

**Chemistry in Everyday Life Important Questions With Answers**

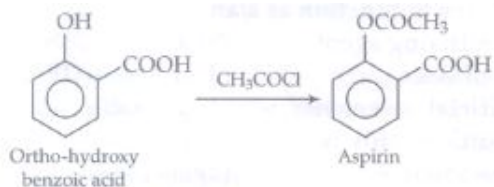
**NEET Chemistry 2023**

1. Aspirin is an acetylation product of :

- a) m-Hydroxybenzoic acid    b) o-Dihydroxybenzoic acid    **c) o-Hydroxybenzoic acid**  
 d) p-Dihydroxybenzene

**Solution : -**

Aspirin is acetyl salicylic acid which is formed by acetylation of ortho-hydroxy benzoic acid.



2. Antiseptics and disinfectants either kill or prevent growth of microorganisms. Identify which of the following statement 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 disinfectant.  
 d) Chlorine and iodine are used as strong disinfectants.

**Solution : -**

Dilute solutions of boric acid and hydrogen peroxide are weak antiseptics.

3. Which of the following is not a fat soluble vitamin?

- a) Vitamin B complex**    b) Vitamin D    c) Vitamin E    d) Vitamin A

**Solution : -**

The fat-soluble vitamins A, D, E, K are stored in the body for long time but vitamins B-complex is water soluble vitamin.

4. In the following question, a statement of assertion is followed by a statement of reason. Mark the correct choice as:

**Assertion:** Competitive inhibitors compete with the natural substrate for their attachment on the active sites of enzymes.

**Reason :** In competitive inhibition, inhibitor binds to allosteric site of the enzyme

- a) If both assertion and reason are true and reason is the correct explanation of assertion  
 b) If both assertion and reason are true but reason is not the correct explanation of assertion.  
**c) If assertion is true but reason is false**    d) If both assertion and reason are false.

**Solution : -**

Some drugs do not bind to the enzyme's active site but bind to allosteric site.

5. Drugs that bind to the receptor site and inhibit its natural function are called

- a) agonistic drugs    **b) antagonistic drugs**    c) antimicrobial drugs    d) allosteric drugs

**Solution : -**

Drugs that bind to the receptor site and inhibit its natural function are called antagonistic drugs. These are useful when blocking of message is required.

6. Antiseptics and disinfectants either kill or prevent growth of microorganisms. Identify which of the following statements is not true: \_\_\_\_\_.

a) Chlorine and iodine are used as strong disinfectants.

**b) Dilute solutions of Boric acid and Hydrogen Peroxide are strong antiseptics.**

Disinfectants harm the living tissues.

c)

d) A 0.2% solution of phenol is an antiseptic while 1 % solution acts as a disinfectant.

**Solution : -**

Dilute solutions of boric acid and hydrogen peroxide have weak antiseptic property.

7. Artificial sweetener which is stable under cold conditions only is :

a) saccharine    b) sucralose    **c) aspartame**    d) alitame

**Solution : -**

Aspartame is stable under cold conditions and unstable at cooking temperature.

8. Name an artificial sweetener which is derivative of sucrose

a) Saccharine    **b) Sucrolose**    c) Sucrobenzamide    d) Aspartame

**Solution : -**

Sucrolose is trichloro derivative of sucrose. Its appearance and taste are like sugar.

9. Barbiturates acts as

**a) hypnotic i.e., sleep producing agents**    b) non-narcotic analgesics    c) activator of neurotransmitters

d) antiallergic drugs.

10. Which one of the following is employed as a tranquilizer drug?

a) Promthazine    **b) Valium**    c) Naproxen    d) Mifepristone

**Solution : -**

Valium is a tranquilizer.

11. In the following question, a statement of assertion is followed by a statement of reason. Mark the correct choice as :

**Assertion:** Penicillin (G) is an antihistamine.

**Reason:** Penicillin (G) is effective against gram positive as well as gram negative bacteria.

**a) If both assertion and reason are true and reason is the correct explanation of assertion**

b) If both assertion and reason are true but reason is not the correct explanation of assertion

c) If assertion is true but reason is false.    **d) If both assertion and reason are false**

**Solution : -**

Penicillin (G) is an antibiotic and is effective against some gram positive bacteria.

