

CHEMISTRY

JEE (MAIN AND ADVANCED) CHEMISTRY

CHEMISTRY IN EVERY DAY LIFE

Problems

1. What is the structural difference between morphine and codeine? Why codeine is more versatile?



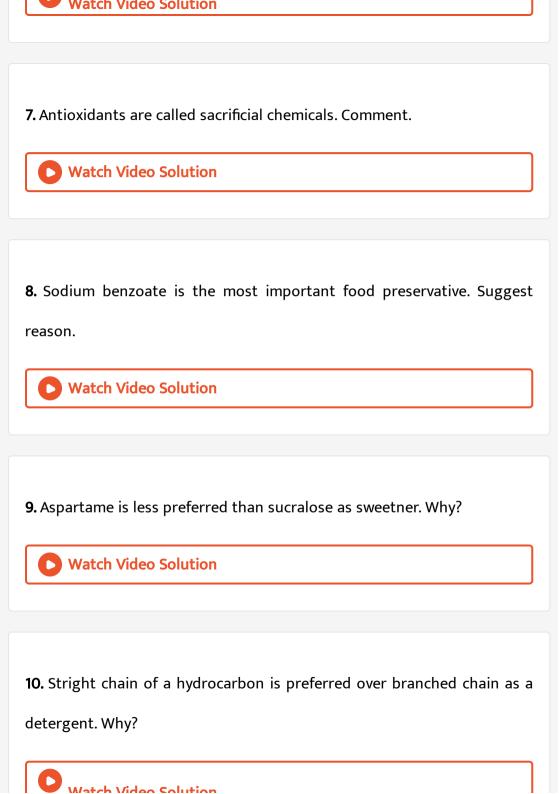
Watch Video Solution

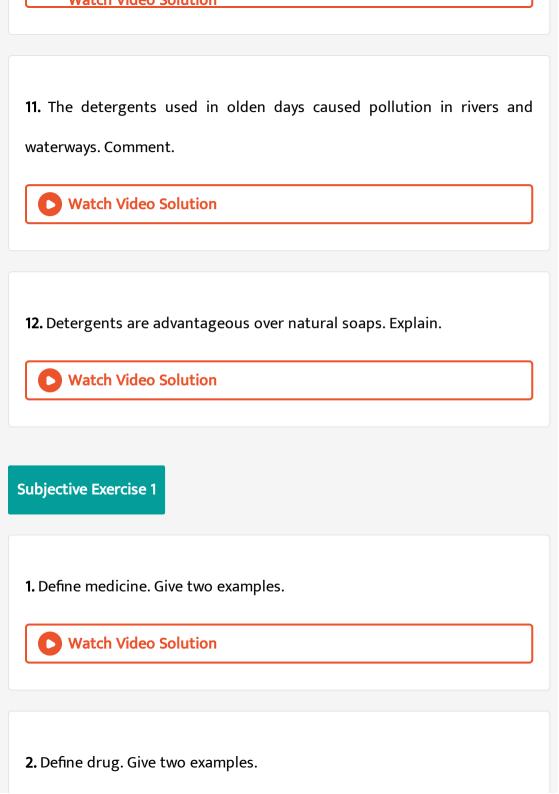
2. Aspirin is used to prevent heart attack and transient ischemic attacks.

Comment.



3. A patient was suffering from urinary infection. What is the prescribed antibiotic? **Watch Video Solution** 4. What is the difference between disinfectants and antiseptics? Can the same chemcial be used for both the pruposes? **Watch Video Solution** 5. Is ranitidine an antacid or antihistamine? Can it be used for both purposes? **Watch Video Solution 6.** What do you understand by mild tranquilizer? Give examples.





Watch Video Solution
3. What is the difference between drug and medicine? What happens
when a drug is used in more than prescribed amounts?
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4. What are analgesics? How are they classified? Give the preparation of codeine from morphine.
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5. Discuss the preparation of aspirin. Write the necessary equation.
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6. What are the differences between a sedative and a hypnotic ?

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7. Name any two compounds that are derivatives of barbituric acid. Give their structures.



8. What are tranquilisers? Mention some derivatives of 2-phenylethylamine that act as tranquilisers.



9. What are antimicrobials ? Give the general formulae and derivatives of penicillin.



10. What are antihistamines and antacids? Give examples.
Watch Video Solution
11. Define the following and give two examples for each.
a) Antibiotics b) Antacids c) Antihistamines
Watch Video Solution
12. Explain the action of following drugs : a) Ibuprofen b) Luminal c) Phenelzine d) Norethindrone
ay ibaprofer by Ediffinal cy Friencizine ay Norethinarone
Watch Video Solution
13. Define antifertility drugs and give two examples.
3. Define until crimity drugs and give two examples.
Watch Video Solution

14. Explain antiseptics and disinfectants.
Watch Video Solution
Subjective Exercise 2 Very Short Type Question
1. What are food preservatives ? Give examples.
Watch Video Solution
2. Synthetic food colours are not advisible. Why?
Watch Video Solution
3. What are the advantages of artificial sweetening agents?
Watch Video Solution

4. Write the structures of alitame and aspartame.
Watch Video Solution
Subjective Exercise 3 Very Short Type Question
1. What are soaps chemically?
Watch Video Solution
2. Name different type of soaps.
Watch Video Solution
3. What is saponifications.
Watch Video Solution

4. Write the differences between soapes and detergents.
Watch Video Solution
5. What are synthetic detergents? How are they better than soapes.
Watch Video Solution
6. Can we use a detergent with hard water for the purpose of cleaning ? Explain.
Watch Video Solution
7. What are the types of detergents? How are they prepared?
Watch Video Solution

Answer: C

2. The classification of drugs in the following manner is most conveniant for doctors

A. Based on pharmacological effect

B. Based on drug action

C. Based on chemical structure

D. Based on molecular targets

Answer: A



- 3. Molecular mass of drugs usually is in the range of
- A. $10-100\mu$
 - B. 100 500
 - C. 500 1000
 - D. $1000-10000\mu$

Answer: B Watch Video Solution

- 4. An ideal drug should not have the following
 - A. quality
 - B. Be toxic
 - C. Be localised at invading gland.
 - D. Have to toierable side effects

Answer: A



- **5.** The following can be a drug target
 - A. Nucleic acid

B. Paracetmol C. Omeprazole D. Terfenadine Answer: A **Watch Video Solution Objective Exercise 1 Antacids** 1. Secretion of HCl in the stomach is stimulated by A. Histamine B. Dopamine C. Noradrenaline D. Serotonine Answer: A

Watch Video Solution	

- 2. The following anti histamine does not act as antacid
 - A. Terfenadine
 - B. Lansoprazole
 - C. Cinitidine
 - D. Rantidine

Answer: A

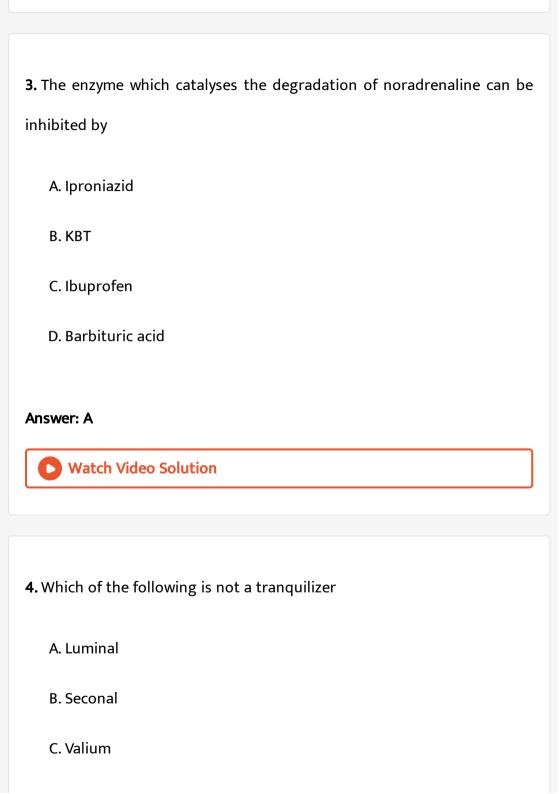


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Objective Exercise 1 Tranquilisers

- 1. Barbituric acid and its derivatives are well known as
 - A. Tranquillizers

B. Antiseptics C. Antibiotics D. Analgesics Answer: A **Watch Video Solution** 2. The substances which affect the central nervous system and induce sleep are called A. antipyretics B. tranquilizers C. analgesics D. anti septic **Answer: B**



D. Alitame
Answer: D
Watch Video Solution
5. Which of the following substance may be used as antiseptic as well as
disinfectant

A. formal dehyde

B. chlorine

 $\mathsf{C}.\,KMnO_4$

D. Phenol

Watch Video Solution

Answer: D

6. The condensation product of malonyl dichloride and urea in presence of $POCI_3$
A. Barbituric acid
B. Ibuprofen
C. Codine
D. Pencilline
Answer: A
Watch Video Solution
Watch Video Solution
7. Barbiturates exert deppressant action on
7. Barbiturates exert deppressant action on
7. Barbiturates exert deppressant action on A. Gut

Answer: C



8. Which of the following can possibly be used as analgesic without causing addiction and any modification ?

- A. Morphine
- B. Diazepam
- C. N- Acetyl para-aminophenol
- D. Tetrahydrocatechol

Answer: C



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9. 2-Acetoxy benzoic acid can be used as

B. Antipyretic
C. Antibiotic
D. Mordant dye
Answer: B
Watch Video Solution
10. Substances which relieve body pains are termed as
A. antipyretics
B. antibiotics
C. analgesics
D. antimalarials
Answer: C
Watch Video Solution

A. Antiseptic

11. The drug given during hyper tension is
A. Streptomycin
B. Chloroxylenol
C. Equanil
D. Aspirin
Answer: C
Answer: C Watch Video Solution
Watch Video Solution

C. analgesic drug

D.	1	and	3
-.		alla	_

Answer: D



Watch Video Solution

13. Which one of the following compounds gives aspirin on reacting with acetic anhydride in the presence of cone H_2SO_4 ?



