



Karanjia Auto College, Karanjia, Mayurbhanj

DSE-III, CHEMISTRY HONS.

1. Answer all the questions

[1×8=8]

i. Write the chemical formula of potash alum.

iii. What is geothermal energy. iv.

How phosgene is manufactured. v.

What is asphyxiation.

vi. Name some particulate air pollutants.

vii. What is total hardness of water. viii.

What is flocculation.

2. Answer any **Eight** the questions

[1.5×8=12]

i. What is meant by Q-value in a nuclear reaction.

ii. What is bio fuel. iii. What are different types of coal. iv.

What is meant by evapotranspiration. v. What is BOD.

vi. What is trophic level. vii. Write the use of borax. viii.

What is meant by steam reforming of hydrocarbon. ix.

Which acid is commercially known as muriatic acid. x.

Which gas is manufactured by coal gasification.

3. Answer any **Eight** the questions

[2×8=16]

i. How nitrogen is removed from effluents.

ii. What is cyanide process.

iii. Write chemical reaction involved in Van Arkel method. iv. What are the advantages of biocatalyst.

- v. What is meant by sustainable development.
- vi. What is water gas shift reaction. vii. What are the nuclear wastes.
- viii. Write difference between nuclear fission and fusion. ix.
- What is the basic of ozone photochemistry.

x. Write the cause of green house effect.

5. Discuss the methods of preparation of Cl_2 gas production, its storage and application. [6]

OR

Write down the industrial method of preparation of Steel and discuss its application ?

7. Discuss in brief about working principle of effluent treatment plant. [6]

OR

Explain in brief about process of sludge disposal.

8. Discuss in detail about disposal of nuclear waste. [6]

OR

What is renewable energy? Explain how non-conventional energy sources i.e. geothermal, tidal, hydel enegy etc. can be used as an alternative to traditional energy sources.

9. Discuss the biogeochemical cycle of carbon. [6]

OR

Write the process for treatment of waste water released from textile industry.