12. Which of the following is an analgesic?

a) Streptomycin    b) Chloromycetin    **c) Novalgin**    d) Penicillin

**Solution : -**

Streptomycin, chloromycetin and penicillin are antibiotics while novalgin is an analgesic.

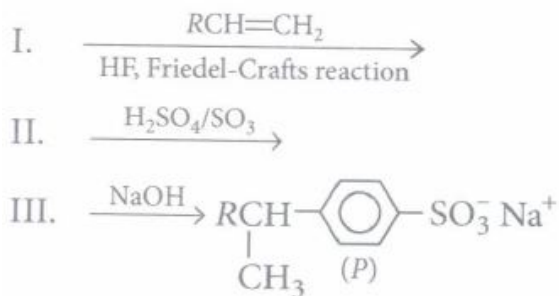
13. Which of the following is not a food additive?

a) Preservatives    b) Sweetening agents    c) Flavours    **d) Oxidants**

**Solution : -**

Antioxidants are added to food to prevent it from spoiling.

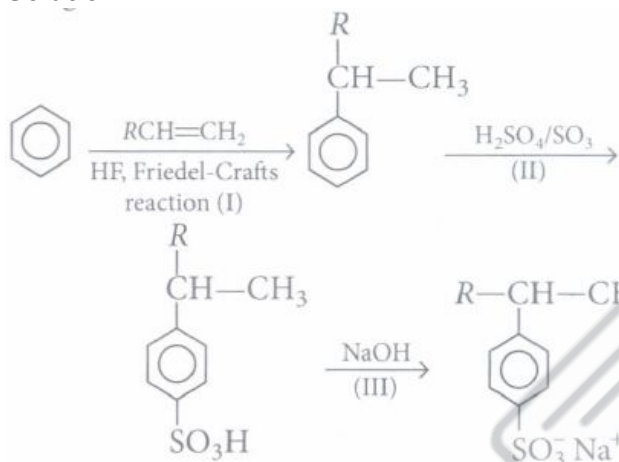
14. For the preparation of a detergent 'P' from benzene, the following steps are involved:



These steps should be in sequence of

- a) I, III, II    **b) I, II, III**    c) II, I, III    d) II, III, I

**Solution : -**



15. What is tincture of iodine?

- a) 2-3% solution of iodine in alcohol-water mixture.**    b) A mixture of iodine in chloroxylenol.  
c) A mixture of 0.2% phenol and 2-3% iodine in water    d) 2-3% solution of iodine in potassium iodide.

**Solution : -**

2-3% solution of iodine in alcohol-water mixture is known as tincture of iodine. It is a powerful antiseptic.

16. The main constituents of dettol are

- a) chloramphenicol + glycerol    b) 2-3% solution of iodine in alcohol    c) 0.2% solution of phenol  
**d) chloroxylenol and terpineol.**

17. In the following question, a statement of assertion is followed by a statement of reason. Mark the correct choice as :

**Assertion:** Metal hydroxides are better antacids than hydrogen carbonates.

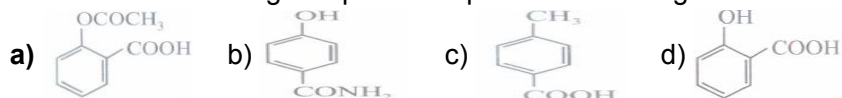
**Reason:** Being insoluble metal hydroxides do not increase the pH above neutrality.

- a) If both assertion and reason are true and reason is the correct explanation of assertion.**  
b) If both assertion and reason are true but reason is not the correct explanation of assertion  
c) If assertion is true but reason is false    d) If both assertion and reason are false

18. Some drugs do not bind to the enzyme's active site, instead bind to a different site of enzyme. This site is called

- a) allosteric site**    b) substrate site    c) ionic site    d) competitive site.

19. Which of the following compounds represents an analgesic?



**Solution : -**

2-Acetoxy benzoic acid, commonly known as 'aspirin' acts as an analgesic.

20. Which of the following defines the term opiates?

- a) **Narcotic analgesics obtained from the opium poppy.**    b) Non-narcotic analgesics which reduce fever.  
c) Narcotic drugs that inhibit pathogenic microbes.    d) Tranquilizers used to induce sleep.

