

## Chemistry in everyday life

List of concepts-

1. Therapeutic action of drugs
2. Chemicals in food
3. Cleansing agents

**(A) Therapeutic action of drug:**

	CARD-01		CARD-02																				
1.	Which of the following will you take during allergy? (Paracetamol, bromphenaramine)	1.	0.2 % phenol solution is used as_____.																				
2.	Pick up the bactericidal antibiotic-(penicillin, Tetracyclin)	2.	_____ is a well-known antihistamine.																				
3.	Which drugs relieves the pain? (Analgesics, Antipyretics)	3.	_____ is also known as morning after pill. (mifepristone)																				
4.	Which is not a tranquilizer? (Veronal, seconal, furacine)	4.	A mixture of synthetic estrogen and progesterone derivatives is largely used as ____.																				
		5.	Disinfectants are used on inanimate objects while _____ are used on living tissues.																				
	CARD-03		CARD-04																				
1.	Match the following: <table><tr><td>Column-1</td><td>Column-2</td></tr><tr><td>Antipyretic</td><td>Codeine</td></tr><tr><td>Analgesic- narcotic</td><td>Tincture of Iodine</td></tr><tr><td>Antibiotic</td><td>Aspirin</td></tr><tr><td>Antiseptic</td><td>1 % phenol</td></tr><tr><td>Disinfectant</td><td>Chloramphenicol</td></tr></table>	Column-1	Column-2	Antipyretic	Codeine	Analgesic- narcotic	Tincture of Iodine	Antibiotic	Aspirin	Antiseptic	1 % phenol	Disinfectant	Chloramphenicol	1.	Match the following: <table><tr><td>Column-A</td><td>Column-B</td></tr><tr><td>Dettol</td><td>Antiseptic for eyes</td></tr><tr><td>Iodine in alcohol-water mixture</td><td>Mixture of chloroxylonol and terpeneol</td></tr><tr><td>Aq. Boric acid solution</td><td>Tincture of Iodine</td></tr></table>	Column-A	Column-B	Dettol	Antiseptic for eyes	Iodine in alcohol-water mixture	Mixture of chloroxylonol and terpeneol	Aq. Boric acid solution	Tincture of Iodine
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	CARD-05		CARD-06																				
Q	State whether true or false.	Q	What is the action of following drugs on the human body-																				
1.	Analgesics lower down body temperature.	1.	Luminal, seconal, Veronal																				
2.	Bromphenaramine can act as both antiallergic and antacid.	2.	Bromphenaramine, Terfenadine																				
3.	Amoxicillin is a broad spectrum antibiotic.	3.	Ranitidine, cimetidine																				
4.	The barbituric acid act as Tranquilizers.	4.	Ofloxacin, Amoxicillin, Penicillin																				
5.	Aspirin is used in prevention of heart attacks.	5.	Mifeprestone, Norethindrone, Novestrol																				

**(B) Chemicals in food:**

CARD-01	CARD-02
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1.	The food additives used to prevent the oxidation of food are called_____	Q	State whether true or false.												
2.	The food additives used to prevent the spoilage of food due to microbes are called_____	1.	Sucrolose is trichloro derivative of sucrose.												
3.	The food additives that sweeten the food but do not add calorie are _____	2.	Alitame is not largely used because the control of sweetness of food is difficult.												
		3.	Sucrolose provides calories.												
		4.	Salts of sorbic acid and propanoic acid used as preservatives.												
	CARD-03		CARD-04												
	Match the following:	Q	Give reason for the following:												
	<table><tr><th>Column-1</th><th>Column-2</th></tr><tr><td>Antioxidant</td><td>Aspartame</td></tr><tr><td>Preservative</td><td>Sugar</td></tr><tr><td>Artificial sweetener</td><td>Sodium benzoate</td></tr><tr><td>Natural sweetener</td><td>BHA</td></tr><tr><td>Artificial sweetener that breaks at cooking</td><td>Sucrolose</td></tr></table>	Column-1	Column-2	Antioxidant	Aspartame	Preservative	Sugar	Artificial sweetener	Sodium benzoate	Natural sweetener	BHA	Artificial sweetener that breaks at cooking	Sucrolose	1.	The people suffering from diabetes are advised to use artificial sweeteners.
Column-1	Column-2														
Antioxidant	Aspartame														
Preservative	Sugar														
Artificial sweetener	Sodium benzoate														
Natural sweetener	BHA														
Artificial sweetener that breaks at cooking	Sucrolose														
		2.	Aspartame is used in cold food items only.												
		3.	Alitame is not much in use as artificial sweetener.												
		4.	Antioxidants are generally reducing agents.												