В. 📝

C. 📄

D. 📝

Answer: B



14. Substances which bring down the body temperature during fever are known as

A. antibiotics

B. analgesics

C. antipyretics

D. Antimalarial

Answer: C



15. Paracetamol is

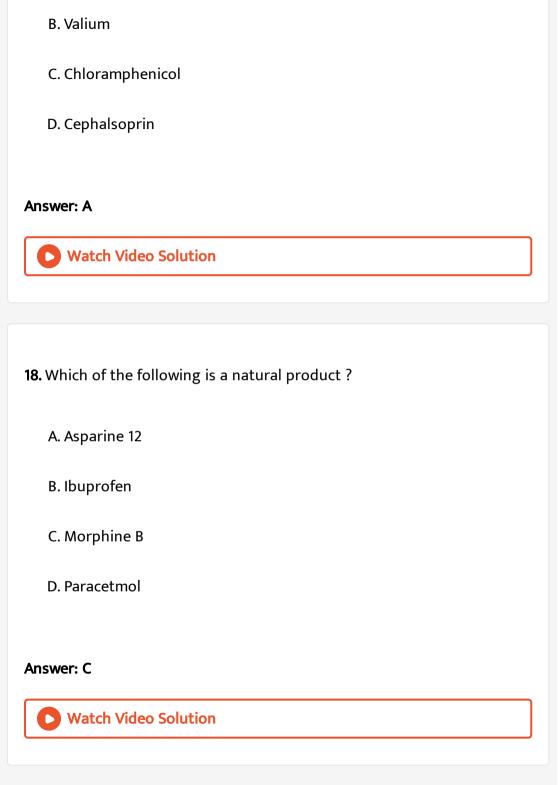
A. acetyl derivative of orthohydroxy benzoic acid

B. acetyl derivative of p-amino phenol

C. acetyl derivative of benzoic acid

D. acetyl derivative of para hydroxy benzoic acid

Answer: B Watch Video Solution 16. Functional groups in aspirin are A. carboxylic acid B. ester C. alcohol D. 1 and 2 **Answer: D** Watch Video Solution 17. The drug used for prevention of heart attacks A. Aspirin



19. Which of the substance added to soap to make it antiseptic
A. lodine
B. $KMnO_4$
C. Bithional
D. CI_2
Answer: C
Watch Video Solution
20. Which of the following is an addictive drug?
A. Papaverine
B. Pencilline
C. Sulphadiazine
D. Aspirin

Answer: A



21. An example for coal tar analgesic

- A. Acetanilide
- B. Aniline
- C. Analgin
- D. Acetanilide $\,+\,$ aniline

Answer: D



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22. Which of the following is an antacid

A. $Mg(OH)_2$

- B. $Al(OH)_3$ gel
- D. All

 $\mathsf{C}.\,MgCO_3$

Answer: D



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Objective Exercise 1 Antimicrobials

1. Tincture of iodine (2-3% I_2 in water/alcohol) is

- - A. Antiseptic
 - B. Disinfectant
 - C. Analgesic
 - D. Antipyretic

Answer: A



- 2. Sulpha drugs are derivatives of
 - A. Benzene sulphonic acid
 - B. Sulphanilic acid
 - C. Sulphanilamide
 - D. p- Aminobenzoic acid

Answer: C



- 3. The following drugs canot be considered as anti microbials
 - A. Antiseptic
 - B. Antipyretic
 - C. Antibiotic

D. Disinfectant
Answer: B
Watch Video Solution
4. Biological specimens can be preserved in
A. Formalin
B. Dettol
C. Boric acid
D. Chlorine water
Answer: A
Watch Video Solution
5. Urinary infections can be cured by using

D. Dysidazirine Chemicals in food Answer: A **Watch Video Solution** 6. The anti oxidants for wine are A. $SO_2\&SO_3^{-2}$ B. BHT&BHA C. Citric acid D. Tetrazine Answer: A Watch Video Solution

A. Chloramphenicol

B. Novestrol

C. Sulphadiazine

7. Metabolism of C_6H_5COONa finally excreated as
A. Benzene
B. Hippuric acid
C. BHT
D. BHA
Answer: B
Watch Video Solution
8. The following substance is more reactive towards oxygen than food
meterial
A. Antioxidant
B. Food colour
C. Food sweetner

D. Food nutrients
Answer: A
Watch Video Solution
9. Control of sweetness of food is difficult with
A. Asparatame
B. Sucrolose
C. Fructose
D. Alitame
Answer: D
Watch Video Solution
10 Cu analaga atmustuma in ainsilan ta
10. Sucrolose structure is similar to

B. Sucrose	
C. Fructose	
D. Glucose	
Answer: B	
Allswel: b	
Watch Video Solution	
11. More number of peptide bonds are present in	
A. alitame	
A. alitame B. aspartame	
B. aspartame	
B. aspartame C. saccharin	
B. aspartame C. saccharin	

12. Acetylation of the two OH groups of Morphine with acetic anhydride gives
A. Codeine
B. Heroin
C. Cocaine
D. quinine
Answer: B
Answer: B Watch Video Solution
Watch Video Solution
Watch Video Solution 13. Receptors are

D. Nucleric acids
nswer: A
Watch Video Solution
4. Drugs which supplement or substitute for chemical messengers are
A. antagonists
B. agonists
C. blocking chemicals
D. All
nswer: B

15. List-I contains the names of compounds and list-II contains their

functions.

List - 1

List - II

A) heroin 1) used as artificial sweetener

2) used as analossis and antipo

5) used to prepare sedatives and hypnotics

B) aspirin 2) used as analgesic and antipyretic C) analgin 3) to suppress headache, discomfort and fever due to co

D) barbituric acid 4) induces sleep in presence of pain

The correct match is

A. 4 3 1 2

B. 1 2 4 3

c. $\begin{pmatrix} A & B & C & D \\ 4 & 3 & 2 & 5 \end{pmatrix}$

D. $egin{array}{ccccc} A & B & C & D \\ 2 & 1 & 5 & 4 \end{array}$

Answer: C



Watch Video Solution

16. The antiseptic used in good quality soaps is

A. Lysol
B. Bithional
C. Boric acid
D. Salol
Answer: B
Watch Video Solution
17. Sulpha drugs are derivatives of
A. Benzene sulphonic acid
B. Sulphanilic acid
C. Sulphanilamide
D. P- aminobenzoic acid
Answer: C
Watch Video Solution

18. The following drugs canot be considered as anti microbials
A. Antiseptic
B. Antipyretic
C. Antibiotic
D. Disinfectant
Answer: B
Watch Video Solution
19. Tincture of iodine (2-3% I_2 in water/alcohol) is
A. Antiseptic
B. Disinfectant
C. Analgesic

D. Antipyretic
Answer: A Watch Video Solution
20. Biological specimens can be preserved in
A. Formalin
B. Dettol
C. Boric acid
D. Chlorine water
Answer: A
Watch Video Solution
21. Urinary infections can be cured by using

A. Chloramphenicol B. Novestrol C. Sulphadiazine D. Dysidazirine Answer: A **Watch Video Solution** 22. Among the following compounds, which one is used as a flavouring agent in ice creams, chocolates and candies? A. vanillin B. valine C. salicin D. veronal Answer: A



Objective Exercise 1 Assertion And Reason Type

- 1. (A): Paracetamol is widely used as analgesic even it is an antipyretic.
- (R): It is administered to aspirin sensitive patients.
 - A. Both A & R are true, R is the correct explanation of A
 - B. Both A & R are true, R is not correct explanation of A
 - C. A is true, R is false
 - D. A is false, R is true

Answer: A



- 2. (A): Same chemicals may be used as antiseptics as well as disinfectants.
- (R): A chemical which destroys micro organism can be used as an

antiseptic in higher concentration and as disinfectant in lower concentration.

A. Both A & R are true, R is the correct explanation of A

B. Both A & R are true, R is not correct explanation of A

C. A is true, R is false

D. A is false, R is true

Answer: C



- **3.** (A): Morphine is an example for narcotic analgesic.
- (R): Narcotic drugs have no addictive properties but is limited to mild aches and pains.
 - A. Both A & R are true, R is the correct explanation of A
 - B. Both A & R are true, R is not correct explanation of A
 - C. A is true, R is false

D. A is false, R is true

Answer: C



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- **4.** (A): A mixture of $Mg(OH)_2$ is better antacid than $NaHCO_3$.
- (R): $NaHCO_3$ makes stomach alkaline and triggers the over production of acid where-as a mixture of $Al(OH)_3$ and $Mg(OH)_2$ does not increase the pH above 7 in stomach.
 - A. Both A & R are true, R is the correct explanation of A
 - B. Both A & R are true, R is not correct explanation of A
 - C. A is true, R is false
 - D. A is false, R is true

Answer: A



- **5.** (A): Birth control pills suppress ovulation.
- (R): Birth control pills contain progesterone.
 - A. Both A & R are true, R is the correct explanation of A
 - B. Both A & R are true, R is not correct explanation of A
 - C. A is true, R is false
 - D. A is false, R is true

Answer: A



- 6. (A): Hair washed with soap and hard water looks dull.
- (R): Calcium and magnesium salts soaps are 1 insoluble in water.
 - A. Both A & R are true, R is the correct explanation of A
 - B. Both A & R are true, R is not correct explanation of A
 - C. A is true, R is false

D. A is false, R is true

Answer: B



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7. (A): Bithional is added to soap for its beautification and solidification.

(R): Bithionol is a sulphadrug.

A. Both A & R are true, R is the correct explanation of A

B. Both A & R are true, R is not correct explanation of A

C. A is true, R is false

D. A is false, R is true

Answer: D



- **8.** (A): Sythetic detergents do not contain any soap but exhibit all the properties of soaps.
- (R): Synthetic detergents give foam even in hard water.
 - A. Both A & R are true, R is the correct explanation of A
 - B. Both A & R are true, R is not correct explanation of A
 - C. A is true, R is false
 - D. A is false, R is true

Answer: A



hydro carbon chain.

- **9.** (A): Detergent containing more branches in the hydrocarbonpart are water polluting.
- (R) : Bacteria cannot degrade detergent containing highly branched

- A. Both A & R are true, R is the correct explanation of A
- B. Both A & R are true, R is not correct explanation of A
- C. A is true, R is false
- D. A is false, R is true

Answer: B



- **10.** (A): The drugs which act on the central nervous system and help in reducing anxiety are called antibiotics.
- (R): Pencillin is an antibiotic.
 - A. Both A & R are true, R is the correct explanation of A
 - B. Both A & R are true, R is not correct explanation of A
 - C. A is true, R is false
 - D. A is false, R is true

Answer: D **Watch Video Solution Objective Exercise 2 Classification** 1. Histidine can be converted into histamine by A. Decarboxylation of histidine B. Dehydration of histidine C. Decarboxylation of histamine

Answer: A



D. Dehydrohalogenation of histamine

2. Naturally occurring α aminoacid, histidine is____in nature

D. Neutral **Answer: B Watch Video Solution** 3. Histidine can be converted into histamine by A. Decarboxylation of histidine B. Dehydration of histidine C. Decarboxylation of histamine D. Dehydrohalogenation of histamine Answer: A **Watch Video Solution**

A. Acidic .

B. Basic

C. Amphoteric

4. Naturally occurring $lpha$ aminoacid, histidine is in nature
A. Acidic
B. Basic
C. Amphoteric
D. Neutral
Answer: B
Watch Video Solution
5. Drugs possesing same structural features will have
A) Same mechanism of action
B) Similar physiological & psycological effect
C) Similar phormocological effect.
A. Only A and B are correct

- B. Only B and C are correct
- C. Only A and C are correct
- D. A, B and C are correct

Answer: D



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- **6.** The substrate will be binded to the active site of the enzyme through
- a) Ionic binding
- b) Hydogen bonding
- c) van der Waals interactions
- d) Dipole-dipole interactions

Correct answer is

- A. a, b and c only
 - B. b, c and d only
 - C. a, b and d only

D. a, b, c and d

Answer: D



Watch Video Solution

- 7. The chemical messengrs transport message between
- a) Neuron to neuron
- b) Neuron to muscles

d) Enzyme to enzyme

- c) Enzyme to receptor are
- Correct answers are
- A. a only
 - B. b only
 - C. a and b
 - D. a, b, c and d

Answer: C



Objective Exercise 2 Antacids

- 1. Histamine causes
 - A. Allergic response to pollen
 - B. Secreation of acid in stomach
 - C. Nasal congestion
 - D. All the above