**Solution : -**

Morphine narcotics are sometimes referred to as opiates, since they are obtained from the opium poppy.

21. Match the drugs in column I with the examples given in column II and mark the appropriate choice

Column I		Column II	
(A)	Antibiotic	(i)	Codeine
(B)	Antiseptic	(ii)	Phenelzine
(C)	Analgesic	(iii)	Chloramphenicol
(D)	Tranquilizer	(iv)	Chloroxylenol

- a) (A) → (i), (B) → (iii), (C) → (ii), (D) → (iv)    b) (A) → (iv), (B) → (ii), (C) → (iii), (D) → (i)  
c) (A) → (ii), (B) → (iv), (C) → (i), (D) → (iii)    **d) (A) → (iii), (B) → (iv), (C) → (i), (D) → (ii)**

22. In the following questions, a statement of assertion is followed by a statement of reason. Mark the correct choice as:

**Assertion:** Chemicals added to foods for increasing their shelf life are called preservatives.

**Reason :** Natural sweeteners like sucrose and artificial sweeteners like saccharin are commonly used as food preservatives.

- a) If both assertion and reason are true and reason is the correct explanation of assertion.  
b) If both assertion and reason are true but reason is not the correct explanation of assertion.  
**c) If assertion is true but reason is false.**    d) If both assertion and reason are false

**Solution : -**

Sweeteners are added to impart sweetness to the food. Sodium benzoate, table salt, vegetable oils etc. are some commonly used preservatives.

23. In the following question, a statement of assertion is followed by a statement of reason. Mark the correct choice as :

**Assertion:** Low level of noradrenaline causes depression.

**Reason:** Equanil is used in controlling depression.

- a) If both assertion and reason are true and reason is the correct explanation of assertion  
**b) If both assertion and reason are true but reason is not the correct explanation of assertion**  
c) If assertion is true but reason is false.    d) If both assertion and reason are false.

**Solution : -**

If the level of noradrenaline is low then the signal sending activity becomes low and person suffers from depression.

24. Which one of the following is employed as antihistamine?

- a) Chloramphenicol    **b) Diphenhydramine**    c) Norethindrone    d) Omeprazole

**Solution : -**

Diphenhydramine is employed as antihistamine drug.

25. In the following question, a statement of assertion is followed by a statement of reason. Mark the correct choice as :

**Assertion:** Chemical messengers are received at the binding sites of receptor proteins.

**Reason:** Chemical messenger gives messages to the cell without entering the cell

a) If both assertion and reason are true and reason is the correct explanation of assertion

b) If both assertion and reason are true but reason is not the correct explanation of assertion

c) If assertion is true but reason is false d) If both assertion and reason are false.

26. Antiseptics are the chemicals which either \_\_\_\_\_ or the growth of microorganisms and are applied to the \_\_\_\_\_.

a) kill, prevent, living tissues b) kill, prevent, non-living objects c) increase, decrease, living tissues

d) kill, increase, non-living tissues

27. Which of the following is an example of non-biodegradable detergent?

a)  $\text{CH}_3-(\text{CH}_2)_{11}-\text{SO}_3\text{Na}$  b)  $\text{CH}_3-(\text{CH}_2)_9-\underset{\text{CH}_3}{\text{CH}}-\text{SO}_3\text{Na}$  c)  $\left[ \underset{\text{CH}_3}{\text{CH}}-\text{CH}_2 \right]_{10}-\text{CH}_2-\text{SO}_3\text{Na}$  d)  $\text{CH}_3-(\text{CH}_2)_{10}-\text{CH}_2-\text{OSO}_3\text{Na}$

**Solution : -**

Branched alkyl groups are not dissociated easily and that's why such compounds are non-biodegradable.

28. In the following question, a statement of assertion is followed by a statement of reason. Mark the correct choice as :

**Assertion:** The -As=As- linkage present in arsphenamine (a sulpha drug) resembles the -N=N- linkage present in azo dyes.

**Reason :** The first antibacterial agent, prontosil resembles in structure to the compound salvarsan.

a) If both assertion and reason are true and reason is the correct explanation of assertion.

b) If both assertion and reason are true but reason is not the correct explanation of assertion.

c) If assertion is true but reason is false. d) If both assertion and reason are false.

