## UNIT -16 CHEMISTRY IN EVERYDAY LIFE

## **1 Mark Question**

- 1) Which among the following is a semi synthetic modification of penicillin Erythromycin, ampicillin, tetracycline, ofloxacin.
- 2) Substances produced wholly or partly by chemical synthesis, which in low concentrations inhibits the growth or destroys microorganisms by intervening in their metabolic processes. Identify the substance.
- 3) Drugs are classified as

Aspirin – analgesic Chlordiazepoxide – tranquilizer Penicillin – antibiotic

Mention on what basis the above classification is done?

4) 
$$\begin{pmatrix} CH_3 \\ | \\ CH_3(CH_2)_{15} N - CH_3 \\ | \\ CH_3 \end{pmatrix}^{+}$$
 Br

Identify the type of detergent given in the above structure.

5) Which of the following drug combinations is not correct and state why?

Chloramphenicol – broad spectrum antibiotic.

Equanil – sedative.

Phenacetin – antipyretic.

Bithional – tranquilizer.

## **2 Mark Questions**

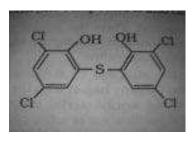
- 6) Analysis of water in a place shows that the water contains Magnesium Chloride. The people in that place are advised to use detergents for washing clothes. Why?
- 7) Pick out the odd one from the following and mention why?

Erythromycin, penicillin, tetracycline, chloramphenicol

- 8) Antiallergics and antacids are antihistamines. Can antiallergics be used to reduce the acidity of the stomach? Give plausible reason for your answer.
- 9) Following drugs are used as analgesics. One among them is different from others. Identify it and state the reason.

Morphine, Heroin, Aspirin, Codeine.

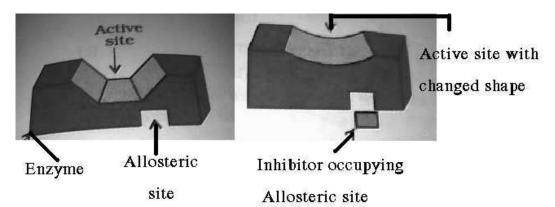
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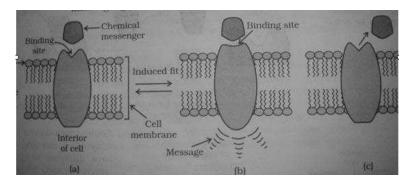
- i. Identify the compound.
- ii. What is its use?
- 11) Birth control pills essentially contain a mixture of synthetic estrogen and progesterone. What are estrogen and progesterone? Why are they used in birth control pills?
- 12) Sodium and Potassium soaps are only used for cleaning purposes. Why?
- 13) Detergents containing unbranched chains are more preferable than those containing branched chains. State the reason.
- 14) Low level of noradrenalin is the cause of depression. Suggest drugs to cure this problem?

## 3 Mark Questions

15) Observe the diagram and answer the questions given below:



- i. Name the drug target.
- ii. What is meant by allosteric site?
- iii. Mention the role of inhibitors.
- 16) Observe and identify the steps a, b, c from the diagram given below:



- 17) Sodium hydrogen carbonate and ranitidine are used as antacids. Which one is a better choice? Why?
- 18) Identify the following substances:
  - i. It is about 550 times as sweet as cane sugar and excreted from body in urine unchanged.
  - ii. It is 100 times as sweet as cane sugar and its use is limited to cold food and soft drinks as it is unstable at cooking temperature.
  - iii. It is a trichloro derivative of Sucrose and it is stable at room temperature.