Answer: D



- 2. Ranitidine is a
 - A. Antihistamine

C. Analgesic drug
D. Tranquiliser
Answer: A
Watch Video Solution
3. Luminal, a barbiturate drug is used as a /an
A. Antihistamine
B. Sedative
C. Antiseptic
D. Antimalarial
Answer: B
Watch Video Solution

B. Antacid

4. For the relief of post operative pains, cardiac pains, suitable analgesic
is
A. Codeine
B. Aspirin
C. Ibuprofen
C. Ibupi oferi
D. Any non - addictive analgesics
Answer: A
Watch Video Calation
Watch Video Solution
watch video Solution
watch video Solution
5. Drug which helps to reduce anxiety
5. Drug which helps to reduce anxiety
5. Drug which helps to reduce anxiety A. Tranquiliser
5. Drug which helps to reduce anxiety
5. Drug which helps to reduce anxiety A. Tranquiliser

Answer: A **Watch Video Solution** 6. Which of the following is used for inducing sleep? A. Paracetamol B. Chloroquine C. Bithional D. Barbituric acid derivatives **Answer: D Watch Video Solution** 7. Which of the following is the a tranquilizer? A. Luminal

B. Seconal C. Equanil D. All the three **Answer: D** Watch Video Solution **Objective Exercise 2 Analgesics** 1. An antipyretic drug on prolonged usage causes irreversible kidney damage. It is A. Aspirin B. Paracetomol C. Phenacetin

D. Pencilline

Answer: C Watch Video Solution 2. The antiseptic present in dettol is A. codine B. Choloroxylenol C. bithional D. lodine **Answer: B Watch Video Solution** 3. Scouring soaps and soap powders contain soap along with A. lime

B. powdered pumice $\mathsf{C.}\,Al_2(SO_4)_3$ D. all **Answer: B Watch Video Solution** 4. I) Aspirin is an acetyl derivative of o-hydroxy benzoic acid II) In aspirin acetyl group is substituted in the place of phenolic hydrogen A. only II is correct B. I & II are correct C. II is correct D. both are false **Answer: B Watch Video Solution**

5. Shaving soaps give extensive lather due to
A. sodium rosinate
B. Na_2CO_3
C. Borax
D. Glycerol
Answer: A
Watch Video Solution
6. An antipyretic drug on prolonged usage causes irreversible kidney damage. It is
damage. It is

D. Pencilline
Answer: C
Watch Video Solution
7. The antiseptic present in dettol is
A. Codine
B. Chloroxylenol
C. Bithional
D. lodine
Answer: B
Watch Video Solution
8. Scouring soaps and soap powders contain soap along with

A. Lime B. Powdered pumice $\mathsf{C.}\,Al_2(SO_4)_3$ D. All **Answer: B Watch Video Solution** 9. I) Aspirin is an acetyl derivative of o-hydroxy benzoic acid II) In aspirin acetyl group is substituted in the place of phenolic hydrogen A. Only II is correct B. I & II are correct C. II is correct D. Both are false **Answer: B**

LIST - 1

- LIST 2
- A) Antipyretic 1) Epsom salt
- B) Laxative
- 2) Chloretone
- C) Hypnotic 3) Paracetamol
- D) Analgesic 4) Aspirin

The correct match is

- Α В C D
- B C Α D
- 1) 1 2 3 4 2) 3
- 4) 4 3 2 1 3) 4 2 1 3
- 10.
 - Watch Video Solution

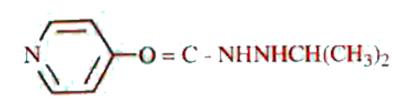
- 11. Shaving soaps give extensive lather due to
 - A. Sodium rosinate
 - B. Na_2CO_3
 - C. Borax

D. Glycerol

Answer: A



Watch Video Solution



12.

The drug is a

A. Antacid

B. Antiseptic

C. Antidepressant

D. Analgesic

Answer: C





Liet_II

4) III IV V I

List- I	List-II
A) Brompheniramine	I) Narcotic analgesic
B) Equanil	II) Tranquilizer
C) Veronal	III) Control of
	hypertension
D) Morphine	IV) Detergent
	V) Antihistamine
A B C D	A B C D
1) II III IV I	2) V III IV II



3) V

III III

List- I

Objective Exercise 2 Antimicrobials

1. A class of drugs useful to inhibit the pathogenic action of microbes are called.

A. Antimicrobials

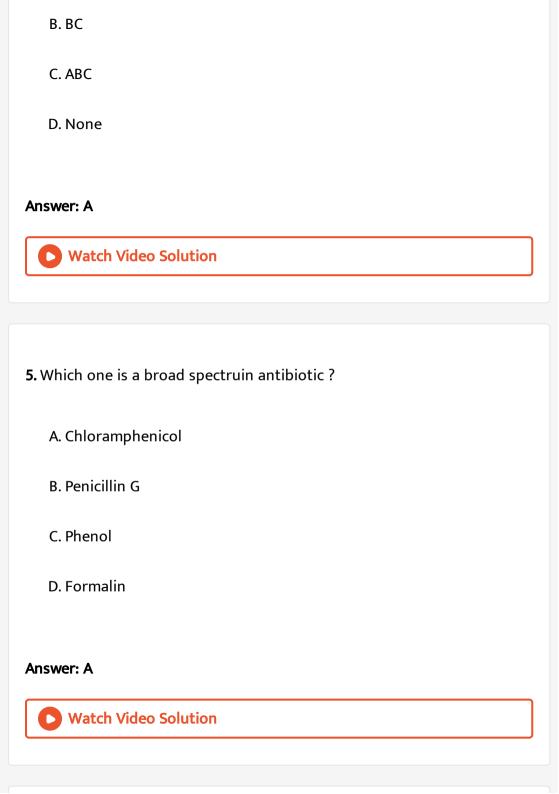
B. Analgesic

D. Iranquinzers.
Answer: A
Watch Video Solution
2. The following antibiotic is Bacteriostatic.
A. Erythromycin
B. Amoxycillin
C. Boric acid
D. Tincture of Iodine
Answer: A
Watch Video Solution

C. Antipyretics

3. The following is disinfectant under high concentration but antiseptic
under low concentration.
A. Phenol
B. BHT
C. HBA
D. Novestrol
An array A
Answer: A
Watch Video Solution
Watch Video Solution
Watch Video Solution
Watch Video Solution 4. Allosteric sites on an enzyme are
Watch Video Solution 4. Allosteric sites on an enzyme are A) those other than drug-active sites

A. AB



6. 0.2 percent solution of phenol is a/an
A. antiseptic
B. Disinfectant
C. antibiotic
D. antifertility drug
Answer: A
Watch Video Solution
7. Which of the following is not an antiseptic drug?
7. Which of the following is not an antiseptic drug? A. furacine
A. furacine
A. furacine B. Dettol

Watch Video Solution 8. Antiseptic applied on the tissue is A. Soframicine B. Novestrol C. Sulphanilamide D. Pencilline Answer: A **Watch Video Solution 9.** Very low concentrations of SO_2 acts as A. Antifertility drug

Answer: C

C. Disinfectant D. Antiseptic **Answer: C Watch Video Solution** 10. Amoxycillin is semi synthetic modification of A. Penicillin B. Streptomycin C. Tetracycline D. Chloraampheniol Answer: A **Watch Video Solution**

B. Artificial sweetening agent

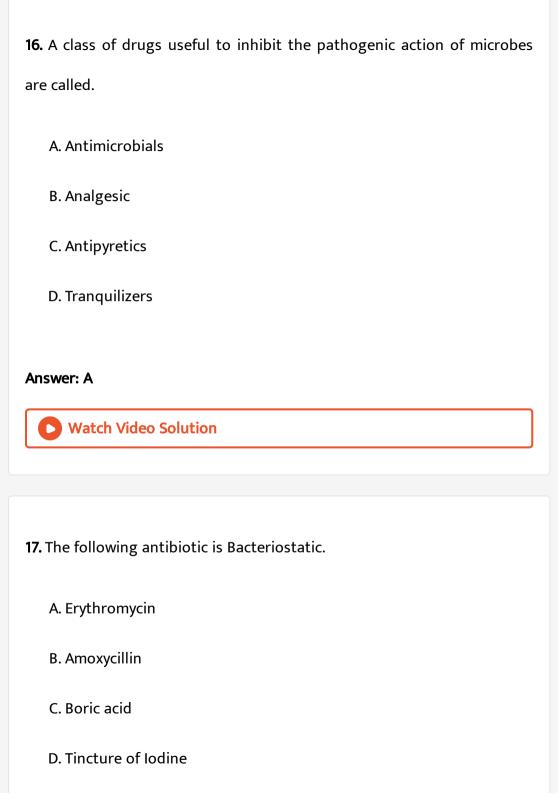
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Watch Video Solution
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A. furacine
A. furacine B. dettol
B. dettol

Watch Video Solution 13. Antiseptic applied on the tissue is A. Soframicine B. Novestrol C. Sulphanilamide D. Pencillin Answer: A **Watch Video Solution 14.** Very low concentrations of SO_2 acts as A. Antifertility drug

Answer: C

C. Disinfectant D. Antiseptic **Answer: C Watch Video Solution** 15. Amoxycillin is semi synthetic modification of A. Penicillin B. Streptomycin C. Tetracycline D. Chloraampheniol Answer: A **Watch Video Solution**

B. Artificial sweetening agent



Answer: A



Watch Video Solution

18. Streptomycin, a well known antibiotic, is a derivative of

- A. Peptides
- B. Carbohydrates
- C. Purines
- D. Terpenes

Answer: B



Watch Video Solution

19. Statement-I: Antiseptic are not injected into the body.

Statement-II: Antiseptic are intravenous drugs

A. Both I and II are true B. Both Land II are false C. I is true, but II is false D. Lis false but II is true **Answer: C Watch Video Solution** 20. The following is disinfectant under high concentration but antiseptic under low concentration. A. Phenol B. BHT C. BHA D. Novestrol Answer: A



- **21.** Which one is a broad spectruin antibiotic?
 - A. Chloramphenicol
 - B. Penicillin G
 - C. Phenol
 - D. Formalin

Answer: A



- **22.** The antibiotic having Beta-Lactam ring.
 - A. Pencillin
 - B. Chloramphenicol
 - C. Streptomycin

D. Ciproflaxacin
Answer: A
Watch Video Solution
23. Furacine is an
A. Antibiotic
B. Analgesic
C. Antihistamine
D. Antiseptic
Answer: D
Watch Video Solution
Objective Exercise 2 Chemiclas In Food

1. More sweeteners among the following
A. Aspartame
B. Saccharin
C. Sucralose
D. Alitame
Answer: D
Watch Video Solution
2. Which of the following artifical sweetner is a chloroderivative of dissacharide ?
A. Alitame
B. Aspartane
C. Sucralose
D. Saccharine

Answer: C Watch Video Solution

- 3. The artificial sweetner aspartame is the methyl ester of the dipeptide
 - A. Glycylalanine
 - B. Aspartyl phenyl alanine
 - C. Phenyl alanyl aspartic acid
 - D. Alanyl glycine