29. Antimicrobial drugs include

(i) antiseptics

(ii) antibiotics

(iii) disinfectants

a) (i) and (ii) b) (i) and (iii) c) (ii) and (iii) d) (i), (ii) and (iii)

**Solution : -**

Antimicrobials destroy or prevent the pathogenic action of microorganisms. Antibiotics, antiseptics and disinfectants are antimicrobial drugs.

30. Which one of the following is employed as Antihistamine?

a) Chloramphenicol b) Diphenyl hydramine c) Norothindrone d) Omeprazole

**Solution : -**

Diphenyl hydramine is employed as an antihistamine.

31. A drug which acts as antipyretic as well as analgesic is

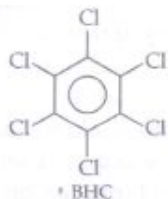
a) chloroquine b) penicillin c) chlordiazepoxide d) 4-acetamidophenol.

32. Gammexane is :

a) bromobenzene b) benzyl chloride c) chlorobenzene d) benzene hexachloride

**Solution : -**

Gammexane is an isomeric form of benzene hexachloride (BHC)



33. An antioxidant which is added to butter to increase its shelf life from months to years is

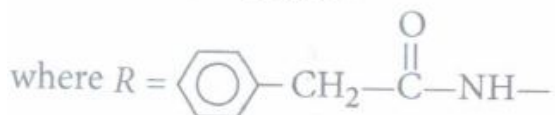
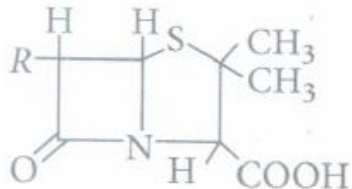
- a) Sodium benzoate    **b) Butylated hydroxy anisole**    c) Sulphur dioxide    d) Butylated hydroxy toluene
34. Which of the following can possibly be used as analgesic without causing addiction and moon modification?

a) Diazepam    b) Tetrahydrocationl    c) Morphine    **d) N-Acetyl-para-aminophenol**

**Solution : -**

N-Acetyl-para amino phenol i.e., paracetamol is an antipyretic which can also be used as an analgesic to relieve pains.

35. The structure given below is known as



- a) Penicillin F    **b) Penicillin G**    c) Penicillin K    d) Ampicillin
36. In the following question, a statement of assertion is followed by a statement of reason. Mark the correct choice as :

**Assertion:** Clothes washed with soap using hard water do not absorb dyes evenly.

**Reason:** Hard water contains calcium and magnesium ions.

- a) If both assertion and reason are true and reason is the correct explanation of assertion.  
**b) If both assertion and reason are true but reason is not the correct explanation of assertion.**  
 c) If assertion is true but reason is false.    d) If both assertion and reason are false.

**Solution : -**

Calcium and magnesium ions form insoluble calcium and magnesium soaps which adheres on to the fibre of the cloth as gummy mass and hence dye does not get absorbed evenly.

37. Antihistamines are not helpful
- a) in curing nasal allergies    b) in treating rashes caused by itching    **c) in bringing down acute fever**  
 d) in vasodilation

**Solution : -**

Antihistamines are vasodilators and antiallergics.

38. The use of chemicals for treatment of diseases is called
- a) chemotherapy**    b) physiotherapy    c) angiotherapy    d) polytherapy

39. Which of the following is a narcotic analgesic?
- a) Ibuprofen    b) Aspirin    c) Paracetamol    **d) Morphine**

40. Which of the following antibiotics is bactericidal?
- a) Erythromycin    b) Tetracycline    **c) Penicillin**    d) Chloramphenicol

**Solution : -**

Penicillin is a bactericidal antibiotic.

41. Which of the following is not true about antifertility drugs?
- a) Birth control pills contain a mixture of synthetic estrogen and progesterone derivatives  
**b) Both compounds i.e., estrogen and progesterone are vitamins.**

- c) Progesterone is supposed to suppress ovulation  
 d) Norethindrone is an example of synthetic progesterone derivative

**Solution : -**

Estrogen and progesterone are hormones.

