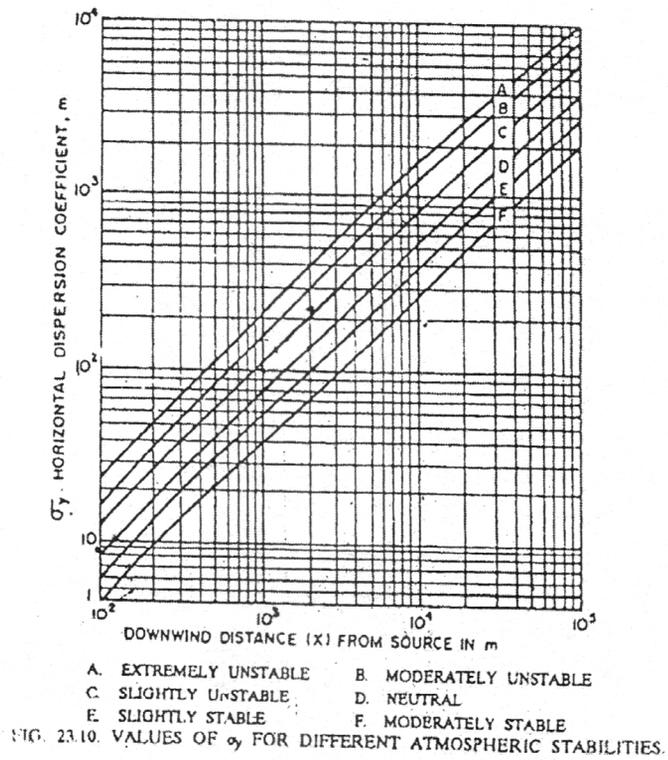
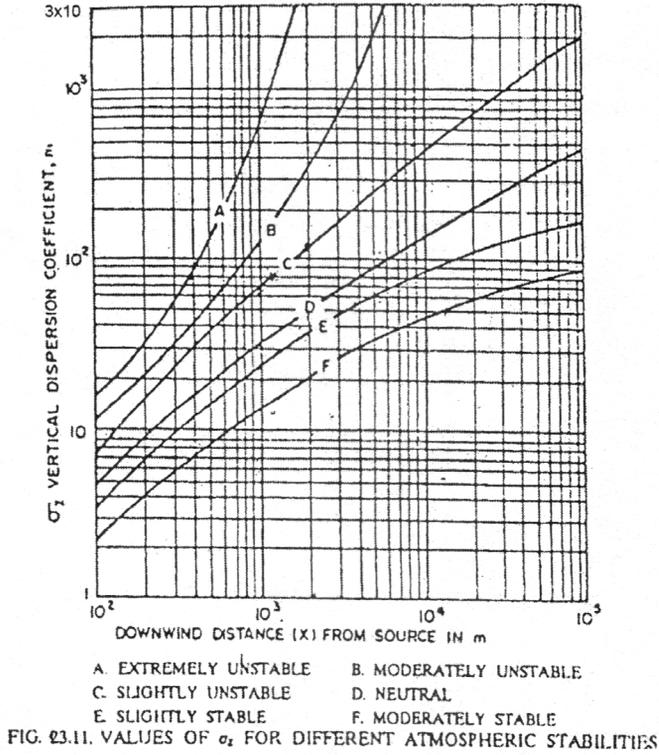
Max. Marks : 100

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answersheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Attempt **any two** questions from each unit.
5. Figure to right indicate full marks.
6. Assume any suitable data wherever necessary.

1. a) Explain characteristics of industrial waste & give waste water characteristics of oil refinery industry. **10**  
b) Explain Neutralization of flow. **10**  
c) Explain inplant waste control & water reuse. **10**
2. a) Explain aeration equipments. **10**  
b) Explain aerated lagoons & its application. **10**  
c) Explain air stripping of voc. **10**
3. a) Explain vacuum filtration & pressure filtration. **10**  
b) Explain theory of adsorption & give properties of activated carbon. **10**  
c) Explain theory of ion exchange. **10**
4. a) Define Air pollution & explain effects of air pollution on man & animals. **10**  
b) Explain plume behaviour. **10**  
c) A coal fired thermal power plant burns 6.25 tonnes of coal / hour & discharges the combustion products through a stack having effective height of 80 m. The coal has a sulphur content of 4.7% & wind velocity at top of stack is 8 m/s. Atmospheric conditions are moderately to slightly unstable. Determine the ground level concentration at a distance of 2 km downwind at -  
i) the centreline of plume  
ii) at cross-wind distance of 0.5 km on either side of centre line. **10**
5. a) Write a note on atmospheric cleaning process & acid rain. **10**

- b) Write short note : 10  
 i) Gravity settling chamber.  
 ii) Bag-house filter.
- c) Explain Automotive emission control. 10



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