Answer: B



- 4. The main bonding between enzyme and inhibitor is
 - A. Hydrogen bond

C. van der Waals attraction D. Strong covalent bond **Answer: D Watch Video Solution** 5. Arsenic drugs are mainly used in the treatment of A. Jaundice B. Typhoid C. Syphilis D. Cholera **Answer: C Watch Video Solution**

B. Ionic bond

6. In shaving soaps rapid drying is prevented by adding
A. Rosin
B. Glycerol
C. Borax
D. Finely divided sand
Answer: B
Watch Video Solution
7. Liquid dishwashing detergents contain
A. non - ionic detergents
B. catronic detergents
C. anionic detergents
D. sodium carbonate

Answer: A **Watch Video Solution** 8. Salvarsan is having similarity in structure as that of A. azodye B. penicillin C. ofloxacin D. chloramphenicol





- **9.** Structurally biodegradable detergent should contain
 - A. Unbranched alkyl chain

B. Branched alkyl chain
C. Phenyl side chain
D. Cyclohexyl side chain
Answer: A
Watch Video Solution
10. Which of the following represents a synthetic detergent ?
A. Which of the following represents a synthetic detergent?
B. $C_{15}H_{31}COOK$

 $\mathsf{C.}\,CH_{3}[CH_{2}]_{16}COONa$

Watch Video Solution

D. 📝

Answer: C

Practice Exercise

- 1. Anti allergy drugs are
 - A. Antimicrobials
 - **B.** Antihistamines
 - C. Antivirals
 - D. Antifungals

Answer: B



- 2. The following antihistamine, can acts as anti allergic
 - A. Brompheniramine
 - B. Cimitidine
 - C. Rantidine

D. Paracetmol
Answer: A Watch Video Solution
3. The following has only one hetero cylic ring
A. Barbituric acid
B. Serotanine
C. amphetamine
D. Paracetmol
Answer: A Watch Video Solution
4. Which of the following is not an antihistamine?

A. Chloropheniramine
B. Dimetap
C. Seldane
D. Equanil
Answer: D
Watch Video Solution
5. Norethindrone is an example of
A. synthetic testosterone
B. synthetic progestrone derivative
C. preservative
D. dye
Answer: B
Watch Video Solution

6. The following opiate can be used as analgesic
A. Codine
B. Phenacetine
C. Asparine
D. Codine & Asparine
Answer: A
Watch Video Solution
Watch Video Solution
7. Which of the following is a acetyl derivative of morphine?
7. Which of the following is a acetyl derivative of morphine ?
7. Which of the following is a acetyl derivative of morphine? A. Heroin

D. Analgin
Answer: A
Watch Video Solution
8. Morphine is used as an
A. Antipyritic
B. antiseptic
C. Analgesic
D. Insecticide
Answer: C
Watch Video Solution

- **9.** A : Heroin is morphine diacetate
- R: Morphine is an alkaloid
 - A. Both A & R are true, R is the correct explanation of A
 - B. Both A & R are true, R is not correct explanation of A
 - C. A is true, R is false
 - D. A is false, R is true

Answer: B



- **10.** The addictive property of narcotic drugs is mainly due to their ability to produce
 - A. Euphoria
 - B. Blood clotting
 - C. Mental disorder

D. Hyper acidity

Answer: A



Watch Video Solution

11.

Set - I Set - II

Compound Chemical Name

- A) Aspirin 1) p-nitrophenol
- B) Ibuprofen 2) Salicylic acid acetate
- C) Paracetmol 3) α methyl -4 -(methyl propyl) benzene acetic acid
- D) Phenacetin 4 N-acetyl para amino phenol
 - 5) [N (4 ethoxy phenyl) acetamide

 - $\mathsf{c.} \, \, \frac{A}{5} \, \, \frac{B}{4} \, \, \frac{C}{3} \, \, \frac{D}{2}$

 - D. A B C D 1

Answer: B

Watch Video Solution	J

12. Aspirin is acetyl salicylic acid, the pair of functional groups present in the compound is

A. Hydroxyl, ester

B. Carboxylic acid, hydroxyl

C. Carboxylic acid, keto

D. Carboxylic acid, ester

Answer: D



Watch Video Solution

13. Which of the following is used as a local anaesthetic agent?

A. Diazepam

B. Ethyl chloride

C. Mescaline
D. Seconal
Answer: B
Watch Video Solution
14. A substance produced by the micro organism which can inhibit the
growth of other micro organism is called
A. Antiseptic .
B. Antibiotic
C. Antimicrobial
D. Disinfectant
Answer: B
Watch Video Solution

15. Microbes can be killed by using
A. Penicillin
B. Tetracycine
C. Chloramphenicol
D. Vancomycin
Answer: A
Watch Video Solution
16. The drug that is effective in the treatment of typhoid is
A. novalgin
B. quinine
C. chloramphenicol
D. paracetamol
•

Answer: C



Watch Video Solution

- **17.** Aqueous ethanolic solution of $2-3\,\%$ lodine is
- a) Antiseptic
- b) Tincture of iodine
- c) Antihistamine
- d) Antifertility drug correct answers are
 - A. a & b
 - B. a &c
 - C. c&d
 - D. b&c

Answer: A



18. Birth control pills essentially contains
A. synthetic estrogen
B. synthetic progesterone
C. both (1) & (2)
D. prontosil
Answer: C
Watch Video Solution
19. Medicine which is an antibiotic
19. Medicine which is an antibiotic A. Ampicillin
A. Ampicillin
A. Ampicillin B. Aspirin

Answer: A Watch Video Solution 20. Phenol is used as A. an antiseptic B. a disinfectant C. Both(1) and(2) D. a styptic **Answer: C** Watch Video Solution 21. A broad spectrum antibiotic is A. Paracetamol

C. Aspirin D. Chloramphenicol **Answer: D Watch Video Solution** 22. Which of the following is used as an anti septic A. Phenol B. Benzaldehyde C. Benzalamine D. Malic anhydride Answer: A **Watch Video Solution**

B. Penicillin-G

23. Which of the following does not provide any calories and stable even
at cooking temperature ?
A. Surcose
B. Sucralose
C. Aspartame
D. Sodium benzoaate
Answer: B
Watch Video Solution
24. Most commonly used salt type preservative
24. Most commonly used salt type preservative A. vegetable oil
A. vegetable oil

Answer: B Watch Video Solution 25. Which of the following is not an artificial sweetner? A. Sucralose B. Alitame C. Saccharin D. Sucrose 3 **Answer: D** Watch Video Solution 26. Transapraent soaps made by dissolving soap in A. rosin

C. trisodium phosphate D. ethanol **Answer: D Watch Video Solution** 27. Anionic detergent is a A. sodium lauryl sulphate B. cetyltrimethyl ammonium bromide C. glyceryl palmitate D. glyceryl Oleate Answer: A **Watch Video Solution**

B. sodium carbonate

- **28.** The incorrect statement in the following
 - A. To accomodate messenger, shape of the receptor site changes
 - B. The chemical messenger gives message to the cell by entering into the cell
 - C. Antagonists inhibit the natural function of receptor
 - D. The drugs that imitate the natural messengers are called agonists

Answer: B



hardening

- 29. The incorrect statement in the following is
 - A. floating soaps are obtained by beating tiny air bubbles before their
 - B. laundry soaps contain sodium resonate

C. colours and perfumes are added to the toilet soaps to make attractive

D. synthetic detergents are cleaning agents but not having properties of soap

Answer: D

Watch Video Solution

Problem

1. What is the structural difference between morphine and codeine? Why codeine is more versatile?



2. Aspirin is used to prevent heart attack and transient ischemic attacks.

Comment.

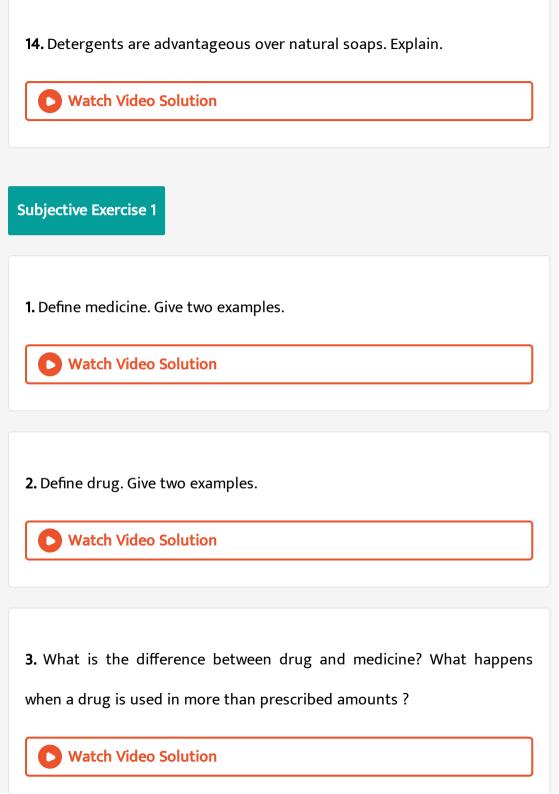
Watch Video Solution
3. A patient was suffering from urinary infection. What is the prescribed antibiotic?
Watch Video Solution
4. What is the difference between disinfectants and antiseptics? Can the same chemcial be used for both the pruposes?
Watch Video Solution

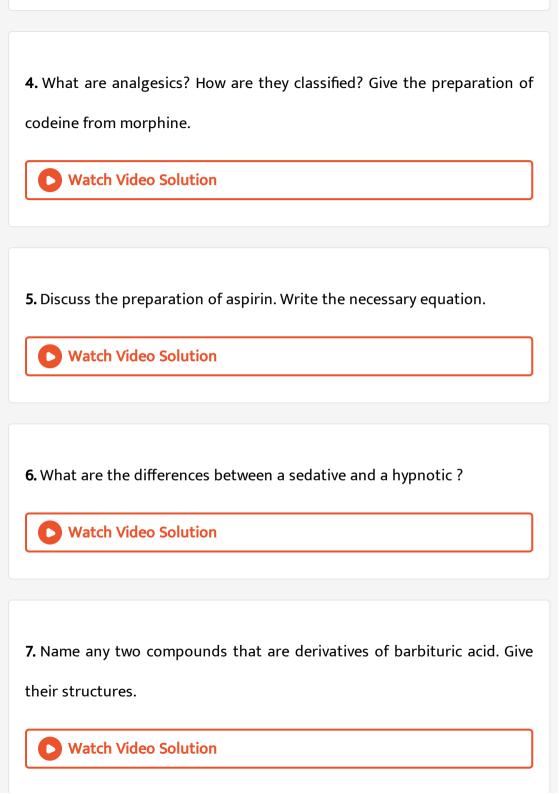
5. Is ranitidine an antacid or antihistamine? Can it be used for both

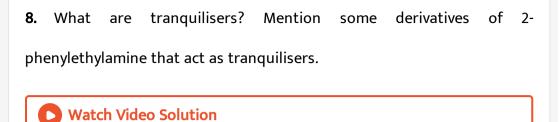
purposes?

