



JAZ-003-1103005 Seat No. _____

M. Sc. (Sem. III) (CBCS) Examination

December – 2019

Chemistry : Paper-CPA-303

(Advance in Environmental Chemistry)

(New Course)

Faculty Code : 003

Subject Code : 1103005

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

Instructions :

- (1) All questions carry equal marks.
- (2) All questions are compulsory.

1 Answer the following : (any seven) 14

- (a) Write four different definition of water pollution.
- (b) Give the effect of oil pollutants on river water.
- (c) What are carbon credits ? How are it's used ?
- (d) Write impact of toxic chemicals on enzymes.
- (e) Explain effluents from chemical and material industries.
- (f) Classify the waste water treatment process.
- (g) What are particulates ? How will you remove it from effluent stream ?
- (h) What are gaseous pollutants ? How will you remove it from effluent stream ?
- (i) Define water pollutants and categories inorganic pollutants.
- (j) How will you analyze NO_x pollution ?

2 Answer the following : (any two) 14

- (a) Write types of water pollution and discuss ground water pollution in detail.

- (b) Write note on surface water pollution.
- (c) What are biological pollutants in water ? Explain their effects on environment in detail.

3 Answer the following : **14**

- (a) What are sewage and domestic wastes ? Give their effects on environment and also mention the detrimental effects of sediments.
- (b) What are thermal pollutants in water ? Discuss their effect on aquatic ecosystem.

OR

- 3** (a) Discuss in detail the disinfection process used in waste water treatment.
- (b) Write note on Kyoto's flexible mechanisms.

4 Answer the following : **14**

- (a) Write note on compliance carbon market.
- (b) Discuss the sources, characteristics and effects of effluents from leather tanning industries.

5 Answer the following : (any two) **14**

- (a) Describe biochemical effect of cadmium on living life.
- (b) Discuss the sources, characteristic and effects of effluents from textile industries.
- (c) Write note on Clark's method used in water treatment and purification.
- (d) Discuss in detail the sources of oil pollutants in marine water.