42. Which among the following is not an antibiotic?  
 a) Chloramphenicol **b) Oxytocin** c) Erythromycin d) Tetracyclin

**Solution : -**

Oxytocin is a hormone, which is released from posterior pituitary gland. It controls the contraction of uterus after child birth and releases milk from the mammary glands.

43. The pair whose both species are used in antacid medicinal preparation is:  
**a)  $\text{NaHCO}_3$  and  $\text{Mg(OH)}_2$**  b)  $\text{Na}_2\text{CO}_3$  and  $\text{Ca(HCO}_3)_2$  c)  $\text{Ca(HCO}_3)_2$  and  $\text{Mg(OH)}_2$   
 d)  $\text{Ca(OH)}_2$  and  $\text{NaHCO}_3$

**Solution : -**

$\text{NaHCO}_3$  and  $\text{Mg(OH)}_2$  both are antacids.

44. 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.

**Solution : -**

Ampicillin is a modification of penicillin and 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.

45. In the following question, a statement of assertion is followed by a statement of reason. Mark the correct choice as :

**Assertion :** Receptors are crucial to body's communication process.

**Reason:** Receptors are proteins.

- a) If both assertion and reason are true and reason is the correct explanation of assertion.  
**b) If both assertion and reason are true but reason is not the correct explanation of assertion.**  
 c) If assertion is true but reason is false. d) If both assertion and reason are false

**Solution : -**

Neurotransmitters are small molecules which bind to the receptor for a very short time to transfer message to it and depart quickly unchanged after transferring the message. The receptor then forwards the message inside the cell.

46. Which of the following will not enhance nutritional value of food?  
 a) Minerals **b) Artificial sweeteners** c) Vitamins d) Amino acid

**Solution : -**

Artificial sweeteners will not enhance nutritional value of food. Nutritional supplements are minerals, vitamins and amino acids.

47. Match the column I with column II and mark the appropriate choice

Column I	Column II
(A) Alitame	(i) Antihistamine
(B) Iodoform	(ii) Artificial sweetener
(C) Prontosil	(iii) Antibacterial agent
(D) Terfenadine	(iv) Antiseptic

- a) (A) → (i), (B) → (ii), (C) → (iv), (D) → (iii)    b) (A) → (ii), (B) → (iv), (C) → (iii), (D) → (i)  
 c) (A) → (iii), (B) → (i), (C) → (ii), (D) → (iv)    d) (A) → (iv), (B) → (iii), (C) → (i), (D) → (ii)

48. Barbituric acid and its derivatives are well known as

- a) tranquilizers    b) antiseptics    c) analgesics    d) antipyretics

**Solution :** -

The drugs which act on the central nervous system (CNS) and help in reducing stress and fatigue by inducing a sense of well being are called tranquilizers. They are psychotherapeutic drugs. The most commonly used tranquilizers are barbituric acid and its 5, 5-disubstituted derivatives such as veronal, luminal and seconal.

49. Match the column I with column II and mark the appropriate choice

Column I	Column II
(A) $\text{CH}_3(\text{CH}_2)_{10}\text{CH}_2\text{OSO}_3^- \text{Na}^+$	(i) Cationic detergent
(B) $[\text{CH}_3(\text{CH}_2)_{15}\text{N}(\text{CH}_3)-\text{CH}_3]^+ \text{Br}^-$	(ii) Non-ionic detergent
(C) $\text{CH}_3(\text{CH}_2)_{16}\text{COO}(\text{CH}_2\text{CH}_2\text{O})_n\text{CH}_2\text{CH}_2\text{OH}$	(iii) Soap
(D) $\text{C}_{17}\text{H}_{35}\text{COONa}$	(iv) Anionic detergent

- a) (A) → (iii), (B) → (ii), (C) → (iv), (D) → (i)    b) (A) → (ii), (B) → (iv), (C) → (i), (D) → (iii)  
 c) (A) → (i), (B) → (iii), (C) → (iv), (D) → (ii)    d) (A) → (iv), (B) → (i), (C) → (ii), (D) → (iii)

50. Glycerol is added to soap. It functions \_\_\_\_\_

- a) as a filler    b) to increase lathering    c) to prevent rapid drying    d) to make soap granules

**Solution :** -

Shaving soaps contain glycerol to prevent rapid drying.

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