6. What do you understand by mild tranquilizer? Give examples.
Watch Video Solution
7. Antioxidants are called sacrificial chemicals. Comment.
Watch Video Solution
8. Sodium benzoate is the most important food preservative. Suggest reason.
Watch Video Solution
9. Aspartame is less preferred than sucralose as sweetner. Why?
Watch Video Solution

10. What are the amino acids produced on hydrolysis of alitame?		
Watch Video Solution		
11. Why cationic detergents are limited in use them anionic detergents ?		
View Text Solution		
12. The detergents used in olden days caused pollution in rivers and waterways. Comment.		
Watch Video Solution		
13. Stright chain of a hydrocarbon is preferred over branched chain as a detergent. Why?		
Watch Video Solution		







9. What are antimicrobials? Give the general formulae and derivatives of penicillin.



10. What are antihistamines and antacids? Give examples.



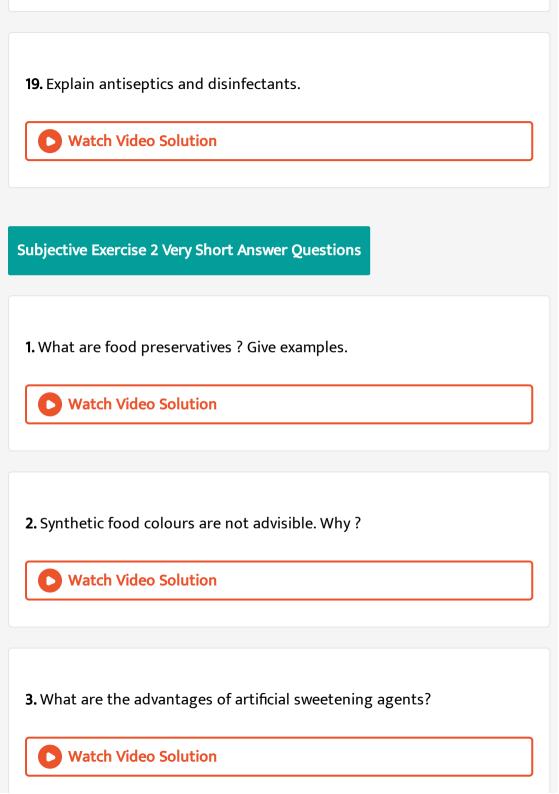
- 11. Define the following and give two examples for each.
- a) Antibiotics b) Antacids c) Antihistamines

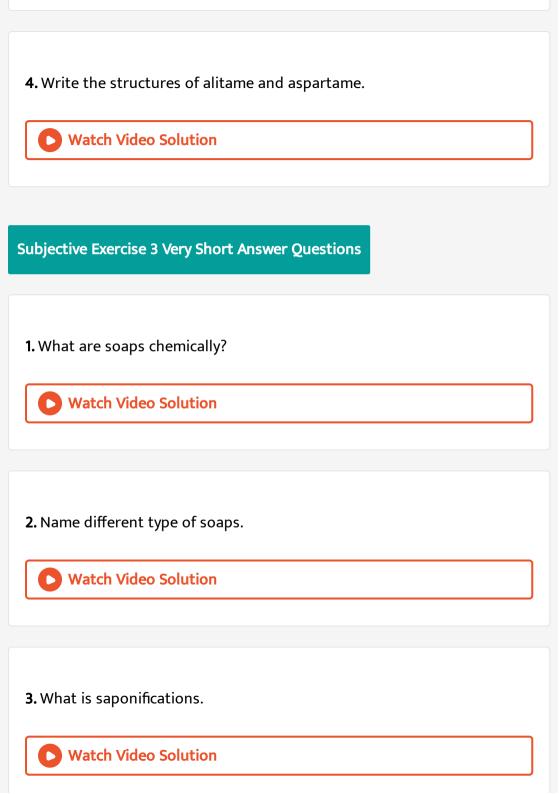


12. Define the following and give two examples Antacids Watch Video Solution	
13. Define the following and give two examples	
Antihistamines	
Watch Video Solution	
14. Define the following and give two examples Antimicrobials	
Watch Video Solution	

Watch video Solution

15. Explain the action of following drugs :
Luminal
Watch Video Solution
16. Explain the action of following drugs : Phenelzine
Watch Video Solution
17. Explain the action of following drugs : Norethindrone
Watch Video Solution
18. Define antifertility drugs and give two examples.
Watch Video Solution





8. What are biodegradable detergents ?
Watch Video Solution
Objective Exercise 1 Chemistry In Medicine
1. The treatment of diseases by using drugs is known as
A. physiotherapy
B. magneto therapy
C. chemotherapy
D. occupuncture
Answer: C
Watch Video Solution

2. The classification of drugs in the following manner is most conveniant for doctors

A. Based on pharmacological effect

B. Based on drug action

C. Based on chemical structure

D. Based on molecular targets

Answer: A



Watch Video Solution

3. Molecular mass of drugs usually is in the range of

A. $10 - 100 \mu$

B. $100 - 500\mu$

 $\mathsf{C.}\,500-1000\mu$

D. $1000 - 10000 \mu$

Answer: B



- 4. An ideal drug should not have the following quality
 - A. Be toxic
 - B. Be localised at invading gland.
 - C. Have to toierable side effects
 - D. Not injure host cells

Answer: A



Watch Video Solution

- 5. The following can be a drug target
 - A. Nucleic acid

B. Paracetmol C. Omeprazole D. Terfenadine Answer: A **Watch Video Solution Objective Exercise 1 Antacids Tranquilisers Antibiotics** 1. Secretion of HCl in the stomach is stimulated by A. Histamine B. Dopamine C. Noradrenaline D. Serotonine Answer: A

Watch Video Solution	
Water video Solution	

A. Terfenadine

B. Lansoprazole

C. Cimitidine

D. Rantidine

Answer: A



Watch Video Solution

3. With reference to which classification has the statemenbt,"rantidine is an antacid"been given?

A. Pharmacological effect

B. Drug action

D. Molecular targets
Answer: A
Watch Video Solution
4. Barbituric acid and its derivatives are well known as
A. Tranquillizers
B. Antiseptics
C. Antibiotics
D. Analgesics
Answer: A
Watch Video Solution

C. Chemical structure

5. Which of the following is a mild tranquilizer?
A. Valium
B. Meprobamate
C. Bithional
D. Norethindrone
Answer: B
Watch Video Solution
6. Which of the following is a disinfectant and in a diluted form act as an antiseptic as well?
A. Aspirin
B. Phenol
B. Phenol C. Veronal

Answer: B



Watch Video Solution

7. The substances which affect the central nervous system and induce sleep are called

A. antipyretics

B. tranquilizers

C. analgesics

D. anti septic

Answer: B



Watch Video Solution

8. Dettol is a mixture of

A. Chloroxylenol and terpineol B. Furacine, and soframicine C. Tincture of Iodine and Iodoform D. Boric acid and bithional Answer: A **Watch Video Solution** 9. Which of the following statements is true? A) Some disinfectants can be used as anti septics at low concentration B) Ampicillin is semi synthetic antibiotic C) Aspirin is both analgesic and antipyretic A. A only B. B only C. C only D. All

Answer: D Watch Video Solution 10. Which of the following is employed as Tranquilizer? A. Equanil B. Naproxen

C. Tetracyclin

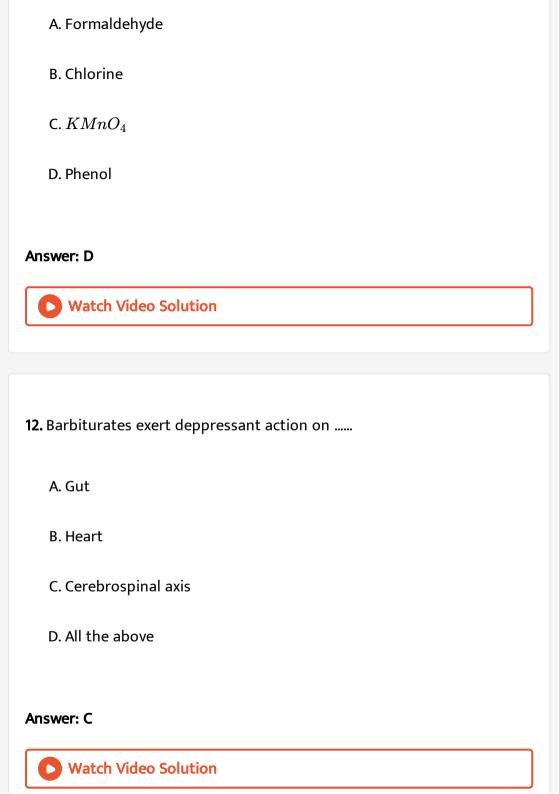
D. Dettol

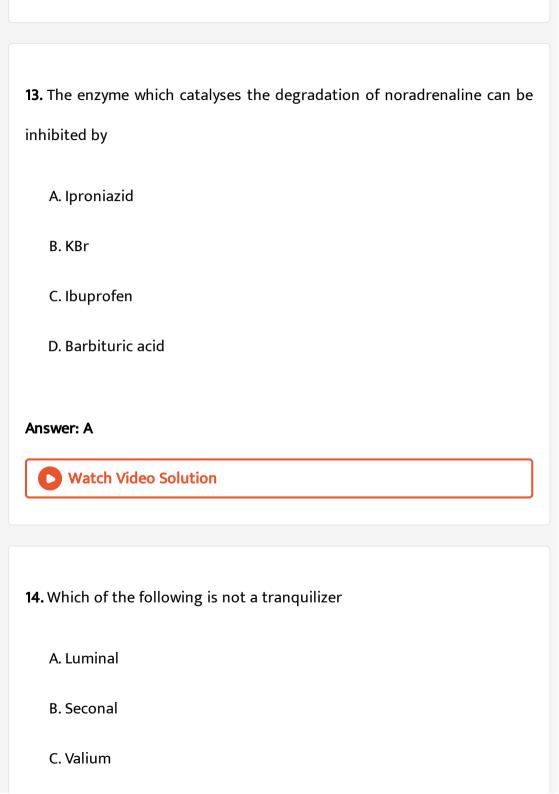
Answer: A



Watch Video Solution

11. Which of the following substance may be used as antiseptic as well as disinfectant





D. Alitame
Answer: D
Watch Video Solution
5. Bactericidal antibiotics among the following
A. Tetracycline
B. Erythromycin
C. Ofloxacin
D. Chloramphenicol
Answer: C
Watch Video Solution

16. Identify an analgesic from the following

В.

A.

C.

D.

Answer: A



Watch Video Solution

Objective Exercise 1 Analgesics

1. Substances which relieve body pa	ains are termed as
-------------------------------------	--------------------

- A. antipyretics
- B. antibiotics
- C. analgesics
- D. antimalarials

Answer: C



Watch Video Solution

2. Which of the following can possibly be used as analgesic without causing addiction and any modification ?

- A. Morphine
- B. Diazepam

C. Para-acetamol

D. Tetrahydrocatechol

Answer: C



Watch Video Solution

3. Which one of the following compounds gives aspirin on reacting with acetic anhydride in the presence of cone H_2SO_4 ?

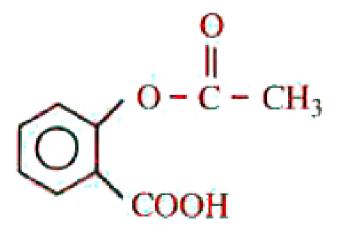
Answer: B

D.



