CBSE Class 12 physics
Important Questions
Chapter 16
Chemistry in Everyday Life

2 Mark Questions

1. How does an antidepressant work? Explain with example.

Ans. Antidepressants are used in case of a person suffering from depression e.g. noradrenalin is a neurotransmitter that plays a role in mood change. If the level of noradrenaline is low, the person suffers from depression. An antidepressants inhibits the enzyme which catalyses the degradation of noradrenalin. If the enzyme is inhibits, the neurotransmitter is slowly metabolized & can activate the receptor for longer time & counteracts the effect of depression.

2. Explain the types of analgesics with example.
Ans.Analgesics are classified an

(i) Non narcotic analgesics – These drugs are effective in relieve skeletal pain & are non – addictive. They may have many other effects like reducing fever and preventing platelet coagulation. e.g. Aspirin & Paracetamol.

(ii) Narcotic analgesics – These are habit forming or addictive drugs e.g. morphine & its homologues. They, when administered in medicinal doses relieve pain & produce sleep but in poisonous doses, they can produce coma, convulsions & even death.

3. What are antibiotics?

Ans.Antibiotics are the drugs used to treat infections because of their low toxicity for humans & animals. They are the substances produced wholly or partly by chemical synthesis, which in low concentration inhibit the growth or destroys the microorganisms by intervening in their metabolic processes.

4. How are antibiotics classified? Explain with example.

Ans. Antibiotics are classified on the basis of –

(1) Their cidal (killing) or. Static (inhibitory) effect. They can be Bactericidal (inhibits the actinty) e.g. penicillin in bactericidal white Tetracycline is bactereostatic.

(2) Their spectrum of action i.e. the range of bacteria or other microorganisms that are affected by them. Antibiotics which are effective against a wide range of Gram – positive are broad spectrum antibiotics, those effective mainly against Gram – positive or gram negative bacteria are narrow spectrum antibiotics wherever those effective against only a single bacteria are limited spectrum antibiotics. e.g. Penicillin G is narrow spectrum while Arnpicillin in broad spectrum antibiotic.

5. What in the difference between antiseptics & disinfectants?

Ans.Antiseptics are those antimicrobials which are applied to the living tissues such an wounds cuts, ulcers and diseased skin surfaces e.g. sofracmicine etc. these are not ingested like antibiotics. Disinfectants are applied to inanimate objects such as floors, drainage system instruments etc. e.g. phenol.

6. How is the problem of non – biodegradable detergents solved?

Ans.The detergents having highly branched hydrocarbon part is non – biodegradable & causes water pollution. This problem can be overcome if the branching of hydrocarbon chain is controlled & kept to minimum – unbranched detergents are biodegradable and cause less pollution.