

B.Sc. Third Year CBCS Pattern Semester-V
USCCHT11 - Chemistry Paper-III (Industrial Chemicals and Environment)

P. Pages : 2

Time : Three Hours



GUG/W/23/13091

Max. Marks : 50

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- Notes : 1. All **five** questions are compulsory and carry equal marks.
2. Draw suitable diagram and write chemical reaction wherever necessary?

1. a) Describe the large scale production, storage and uses of Oxygen. 5
b) Explain the manufacture and uses of- 5
a) Hydrochloric acid b) Common salt

OR

- c) Write the industrial uses of Acetylene. 2½
d) Write a short note on Manufacturing of Caustic soda. 2½
e) Write a short note on hazards in handling the inorganic chemicals. 2½
f) Explain the application of Bleaching powder. 2½
2. a) Explain the biogeochemical cycle of Nitrogen? 5
b) Explain the importance of biocatalysis in Chemical Industry? 5

OR

- c) Write a short notes on preparation of non ferrous metal? 2½
d) What are the application of biocatalysis in Green Chemistry? 2½
e) Explain the different segments of environment? 2½
f) What is ultrapure metal? Write its uses? 2½
3. a) Discuss in detail sources of air pollution? 5
b) Write a short notes on- 5
a) Ozone Layer Depletion.
b) Green house effect and global warming.

OR

- c) Describe the methods for control of air pollution? 2½

- d) What are the primary and secondary air pollutant? 2½
- e) Explain the harmful effect of photochemical smog? 2½
- f) What are the sources of green house gases? Discuss their effect on climate? 2½
- 4. a) Discuss in details the renewable and non renewable energy sources. 5
- b) What is nuclear pollution? Explain how can reduce nuclear pollution? 5

OR

- c) What are the advantages of nuclear energy? 2½
- d) Write a short notes on geothermal energy? 2½
- e) How can we prevent nuclear disaster? 2½
- f) Write a short note on disposal of nuclear waste? 2½
- 5. Solve **any ten** short answer questions. 10
- a) Write the use of potassium Permanganate.
- b) Name any two commonly produced industrial inorganic chemicals?
- c) Why industrial gases are harmful?
- d) Define metallurgy?
- e) What is main function of biogeochemical cycle?
- f) What is biocatalysis?
- g) what is Global warming?
- h) Write major regions of Atmosphere?
- i) What is effect of particle size on air pollution?
- j) What is nuclear fission?
- k) What is Tidal energy.
- l) Write any three sources of energy?