Watch Video Solution

4. The following compound is used as



C. Hypnotic D. Antiseptic **Answer: B** Watch Video Solution 5. 2-Acetoxy benzoic acid can be used as A. Antiseptic B. Antipyretic C. Antibiotic D. Mordant dye **Answer: B Watch Video Solution**

A. Antibiotic

B. Analgesic

6. An antibiotic contains nitro group attached to aromatic nucleus in its structure. It is

A. pencillin

B. sulphadiazine

C. tetracycline

D. chloramphenicol

Answer: D



Watch Video Solution

7. The structure of paracetamol is

В.

C.

OH
$$CH_3$$
 CH_3
 CH_3

Answer: B



Watch Video Solution

- 8. The drug given during hyper tension is
 - A. Streptomycin

B. Chloroxylenol
C. Equanil
D. Aspirin
Answer: C
Watch Video Solution
9. Which of the following is a non-narcotic analgesic?
A. Morphine
B. Codeine
C. Heroin
D. Aspirin
Answer: D
Watch Video Solution

10. Which of the following is a natural product ?
A. Asparine
B. Ibuprofen
C. Morphine
D. Paracetmol
Answer: C
Watch Video Solution
11. Which of the substance added to soap to make it antiseptic
A. Iodine
B. $KMnO_4$
C. Bithional
C. Bithional $D.\mathit{Cl}_2$

Answer: C



12. Which of the following is an addictive drug?

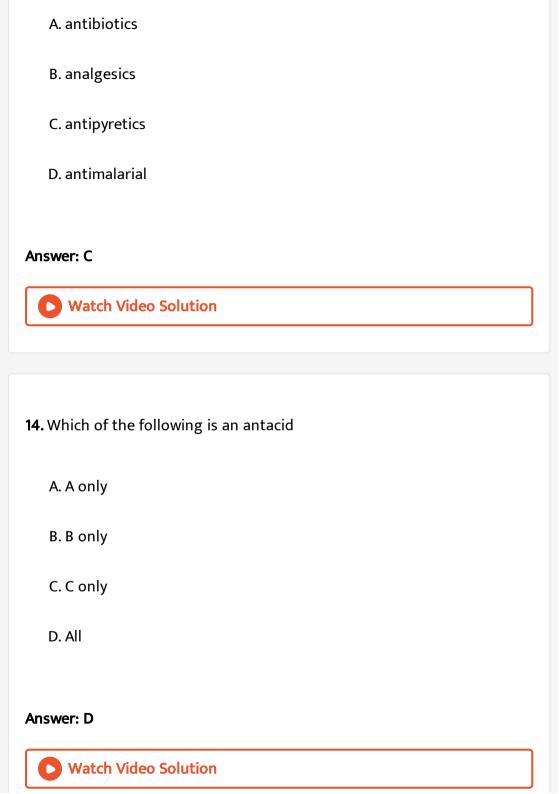
- A. Papaverine
- B. Pencilline
- C. Sulphadiazine
- D. Aspirin

Answer: A



Watch Video Solution

13. Substances which bring down the body temperature during fever are known as



15. Paracetamol	is

A. orthohydroxy benzoic acid

B. p-amino phenol

C. benzoic acid

D. para hydroxy benzoic acid

Answer: B



Watch Video Solution

16. Functional groups in aspirin are

A. carboxylic acid

B. ester

C. alcohol

Answer: D
Watch Video Solution
7. The drug used for prevention of heart attacks is
A. Aspirin
B. Valium
C. Chloramphenicol
D. Cephalsoprin
Answer: A
Watch Video Solution

Objective Exercise 1 Chemicals In Food

D. 1 and 2

1. The following substance is more reactive towards oxygen than food
meterial
A. Antioxidant
B. Food colour
C. Food sweetner
D. Food nutrients
Answer: A
Watch Video Solution
2. The anti oxidants for wine are
A. $SO_2\&SO_3^{-2}$
A. $SO_2 \& SO_3^{-2}$ B. BHT $\&$ BHA

Answer: A



Watch Video Solution

- 3. Metabolism of C_6H_5COONa finally excreated as
 - A. Benzene
 - B. Hippuric acid
 - C. BHT
 - D. BHA

Answer: B



- 4. Control of sweetness of food is difficult with
 - A. Asparatame

B. Sucrolose
C. Fructose
D. Alitame
Answer: D
Watch Video Solution
5. Sucrolose structure is similar to
A. Saccharin
B. Sucrose
C. Fructose
D. Glucose
Answer: B
Watch Video Solution

6. More number of peptide bonds are present in
A. alitame
B. aspartame
C. saccharin
D. sucralose
Answer: A
Watch Video Solution
Objective Exercise 1 Miscellaneous
1. Acetylation of the two OH groups of Morphine with acetic anhydride gives
A. Codeine
B. Heroin

D. Quinine	
Answer: B	
Watch Video Solution	
2. Receptors are	
A. Proteins	
B. Lipids	
C. Carbohydrates	
D. Nucleric acids	
Answer: A	
Watch Video Solution	

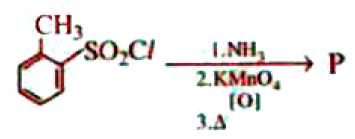
C. Cocaine

- 3. Which of the following is 100 times sweeter than sugar?
 - A. Sucrolose
 - B. Saccharin
 - C. Aspartame
 - D. Alitame

Answer: C

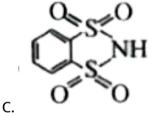


4. Artificial sweetening agent is prepared from the below strategy. Identify the structure of final product



A.

В.



O NH

Answer: A

D.



5. Which of the following is used as an anaesthetic agent?
A. CH_4
B. CO_2
C. N_2O
D. NO_2
Answer: C
Watch Video Solution
6. Pencillin G contains
6. Pencillin G contains A. Phenyl group
A. Phenyl group
A. Phenyl group B. Benzyl group

Answer: B



Watch Video Solution

7. Match the following

- 1) Antibiotic
- 2) Antacid
- 3) Antipyretic
- 4) Anti microbial

- a) Lysozyme
- b) Bithional
- c) Omeprazole
- d) Analgin
- e) Penicillin

A. 1-c, 2-d, 3-e, 4-b

B. 1-e, 2-c, 3-d, 4-a

C. 1-e, 2-d, 3-a, 4-c

D. 1-d, 2-a, 3-c, 4-e

Answer: B



Objective Exercise 1 Soaps And Detergents

- 1. An example for cationic detergent is
 - A. NaLS
 - B. CTAB
 - C. Trimethyl phosphate
 - D. All

Answer: B



- **2.** Detergents are prepared by the action of H_2SO_4 followed by neutralization by starting with
 - A. Cholesterol
 - B. Lauryl alcohol

- C. Cyclohexanol
- D. p-Nitrophenol

Answer: B



Watch Video Solution

- 3. Which of the following is glyceryl oleate
 - A. $(C_{15}H_{31}COO)_3C_3H_5$
 - B. $(C_{17}H_{32}COO)_3C_3H_5$
 - C. $(C_{12}H_{25}COO)_3C_3H_5$
 - D. $(C_{15}H_{31}COO)_3C_4H_9$

Answer: B



4. The antiseptic used in good quality soaps is
A. Lysol
B. Bithional
C. Boric acid
D. Salol
Answer: B
Watch Video Solution
5. The antiseptic used in good quality soaps is
5. The antiseptic used in good quality soaps is A. Lysol
A. Lysol
A. Lysol B. Bithional

Answer: B



- **6.** Scouring soaps and soap powders contain soap along with
 - A. Lime
 - B. Powdered pumice
 - C. $Al_2(SO_4)_3$
 - D. All

Answer: B



Watch Video Solution

7. Pick the correct statement among the following:

- A. Sodium dodecyl benzene sulphonate used in tooth paste is a cationic detergent
- B. Non-ionic detergents is formed when polyetheylene glycol reacts with adipic acid
- C. Cetyl trimethyl ammonium bromide is a popular cationic detergent used in hair conditioner
- D. Sodium lauryl sulphate forms an insoluble scum with hard water

Answer: C



- 8. Which of the following is an anionic detergent?
 - A. Sodium dodecyl benzene sulphonate
 - B. Sodium palmitate
 - C. Cetyl trimethyl ammonium bromide

D. Sodium stearate
Answer: A
Watch Video Solution
bjective Exercise 2 Antacids Tranquilisers
. Histamine causes
A. Allergic response to pollen
B. Secreation of acid in stomach
C. Nasal congestion
D. All the above
Answer: D
Watch Video Solution

2. Chemically Herion is
A. Morphinediacetate
B. Morphinmono acetate
C. Morphine dibenzoate
D. Morphinemonobenzoate
Answer: A
Watch Video Solution
3. Which of the following is not a bacterio static antibiotic?
3. Which of the following is not a bacterio static antibiotic? A. Erythromycin
A. Erythromycin
A. Erythromycin B. Tetracycline



Watch Video Solution

4. The structure given below is known as

- A. Penicillin F
- B. Penicillin G
- C. Ampicillin
- D. Sulphadiazine

Answer: B



5. $Mg(OH)_2 + Al(OH)_3$ Mixture is better antacid than $NaHCO_3$ because

A. $NaHCO_3$ Solubilty in water is less than $Mg(OH)_3$ & $Al(OH)_3$ B. $Al(OH)_3$ and $Mg(OH)_2$ are insoluble in water, these donot raise

 P^H beyond 7

C. Less acid will be produced due to excessive HCO_3^-

D. $NaHCO_3$ is stomach irritant

Answer: B



- 6. Ranitidine is a
 - A. Antihistamine
 - B. Antifertile
 - C. Analgesic drug

Answer: A
Watch Video Solution
7. Luminal, a barbiturate drug is used as a /an
A. Antihistamine
B. Sleep producing
C. Antiseptic
D. Antimalarial
Answer: B
Allower, D

D. Tranquiliser

8. For the relief of post operative pains, cardiac pains, suitable analgesic
is
A. Codeine
B. Aspirin
C. Ibuprofen
D. Any non - addictive analgesics
Answer: A
Watch Video Solution
Watch Video Solution
Watch Video Solution9. Which of the following drugs is a tranquilizer?
9. Which of the following drugs is a tranquilizer?
9. Which of the following drugs is a tranquilizer? A. lodoform

Answer: C **Watch Video Solution** 10. Drug which helps to reduce anxiety A. Tranquiliser B. Diuretic C. Analgesic D. Antihistamine Answer: A **Watch Video Solution** 11. Which of the following is used for inducing sleep? A. Paracetamol

C. Bithional
D. Barbituric acid derivatives
Answer: D
Watch Video Solution
12. Which of the following is the a tranquilizer?
A. Luminal
B. Seconal
C. Equanil
D. All the three
Answer: D
Watch Video Solution

B. Chloroquine

Objective Exercise 2 Chemicals In Food

1. Which	of	the	following	artifical	sweetner	is	а	chloroderivative	of
dissachar	ide	?							

- A. Alitame
- B. Aspartane
- C. Sucralose
- D. Saccharine

Answer: C



- 2. The artificial sweetner aspartame is the methyl ester of the dipeptide
 - A. Glycylalanine
 - B. Aspartyl phenyl alanine

D. Alanyl glycine
Answer: B
Watch Video Solution
3. More sweeteners among the following
A. Aspartame
B. Saccharin
C. Sucralose
D. Alitame
Answer: D
Watch Video Solution

C. Phenyl alanyl aspartic acid

4. The main bonding responsible for blockgae of enzyme is
A. hydrogen bond
B. ionic bond
C. van der Waals attractions
D. strong covalent bond
Answer: D
Watch Video Solution
5. Arsenic drugs are mainly used in the treatment of
A. Jaundice
B. Typhoid
C. Syphilis
D. Cholera

Answer: C



Watch Video Solution

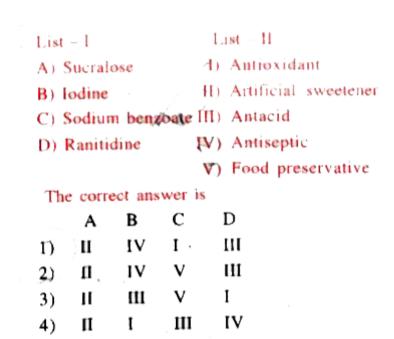
- 6. Enzyme inhibitors may attack on
- a) Active site of enzyme
- b) Allosteric site of enzyme
- c) Tongue
- d) Stomach walls

Correct answers are

- A. a only
- B. b only
- C. a and b
- D. a, b, c and d

Answer: C







7.

