

2016

CHEMISTRY AND ENVIRONMENT

Time : Three Hours]

[Maximum Marks : 80

Answer from both the Sections as directed. The figures in the right-hand margin indicate marks.

SECTION-A

1. Answer any four of the following : 4×4
- (a) Describe four factors influencing environment.
 - (b) Explain : What are direct and indirect benefits from forest.
 - (c) Define pollution and pollutants. Discuss different types of pollutants.
 - (d) What is Photochemical smog? How is it formed in the atmosphere ?
 - (e) Explain the term "Lapse rate" and "temperature inversion".
 - (f) What are the effects of radioactive pollution ? Discuss its effect on life.

OR

(2)

2. Answer all questions from the following : 2×8

- (a) What are biotic factors ?
- (b) Describe stratosphere.
- (c) Explain non-renewable energy resources.
- (d) Discuss the soil erosion.
- (e) Name the sources of NO_x and SO_x in the atmosphere.
- (f) Define Nuclear pollution.
- (g) What is Hydrological Cycle ?
- (h) What are non-conventional energy resources ?

SECTION-B

Answer all questions from the following : 16×4

3. (a) Discuss any two gaseous cycles. Mention their significance on environment.

OR

- (b) Describe factors responsible for environmental degradation. Explain with the help of any one environmental segment.
4. (a) Explain the importance of water resources. Describe the problems from over exploitation, drought and floods.

(3)

OR

- (b) Describe conventional and non-conventional energy resources in detail. How is it beneficial to environment ?

5. (a) Classify the sewage treatment methods. Discuss the various biological treatment methods for sewage.

OR

- (b) Explain with example radiation pollution. Discuss its effect on flora and fauna. Describe how radiation wastes are disposed.

6. (a) Describe ozone layer depletion and factors responsible for it, suggest ways of minimizing ozone layer depletion.

OR

- (b) Name the sources of air pollution in big cities ? What types of pollutants do they produce ? How air pollution can be controlled ?