

Chapter 30. Chemistry in Everyday Life

- Mixture of chloroxylenol and terpineol acts as
(a) antiseptic (b) antipyretic
(c) antibiotic (d) analgesic
(NEET 2017)
- Which of the following is an analgesic?
(a) Streptomycin (b) Chloromycetin
(c) Novalgin (d) Penicillin
(NEET-I 2016)
- Bithional is generally added to the soaps as an additive to function as a/an
(a) buffering agent (b) antiseptic
(c) softener (d) dryer.
(2015, Cancelled)
- Artificial sweetner which is stable under cold conditions only is
(a) saccharine (b) sucralose
(c) aspartame (d) alitame.
(2014)
- Antiseptics and disinfectants either kill or prevent growth of microorganisms. Identify which of the following statements is not true.
(a) Dilute solutions of boric acid and hydrogen peroxide are strong antiseptics.
(b) Disinfectants harm the living tissues.
(c) A 0.2% solution of phenol is an antiseptic while 1% solution acts as a disinfectant.
(d) Chlorine and iodine are used as strong disinfectants.
(NEET 2013)
- Dettol is the mixture of
(a) chloroxylenol and bithionol
(b) chloroxylenol and terpineol
(c) phenol and iodine
(d) terpineol and bithionol
(Karnataka 2013)
- Chloroamphenicol is an
(a) antifertility drug
(b) antihistaminic
(c) antiseptic and disinfectant
(d) antibiotic-broad spectrum (Mains 2012)
- Which one of the following is employed as Antihistamine?
(a) Chloramphenicol
(b) Diphenylhydramine
(c) Norothindrone
(d) Omeprazole (2011)
- Which one of the following is employed as a tranquilizer drug?
(a) Promethazine (b) Valium
(c) Naproxen (d) Mifepriston (2010)
- Which one of the following is employed as a tranquilizer?
(a) Naproxen (b) Tetracycline
(c) Chlorpheniramine (d) Equanil (2009)
- Chloropicrin is obtained by the reaction of
(a) steam on carbon tetrachloride
(b) nitric acid on chlorobenzene
(c) chlorine on picric acid
(d) nitric acid on chloroform. (2004)
- Which of the following forms cationic micelles above certain concentration?
(a) Sodium dodecyl sulphate
(b) Sodium acetate
(c) Urea
(d) Cetyltrimethylammonium bromide. (2004)
- Gammexane is
(a) bromobenzene
(b) benzyl chloride

- (c) chlorobenzene
(d) benzene hexachloride (1999)
- 14.** The decomposition of organic compounds, in the presence of oxygen and without the development of odoriferous substances, is called
(a) nitrification (b) N_2 -fixation
(c) decay (d) denitrification (1999)
- 15.** Aspirin is an acetylation product of
(a) *m*-Hydroxybenzoic acid
(b) *o*-Dihydroxybenzene
(c) *o*-Hydroxybenzoic acid
(d) *p*-Dihydroxybenzene (1998)
- 16.** Which of the following can possibly be used as analgesic without causing addiction and moon modification?
- (a) Diazepam
(b) Tetrahydrocannabinol
(c) Morphine
(d) N-Acetyl-para-aminophenol. (1997)
- 17.** Diazo coupling is useful to prepare some
(a) pesticides
(b) dyes
(c) proteins
(d) vitamins. (1994)
- 18.** Which one of the following statements is not true?
(a) Ampicillin is a natural antibiotic
(b) Aspirin is both analgesic and antipyretic
(c) Sulphadiazine is a synthetic antibacterial drug
(d) Some disinfectants can be used as antiseptics. (1994)

Answer Key

- 1.** (a) **2.** (c) **3.** (b) **4.** (c) **5.** (a) **6.** (b) **7.** (d) **8.** (b) **9.** (b) **10.** (d)
11. (d) **12.** (b) **13.** (d) **14.** (c) **15.** (c) **16.** (d) **17.** (b) **18.** (a)
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EXPLANATIONS

1. (a) : Dettol which is a well known antiseptic is a mixture of chloroxylenol and α -terpineol in a suitable solvent.

2. (c) : Streptomycin, chloromycetin and penicillin are antibiotics while novalgin is an analgesic.

3. (b)

4. (c) : Aspartame is stable under cold conditions and unstable at cooking temperature.

5. (a) : Dilute solutions of boric acid and hydrogen peroxide are weak antiseptics.

6. (b) : Dettol is the mixture of chloroxylenol and α -terpineol.

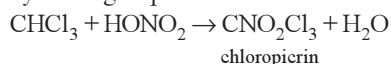
7. (d)

8. (b) : Diphenylhydramine is employed as antihistamine drug.

9. (b) : Valium is a tranquilizer.

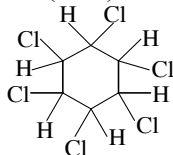
10. (d) : Equanil is used for the treatment of stress, mild and severe mental diseases *i.e.*, as a tranquilizer.

11. (d) : When chloroform is treated with concentrated nitric acid, its hydrogen is replaced by nitro group.



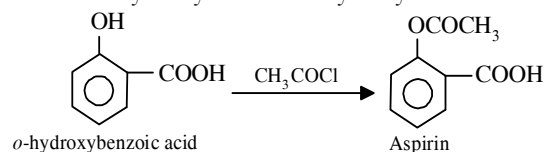
12. (b) : Sodium acetate forms cationic micelles. In the molecule of soaps and detergents the negative ions aggregate to form a micelle of colloidal size. The negative ion has a long hydrocarbon chain and a polar group (COO) at one end.

13. (d) : Gammexane is an isomeric form of benzenehexachloride (BHC).



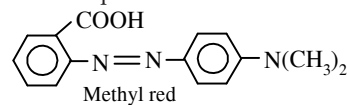
14. (c) : The other three type of reactions takes place only in the presence of bacteria, in which the nitrogen compound is decomposed either to nitrogen or nitrates or nitrites. While in decay reaction an organic compound is decomposed in presence of oxygen.

15. (c) : Aspirin is acetyl salicylic acid, which is formed by acetylation of *o*-hydroxybenzoic acid.



16. (d) : N-Acetyl-para-aminophenol (or paracetamol) is an antipyretic which can also be used as an analgesic to relieve pains.

17. (b) : Azo dyes are derived by coupling of a phenol adsorbed on the surface of a fabric with a diazonium salt. Dyes can be prepared by diazo coupling for example



18. (a) : Ampicillin is a modification of penicillin and thus is not a natural antibiotic. These semisynthetic penicillin (SSP) like ampicillin, cloxacillin, etc. are produced by chemically combining specific side chains (in place of benzyl side chain of penicillin group) or by incorporating specific precursors in the mould cultures. The aim of producing SSP's is to overcome penicillin's shortcomings such as poor oral efficacy, hyper sensitivity, susceptibility to penicillinase, narrow spectrum of activity, etc.