

M. Sc. (Part - II) (Semester - III) Examination, Nov. 2024**Analytical Chemistry****E-ACH 304: Environmental Chemical Analysis and Control****Sub. Code : 97899_2375**

Q.1

- a. Cadmium
- b. In amperometric titration the voltage applied across the indicator electrode and the reference electrode is kept constant and the diffusion current (which is equal to limiting current – residual current) passing through the cell is measured and plotted against the volume of reagent added.
- c. CO
- d. Organophosphate
- e. NO₂*
- f. Osmoscope
- g. Asbestos can be found in various materials used commonly in the automotive industry as well as home construction. They are most commonly found in coatings, paints, building materials, and ceiling and floor tiles. However, if you have an old home that was constructed a long time ago, the risks for asbestos are much greater than that of a newer home.
- h. Thermal precipitator collects particles by thermal force on the particle in thermal gradient a force from hot to cold.
- i. PON- Particulate organic nitrogen and DON- Dissolved organic nitrogen
- j. The odour detection threshold is the bare minimum concentration of odour at which an odour substance can be distinguished from odour free air.
- k. Organochlorine pesticide, DDT- Dichlorodiphenyl trichloro ethane
- l. Liquid- liquid extraction, pervaporation, adsorption, Cloud Point Extraction Method, Electrochemical Oxidation, Three Phase Electrode System, Electrocoagulation, Membrane Processes, Reverse Osmosis (RO) and Nanofiltration, Membrane Distillation, Chemical Oxidation, Photodecomposition, UV/H₂O₂ Treatment, Enzymatic Degradation, Microbial Degradation etc.
- m. Dithiozone
- n. In environmental analysis if sample size is very small
- o. Less than 10 ppm
- p. Glass fibre