Watch Video Solution

8. Artificial sweetener which is 600 times sweeter than sucrose is

A. Asparatame

B. Alitame

C. Sucralose

D. Saccharin

Answer: C Watch Video Solution

Objective Exercise 2 Soaps And Detergents

- 1. Liquid dishwashing detergents contain
 - A. non-ionic detergents
 - B. catronic detergents
 - C. anionic detergents
 - D. sodium carbonate

Answer: A



Watch Video Solution

2. Salvarsan is having similarity in structure as that of

B. penicillin C. ofloxacin D. chloramphenicol Answer: A **Watch Video Solution** 3. Structurally biodegradable detergent should contain A. Unbranched alkyl chain B. Branched alkyl chain C. Phenyl side chain D. Cyclohexyl side chain Answer: A **Watch Video Solution**

A. azodye

- **4.** Which of the following represents a synthetic detergent ?
 - A. $C_{15}H_{31}COOK$
 - B. $CH_3[CH_2]_{16}COONa$
 - $C_{12}H_{25}$ \longrightarrow SO_3Na
 - D. None of these

Answer: C



- 5. The group commonly present in synthetic detergents is
 - A. RNa
 - B. RONa
 - C. RCOONa

D. $RC_6H_4SO_3Na$

Answer: D



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- **6.** Which is not true for a detergent molecule?
 - A. It has a non-polar organic part and a polar group
 - B. It is not easily biodegraded
 - C. It is sodium salt of a fatty acid
 - D. It is a surface active reagent

Answer: C



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7. Which of the following is an anionic detergent?

A. $CH_3(CH_2)_{10}CH_2OSO_3Na$

C. $\left[CH_3(CH_2)_{15}N(CH_3)
ight]^+Br^-$

B. $C_6H_5SO_3Na$

 $\operatorname{D.}CH_3(CH_2)_{16}COO(CH_2CH_2O)_nCH_2CH_2OH$

8. In shaving soaps rapid drying is prevented by adding

Answer: A



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- A. Rosin

B. Glycerol

C. Borax

Answer: B

D. Finely divided sand

Objective Exercise 3 Previous Neet Aipmt Questions

1. Methyl organge is the example of which type of dye

- A. Acid dye
- B. Mordant dye
- C. Azo dye
- D. Both a and c

Answer: D



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2. Which of the following is considered to be an anti cancer species.

$$\begin{bmatrix} CI & CI \\ CI & Pt \end{bmatrix}$$

В.

$$\begin{bmatrix} H_2N \\ H_2N \end{bmatrix}$$
 Pt $\begin{bmatrix} C1 \\ C1 \end{bmatrix}$

D.
$$\begin{bmatrix} H_2N \\ Cl \end{bmatrix} Pt \begin{bmatrix} Cl \\ NH_2 \end{bmatrix}$$

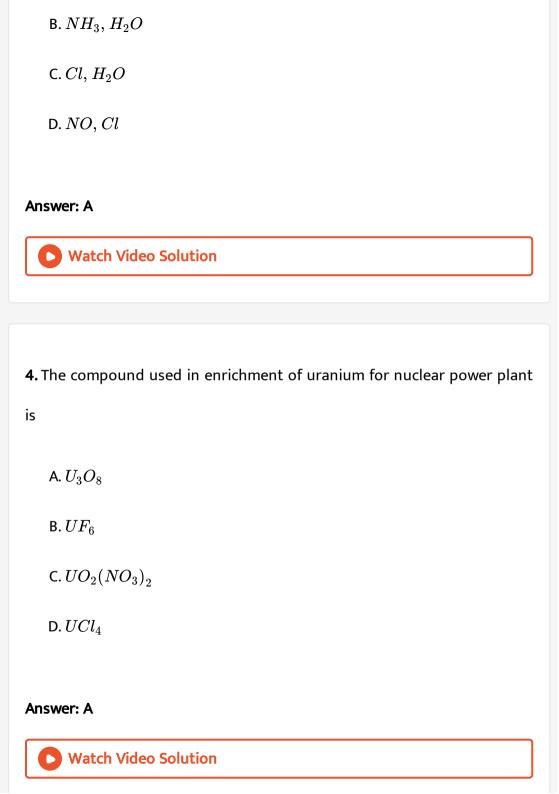
Answer: C



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3. The ligands in anticancer drug "eis-platin" are

A. NH_3 , Cl



5. Chain transfer reagent is
A. CCl_4
B. CH_4
$C.O_2$
D. H_2
Answer: A
Watch Video Solution
6. Which of the following is employed as Tranquilizer ?
6. Which of the following is employed as Tranquilizer? A. Chloropheninamine
A. Chloropheninamine

Watch Video Solution 7. Which one of the following is employed its a tranquilizer drug? A. Promethazine B. Valium C. Naproxen D. Mifipristone **Answer: B Watch Video Solution** 8. Which one of the following is employed as antihistamine? A. Omeprazole

Answer: B

C. Diphenyl hydramine D. Norothindrone **Answer: C Watch Video Solution** 9. Chloroamphenicol is an A. antifertility drug B. antibiotic broad spectrum C. antiseptic and disinfectant D. antihistamine **Answer: B Watch Video Solution**

B. Chloramphenicol

10. 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. Disinfectants harm the living tissues
- C. Dilute solutions of boric acid and hydrogen peroxide are strong antiseptics
- D. A 0.2% solution of phenol is an antiseptic while 1% solution acts as

Answer: C



Watch Video Solution

11. Bithional is generally added to the soaps as an additive to function as a/an

A. buffering agent

C. softener
D. dryer
Answer: B
Watch Video Solution
12. Which of the following is an analgesic ?
A. Streptomycin
B. Chloromycetin
C. Novalgin
D. Pencillin
Answer: C
Watch Video Solution

B. antiseptic

A. antibiotic
B. analgesic
C. antiseptic
D. antipyretic
Answer: C
Watch Video Solution
Objective Exercise 4 Assertion A Reason R Type Questions
1. (A): Paracetamol is widely used as analgesic even it is an antipyretic.
(R): It is administered to aspirin sensitive patients.
A. Both (A) and (R) are true and (R) is the correct explanation of (A)

13. Mixture of chloroxylenol and terpineol acts as

B. Both (A) and (R) are true and (R) is not the correct explanation of

(A)

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: D



Watch Video Solution

2. (A): Same chemicals may be used as antiseptics as well as disinfectants.(R): A chemical which destroys micro organism can be used as an

antiseptic in higher concentration and as disinfectant in lower

concentration.

A. Both (A) and (R) are true and (R) is the correct explanation of (A)

B. Both (A) and (R) are true and (R) is not the correct explanation of

(A)

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: A



Watch Video Solution

- 3. (A): Morphine is an example for narcotic analgesic.
- (R): Narcotic drugs have no addictive properties but is limited to mild aches and pains.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
 - C. (A) is true but (R) is false
 - D. Both (A) and (R) are false

Answer: C



- 4. (A): Hair washed with soap and hard water looks dull.
- (R): Calcium and magnesium salts soaps are 1 insoluble in water.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
 - C. (A) is true but (R) is false
 - D. Both (A) and (R) are false

Answer: C



- **5.** (A): Sythetic detergents do not contain any soap but exhibit all the properties of soaps.
- (R): Synthetic detergents give foam even in hard water.

- A. Both (A) and (R) are true and (R) is the correct explanation of (A)
- B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
- C. (A) is true but (R) is false
- D. Both (A) and (R) are false

Answer: C



- **6.** (A) Non-competitive inhibitors occupy allosteric site so that the substrate cannot attach at active site.
- (R) Non-competitive inhibitors change the shape of active site of enzyme after binding at allosteric site.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)

- C. (A) is true but (R) is false
- D. Both (A) and (R) are false

Answer: A



- **7.** (A): Detergent contanining more branches in the hydrocarbonpart are water polluting.
- (R): Bacteria cannot degrade detergent containing highly branched hydro carbon chain.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
 - C. (A) is true but (R) is false
 - D. Both (A) and (R) are false

Answer: A



Watch Video Solution

- **8.** (A) The drugs which act on the central nervous system and help in reducing anxiety are called antibiotics.
- (R) Morphine is an antibiotic
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
 - C. (A) is true but (R) is false
 - D. Both (A) and (R) are false

Answer: D



- **9.** (A) Food preservatives prevent the growth of microorganisms.
- (R) Antioxdants preserve food by retarding the action of oxygen on food.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - C. (A) is true but (R) is false
 - D. Both (A) and (R) are false

(A)



- **10.** (A) Enzymes have active sites that hold substrate molecule for a chemical reaction.
- (R) Drugs compete with natural substrate by attaching to the active site of enzyme are called antagonists.

- A. Both (A) and (R) are true and (R) is the correct explanation of (A)
- B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
- C. (A) is true but (R) is false
- D. Both (A) and (R) are false

Answer: C



- **11.** (A) Competitive inhibitors compete with natural substrate for their attachment on the active sites of enzymes.
- (R) In competitive inhibition, inhibitor binds to the allosteric site of the enzyme.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)

- C. (A) is true but (R) is false
- D. Both (A) and (R) are false

Answer: C



- **12.** (A) Chemical messenger gives message to the cell without entering the cell.
- (R) Chemical messenger is received at the binding site of receptor proteins.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
 - C. (A) is true but (R) is false
 - D. Both (A) and (R) are false

Answer: A



Watch Video Solution

- 13. (A) All chemicals added to food items are called food preservatives.
- (R) All the food preservatives increase the nutritive value of the food.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of

(A)

- C. (A) is true but (R) is false
- D. Both (A) and (R) are false

Answer: D



14. (A) Artificial sweeteners are added to the food to control the intake of calories.

(R) Most of the artificial sweeteners are inert and do not metabolise in the body.

A. Both (A) and (R) are true and (R) is the correct explanation of (A)

B. Both (A) and (R) are true and (R) is not the correct explanation of

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: A

(A)



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15. (A) Ranitidine is used to control the attack of histamine.

(R) Ranitidine controls the secretion of acid.

