

(19)

SARDAR PATEL UNIVERSITY

M.Sc. (EST) (First Semester) Examination (NC)

Tuesday, 19 March, 2019

Time: 10.00 am to 1.00 pm

PS01CEST22: Air Pollution and Climate Change

Max. Marks: 70

[08]

Q.1. Multiple Choice Questions (Choose Correct Answer)

- (1) In atmosphere, the ratio of Oxygen and Nitrogen is
(a) 1: 3.33 (b) 1: 3.77 (c) 1: 3.37 (d) 1: 3.73
- (2) Photochemical smog does not contain
(a) HNO₃ (b) PAN (c) O₃ (d) HC
- (3) Phosgene is synonymous to
(a) Carbonyl Sulphahte (b) Carbonyl Phospahte (c) Carbonyl Nitrate (d) Carbonyl Chloride
- (4) Following is a carcinogenic HC, which causes Hepatic Cancer.
(a) Vinyl Sulphahte (b) Vinyl Phospahte (c) Vinyl Nitrate (d) Vinyl Chloride
- (5) At 20,000 ppm, Benzene causes
(a) ENT infections (b) Lung cancer (c) CNS disorders (d) Death
- (6) Insoluble aerosols are carried to the _____ system of human body.
(a) lymphatic (b) pneumatic (c) circulatory (d) respiratory
- (7) Vulnerability is _____ of things to be damaged by a hazard.
(a) propensity (b) probability (c) possibility (d) None
- (8) _____ of land of India is vulnerable to severe earthquakes.
(a) 12% (b) 58% (c) 68% (d) 8%

Q.2. Attempt followings (Any Seven).

[14]

- (1) Atmosphere as a resource
- (2) Causative factors for anthropogenic air pollution
- (3) CO₂ emission and its undesirable effects
- (4) Composition of air
- (5) Effects of atomic bombings
- (6) Enlist indoor air pollutants along with its sources
- (7) Enlist major classes of air pollutants
- (8) Enlist major disasters in India
- (9) PAP, OAP, CAP

Q.3. (a) Explain general effects of air pollution on humans with special reference to cardiac and pulmonary diseases. [06]

(b) Describe effects of NO_x and SO_x on plants, humans, and materials. [06]

OR

(b) Write a note on ozone (types, depletion, effects, recovery). [06]

Q.4. (a) Describe man-made sources of air pollution with suitable examples. [06]

(b) Discuss general effects of air pollution on plants, animals, and materials. [06]

OR

(b) Write a note on effects of HC and PM on plants, humans, and materials. [06]

Q.5. (a) Discuss formation of PCS and process of acid deposition. Add a note on general as well as specific effects of acid rain on forest decline. [06]

(b) Write a detailed note on aeroallergens with special emphasis on RAST. [06]

OR

(b) Tabulate: 1. Main sources of air pollution 2. Types of air pollutants (Gaseous) [06]

Q.6. (a) Describe principles of disaster management in detail. [06]

(b) Short Notes: Flood, Drought, Cyclone, Landslide, Avalanche [06]

OR

(b) Short Notes: Nodal agencies for DM in India, Flowchart of DM continuum, National Disaster Management Structure (NDMS) [06]