**(C)Cleansing agents:**

	CARD-01		CARD-02										
1.	Chemically soaps are sodium or potassium salts of _____.	1.	Match the following:										
2.	Chemically detergents are sodium or potassium salts of _____.		<table><tr><td>Column-1</td><td>Column-2</td></tr><tr><td>Cationic detergent</td><td>Sodium stearate</td></tr><tr><td>Anionic detergent</td><td>Ester of stearic acid and</td></tr><tr><td>Non-ionic detergent</td><td>Cetyltrimethyl ammonium bromide</td></tr><tr><td>Soap</td><td>Sodium lauryl sulphate</td></tr></table>	Column-1	Column-2	Cationic detergent	Sodium stearate	Anionic detergent	Ester of stearic acid and	Non-ionic detergent	Cetyltrimethyl ammonium bromide	Soap	Sodium lauryl sulphate
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Cationic detergent	Sodium stearate												
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Non-ionic detergent	Cetyltrimethyl ammonium bromide												
Soap	Sodium lauryl sulphate												
3.	_____ is an example of detergent.												
4.	_____ is an example of soap.												
5.	Among detergent and soap, _____ Is better cleansing agent.												
	CARD-03		CARD-04										

Q.	Give reason for the following:	Q	State whether true or false.
1.	Nowadays long chain hydrocarbon is preferred over branched one to prepare detergents.	1.	Soap can be used in hard water.
2.	Detergents are preferred in hard water.	2.	Soaps are better cleansing agents than detergents.
3.	Soaps form scum in hard water.	3.	Soap solution will turn blue litmus to red.
4.	NaCl is used for precipitation of soap.	4.	Soap is a biodegradable polymer.

**Answers:**

1. Classification Of Polymers			
CARD :01		CARD :02	
NO	QUESTIONS	NO	QUESTIONS
I	Odd One Out	II	Match the following
1	Polyesters(Mol.Forces)	A	B
2	Nylon-66(Sourse of formation)	1	Co-polymers
3	Nylon-6(Mode of polymerization)	2	Homo-Polymers
4	bakelite(Thermoplastic polymers)	3	Thermoplastics
		4	Thermosettings
	CARD:03		CARD:04
III	Fill in the Blanks	IV	Match the following
1	:Bakelite	A	B
2	:Urea-Formaldehyde	1	HDPE
3	:LDPE;	2	PHBV
4	: glyptal	3	Natural rubber
		4	Poly amides
	CARD:05		CARD:06
V	True or False	VI	True or False
1	True	1	True
2	False	2	True
3	True	3	False
4	False	4	True
2. Uses of Polymers			
CARD:01		CARD :02	
I	Match the following	II	Match the following
A	B	A	B

1	Teflon	Non-stick utensils	1	BUNA-S	Automobile tyres.
2	Bakelite	Electrical switches	2	Polyethene	Insulators
3	BUNA-N	Oil Seals,tank lining	3	PVC	Rain coats,hand
4	Melamine-formaldehyde	Unbreakable Crockery	4	PHBV	Specialty Packaging
	CARD:03			CARD:04	
III	Fill in the blanks		IV	Fill in the blanks	
1	Dacron		1	Vulcanisation	
2	Polystyrene		2	Tyre rubber	
3	Bakelite		3	Glyptal	
4	Neoprene		4	Polypropene	
	CARD:05			CARD:06	
V	True or False		VI	True or False	
1	False		1	True	
2.	True		2	True	
3.	True		3	False	
4	False		4	True	

