



Department of Mechanical Engineering

CE8005 AIR POLLUTION AND CONTROL ENGINEERING

Unit I - INTRODUCTION MCQ Bank

1. Which gas is mainly produced due to incomplete burning of wood?

- a) **CO**
- b) SO₂
- c) NO₂
- d) NO₃

Answer: a.

2. Which of the following is involved in production of carboxy haemoglobin?

- a) **CO**
- b) SO₂
- c) NO₂
- d) NO₃

Answer: a

3. Which of the following is a liquid form of aerosol?

- a) Fume
- b) Dust
- c) **Mist**
- d) Smoke

Answer: c

4. X ray films are a source of which of the following gas?

- a) SO₂
- b) CO₂
- c) **NO₂**
- d) SO₃

Answer: c

5. The maximum size of fly ash is _____

- a) 1 μm
- b) 100 μm
- c) **1000 μm**

d) $10\mu\text{m}$

Answer: c

6. Which of the following leads to a disease called broncho spasm?

a) SO_2

b) SO_3

c) SO_4

d) CO_2

Answer: b

7. The minimum size of the smoke particle is _____

a) $0.2\mu\text{m}$

b) $1\mu\text{m}$

c) $0.8\mu\text{m}$

d) $0.5\mu\text{m}$

Answer: d

8. Which of the following is a secondary air pollutant?

a) SPM

b) PAN

c) SO_2

d) NO_2

Answer: b

9. The permissible concentration of PM 10 in the air is _____

a) $60\mu\text{g}/\text{m}^3$

b) $40\mu\text{g}/\text{m}^3$

c) $50\mu\text{g}/\text{m}^3$

d) $20\mu\text{g}/\text{m}^3$

Answer: a

10. Which of the following is not a part of photochemical smog?

a) NO_2

b) O_3

c) PAN

d) SPM

Answer: d

11. Which air pollutant cause corrosion of building?

a) SO_2

b) SO_3

c) CO

d) NO_2

Answer: a

12. Which of the following air pollutant effects plants the most?

- a) **Fluorine**
- b) SO₂
- c) PAN
- d) HCl

Answer: a

13. The size of cigarette particles is _____

- a) 1µm
- b) 10µm
- c) <1µm d) >10µm

Answer: c

14. Concentration of fluorine that cause a phototoxicological effect on the plant is _____

- a) 0.1µg/m³
- b) **0.3µg/m³**
- c) 0.5µg/m³
- d) 1µg/m³

Answer: b

15. Which of the following gas is not colorless?

- a) **NO**
- b) O₃
- c) Pb
- d) SO₃

Answer: a

16. What is the minimum height of the chimney in a thermal power plant of capacity 350MW?

- a) 100m
- b) **220m**
- c) 380m
- d) 60m

Answer: b

17. Coning plume occurs under which conditions?

- a) Super adiabatic
- b) **Sub adiabatic**
- c) Neutral
- d) Inversion

Answer: b

18. In which of the following plumes, stable condition prevails?

- a) Lofting
- b) Fanning**
- c) Neutral
- d) Fumigating

Answer: b

18. The upward vertical rise prevails in which of the following plume?

- a) Trapping
- b) Fanning
- c) Looping
- d) Neutral**

Answer: d

19. Which of the following plume is worst for the dispersion of pollutants?

- a) Trapping
- b) Fanning
- c) Neutral
- d) Fumigating**

Answer: d

20. In which of the following plumes, unstable condition prevails?

- a) Trapping
- b) Fanning
- c) Looping**
- d) Neutral

Answer: c

21. Which of the following are contradictory plume?

- a) Lofting and fumigating**
- b) Looping and coning
- c) Neutral and lofting
- d) Fumigating and trapping

Answer: a

22. The maximum efficiency of the electrostatic precipitator is _____

- a) 95%
- b) 80%
- c) 99%**
- d) 100%

Answer: c

23. The minimum particle size removed by the gravitational chamber is _____

- a) **>50 μ m**
- b) >10 μ m
- c) >25 μ m
- d) >0.5 μ m

Answer: a

24. Which of the following is used in ceramic industries?

- a) Electrostatic precipitator
- b) **Dynamic precipitator**
- c) Spray tower
- d) Wet cyclonic scrubber

Answer: b

25. Wet scrubbers are classified into ____ types.

- a) 2
- b) **3**
- c) 5
- d) 6

Answer: b

26. The centrifugal collectors are classified into how many types?

- a) 3
- b) 4
- c) 5
- d) **2**

Answer: d

27. Which of the following air pollution control device has maximum efficiency?

- a) **Electrostatic precipitator**
- b) Dynamic precipitator
- c) Spray tower
- d) Wet cyclonic scrubber

Answer: a