- A. Both (A) and (R) are true and (R) is the correct explanation of (A)

 B. Both (A) and (R) are true and (R) is not the correct explanation of

 (A)
 - C. (A) is true but (R) is false
 - D. Both (A) and (R) are false

Answer: A



- **16.** (A) Aspirin can causes ulcer in the stomach.
- (R) The ester group in aspirin gets hydrolyzed to give salicylic acid which causes ulcer in the stomach.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of (A)
 - C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: A



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- 17. (A) Cimetidine is an antihistamine.
- (R) It prevents the intraction of histamine with the receptors present in the stomach wall.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
 - C. (A) is true but (R) is false
 - D. Both (A) and (R) are false

Answer: A



18. (A) Drugs that bind to the receptor site and inhibit its natural function are called antagonists

(R) Drugs that mimic the natural messengers by switching on the receptor are called agonists.

A. Both (A) and (R) are true and (R) is the correct explanation of (A)

B. Both (A) and (R) are true and (R) is not the correct explanation of

(A)

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: B



Watch Video Solution

19. (A) A 0.2% solution of phenol is antiseptic while one percent solution is a disin-fectant.

(R) Same substance can act as an antiseptic as well as disinfectant by varying the concentration.

A. Both (A) and (R) are true and (R) is the correct explanation of (A)

B. Both (A) and (R) are true and (R) is not the correct explanation of (A)

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: B



20. (A) A low level of noradrenaline in the body causes depression.

(R) Signal sending activity becomes low.

A. Both (A) and (R) are true and (R) is the correct explanation of (A)

B. Both (A) and (R) are true and (R) is not the correct explanation of

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: A



(A)

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21. (A) A person suffers from depression, in such situation antidepressant drugs are required.

(R) The drugs inhibit the enzymes which catalyse the degradation of noradrenaline.

A. Both (A) and (R) are true and (R) is the correct explanation of (A)

B. Both (A) and (R) are true and (R) is not the correct explanation of

C. (A) is true but (R) is false

(A)

D. Both (A) and (R) are false

Answer: A



Watch Video Solution

- 22. (A) Chlorodiazepoxide and meprobamate are mild tranquilizers.
- (R) Analgesics are neurologically active drugs.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
 - C. (A) is true but (R) is false
 - D. Both (A) and (R) are false

Answer: B



- 23. (A) Chloramphenicol is a broad spectrum antibiotic.
- (R) Antibiotics which kill (or) inhibit a wide range of gram positive and gram negative bacteria are said to be broad spectrum antibiotics.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - C. (A) is true but (R) is false
 - D. Both (A) and (R) are false

Answer: A

(A)



- 24. (A) Molecular mass of drugs is in the range of 100-500U.
- (R) Chemicals of low molecular masses interact with macromolecular targets and produce biological response.

- A. Both (A) and (R) are true and (R) is the correct explanation of (A)
- B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
- C. (A) is true but (R) is false
- D. Both (A) and (R) are false

Answer: A



- **25.** (A) The substance which is responsible for the secretion of pepsin and HCl in the stomach and nasal congestion associated with common cold and allergic response to pollen is histamine.
- (R) Anti allergic and antacid drugs work on different receptors.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: B



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- **26.** (A) Vancomycin and ofloxacin are the important broad spectrum antibiotics.
- (R) Furacine and soframicine are antiseptics.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - C. (A) is true but (R) is false
 - D. Both (A) and (R) are false

Answer: B

(A)

27. (A) Detergents are preferred to soaps for washing purposes.

(R) Detergents having branched chain hydrocarbons are non-biodegradable.

A. Both (A) and (R) are true and (R) is the correct explanation of (A)

B. Both (A) and (R) are true and (R) is not the correct explanation of

(A)

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: B



Watch Video Solution

28. (A) Combination of synthetic progesterone and estrogen derivative are used as antifertility drugs

(R) Synthetic estrogen and progesterone are hormones. A. Both (A) and (R) are true and (R) is the correct explanation of (A) B. Both (A) and (R) are true and (R) is not the correct explanation of (A) C. (A) is true but (R) is false D. Both (A) and (R) are false **Answer: B Watch Video Solution** 29. (A) Ortho sulphobenzimide is called saccharin. (R) Aspartame is a dipeptide of aspartic acid and phenyl alanine A. Both (A) and (R) are true and (R) is the correct explanation of (A) B. Both (A) and (R) are true and (R) is not the correct explanation of (A)

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: B



Watch Video Solution

30. (A) Sucralose is trichloro derivative of sucrose.

(R) Sucralose tastes like sugar and is stable at cooking temperature.

A. Both (A) and (R) are true and (R) is the correct explanation of (A)

B. Both (A) and (R) are true and (R) is not the correct explanation of

(A)

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: B



31. (A) Esters of fatty acids are hydrolysed by NaOH and the soap obtained remains in colloidal form. It is precipitated from the solution by adding NaCl.

(R) Precipitation of soap is due to common ion effect.

A. Both (A) and (R) are true and (R) is the correct explanation of (A)

B. Both (A) and (R) are true and (R) is not the correct explanation of

(A)

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: A



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32. (A) Branched chain detergents are non biodegradable and unbranched hydro-carbon detergents are biodegradable.

(R) Bacteria cannot degrade highly branched hydrocarbon chain.

A. Both (A) and (R) are true and (R) is the correct explanation of (A)

B. Both (A) and (R) are true and (R) is not the correct explanation of

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: A

(A)



33. (A) Generally potassium soaps are soft to the skin than sodium soaps.

(R) Potassium salts of soaps are more soluble than sodium salts of soaps.

A. Both (A) and (R) are true and (R) is the correct explanation of (A)

B. Both (A) and (R) are true and (R) is not the correct explanation of

(A)

- C. (A) is true but (R) is false
- D. Both (A) and (R) are false



- **34.** (A) Transparent soaps are made by dissolving the soap in ethanol and then evaporating the excess solvent.
- (R) Soaps that float in water are made by beating tiny air bubbles before their hardening.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
 - C. (A) is true but (R) is false
 - D. Both (A) and (R) are false



Watch Video Solution

35. (A) Dye does not absorb evenly on cloth washed with soap using hard water.

(R) Insoluble calcium and magnesium soaps precipitate adheres on to the fibre of the cloth as gummy mass.

A. Both (A) and (R) are true and (R) is the correct explanation of (A)

B. Both (A) and (R) are true and (R) is not the correct explanation of

(A)

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: A



- **36.** (A) Veronal and amytal are neurologically active drugs.
- (R) Veronal and amytal are derivatives of Barbituric acid.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
 - C. (A) is true but (R) is false
 - D. Both (A) and (R) are false



- **37.** (A) Anionic detergents are used in tooth pastes.
- (R) In anionic detergents, the anionic part of the molecule is involved in the cleansing action.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)

B. Both (A) and (R) are true and (R) is not the correct explanation of (A)

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: A



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38. (A) Non-ionic detergents remove grease and oil by micelle formation. (R) Palmitic acid reacts with poly ethylene glycol and gives non-ionic

detergent.

(A)

A. Both (A) and (R) are true and (R) is the correct explanation of (A)

B. Both (A) and (R) are true and (R) is not the correct explanation of

C. (A) is true but (R) is false

D. Both (A) and (R) are false



Watch Video Solution

39. (A) Large number of different receptors in the body interact with different chemical messengers.

(R) Receptors show selectivity for one chemical messenger over the other because their binding sites have different shape, structure and amino acid composition.

A. Both (A) and (R) are true and (R) is the correct explanation of (A)

B. Both (A) and (R) are true and (R) is not the correct explanation of

(A)

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: A



40. (A) Message between two neurons and that between neurons to muscles is commu-nicated through certain chemicals known as chemical messengers. (R) Chemical messengers gives message to the cell without entering the cell.

A. Both (A) and (R) are true and (R) is the correct explanation of (A)

B. Both (A) and (R) are true and (R) is not the correct explanation of

(A)

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: B



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41. (A) All receptors are proteins that are crucial to body communication process.

(R) Shape of the receptor changes after attachment of chemical messenger and receptor regains structure after removal of chemical messenger.

A. Both (A) and (R) are true and (R) is the correct explanation of (A)

B. Both (A) and (R) are true and (R) is not the correct explanation of (A)

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: B



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- **42.** (A) Histadine on enzymatic decarboxylation gives histamine.
- (R) Histamine is an amino acid.

A. Both (A) and (R) are true and (R) is the correct explanation of (A)

B. Both (A) and (R) are true and (R) is not the correct explanation of

(A)

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: C



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(R) Sulpha drugs can kill or prevent the growth of micro organisms like antibiotics but they are not antibiotics in the sense that these are not

43. (A) Sulpha drugs work like antibiotics but they are not antibiotics.

produced by micro organisms.

A. Both (A) and (R) are true and (R) is the correct explanation of (A)

B. Both (A) and (R) are true and (R) is not the correct explanation of

(A)

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: A



Watch Video Solution

- 44. (A) Sodium Benzoate is used as food preservative.
- (R) Sodium Benzoate metabolize to give Hippuric acid.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
 - C. (A) is true but (R) is false
 - D. Both (A) and (R) are false

Answer: B



- **45.** (A) Cationic detergents have long hydro carbon part and a positive charge on nitrogen atom.
- (R) Cationic detergents are quarternary ammonium salts of amines with acetates or chlorides or bromides.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
 - C. (A) is true but (R) is false
 - D. Both (A) and (R) are false



- **46.** (A) Food preservatives prevent spoilage of food due to microbial growth.
- (R) Table salt is the most common food preservative.

- A. Both (A) and (R) are true and (R) is the correct explanation of (A)
- B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
- C. (A) is true but (R) is false
- D. Both (A) and (R) are false



Watch Video Solution

- 47. (A) Chloramphenicol is broad spectrum antibiotic.
- (R) It is rapidly absorbed from the gastro intestinal track.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of

(A)

C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: B



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- 48. (A) Sucralose is less sweeter than alitame.
- (R) Sucralose contains amide functional group whereas alitame contains acid as functional group.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
 - C. (A) is true but (R) is false
 - D. Both (A) and (R) are false

Answer: C



- **49.** (A) Penicillin-G is a narrow spectrum antibiotic.
- (R) This drug kills (or) inhibits gram positive and gram negative bacteria
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
 - C. (A) is true but (R) is false
 - D. Both (A) and (R) are false

Answer: C



- **50.** (A) Sulphonamide drugs have same mechanism of action on targets.
- (R) The drugs have same structural feature have same mechanism of action.

- A. Both (A) and (R) are true and (R) is the correct explanation of (A)
- B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
- C. (A) is true but (R) is false
- D. Both (A) and (R) are false

Answer: A



- 51. (A) Aspartame is used only for cold foods and soft drinks
- (R) Aspartame is unstable at cooking temperatures.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
 - C. (A) is true but (R) is false

D. Both (A) and (R) are false

Answer: A



Watch Video Solution

- **52.** (A) Chloramphenicol is a broad spectrum antibiotic.
- (R) Chloramphenicol is effective against gram-positive and Gram-negative bacteria.
 - A. Both (A) and (R) are true and (R) is the correct explanation of (A)
 - B. Both (A) and (R) are true and (R) is not the correct explanation of
 - (A)
 - C. (A) is true but (R) is false
 - D. Both (A) and (R) are false

Answer: A