## 3. Uses of Polymers

CARD :01

	Column A	Column B	Column C
	Polythene	Ethene $\text{CH}_2=\text{CH}_2$	Insulator, ,Packing
	Teflon(Poly	Tetrfluoroethene $\text{CF}_2=\text{CF}_2$	Lubricant, Insulator
	Buna S	Buta-1,3-diene + Styrene $\text{CH}_2=\text{CH}-$	Automobile tyres
	Buna N	Buta-1,3-diene + Acrylonitrile	Oil seals, Tank lining

CARD:02

	Name of the Polymer	Name of the Monomers
	Nylon 66	Hexamethylene diamine + Adipic
	Nylon 6	Caprolactum
	Bakelite	Phenol + Methanal
	Melamine	Melamine + Methanal
	PHBV (biodegradable)	3-Hydroxybutanoic acid + 3-Hydroxypentanoic acid
	Nylon 2 – Nylon 6 (biodegradable)	Glycine + Amino caproic acid
	Terylene(Dacron)	Ethane-1,2-diol + Benzene-1,4-dicarboxylic acid

CARD:03

III	Fill in the blanks:	
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1. polythene.
2. Adipic acid.
3. HDP.
4. Biodegradable polymer.
5. Polyesters.
6. Glyptal.

CARD:04

1. 
$$\text{---}(\text{CH}_2\text{---CH=CH---CH}_2\text{---CH}_2\text{---CH(C}_6\text{H}_5\text{))}_n\text{---}$$
 Buna-S
2. 
$$\text{---}[\text{OCH}_2\text{---CH}_2\text{---C(=O)---C}_6\text{H}_4\text{---C(=O)}]_n\text{---}$$
 Terylene
3. 
$$\text{---}(\text{NH---(CH}_2\text{)}_6\text{---NH---C(=O)---(CH}_2\text{)}_4\text{---C(=O))}_n\text{---}$$
 Nylon-66
4. 
$$\text{---}(\text{C}_6\text{H}_3(\text{OH})_2\text{---CH}_2\text{)}_n\text{---}$$
 Bakelite

CARD:05

Answer:5

1.  $\left( \text{CH}_2 - \underset{\text{Cl}}{\text{C}} = \text{CH} - \text{CH}_2 \right)_n$  Vinyl chloride
2.  $\left[ \text{CH}_2 - \text{CH} = \text{CH} - \text{CH}_2 - \text{CH}_2 - \underset{\text{CN}}{\text{CH}} \right]_n$  1,3 butdiene + Acrylonitrile
3.  $\left( \underset{\text{H}}{\text{N}} - (\text{CH}_2)_6 - \underset{\text{H}}{\text{N}} - \overset{\text{O}}{\parallel} \text{C} (\text{CH}_2)_4 - \overset{\text{O}}{\parallel} \text{C} \right)_n$  Hexamethylenediamine + Adipic acid
4.  $\left[ \text{OCH}_2 - \text{CH}_2 - \overset{\text{O}}{\parallel} \text{C} - \text{C}_6\text{H}_4 - \overset{\text{O}}{\parallel} \text{C} \right]_n$  Ethelene glycol + Terephthalic acid

Chapter -16  
Chemistry in everyday life

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**(A)Therapeutic action of drug:**

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**(B) Chemicals in food:**

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1. 2 3.	The food additives used to prevent the oxidation of food are called _____  The food additives used to prevent the spoilage of food due to microbes are called _____  The food additives that sweeten the food but do not add calorie are _____	Q  1. 2. 3. 4.	State whether true or false.  Sucrolose is trichloro derivative of sucrose.  Alitame is not largely used because the control of sweetness of food is difficult.  Sucrolose provides calories.  Salts of sorbic acid and propanoic acid used as preservatives.												
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**C) Cleansing agents:**

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3. _____ is an example of detergent.											
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Among detergent and soap, _____											
4. Is better cleansing agent.											
CARD-03	CARD-04										
Q. Give reason for the following:	Q. State whether true or false.										
1. Nowadays long chain hydrocarbon is preferred over branched one to prepare detergents.	1. Soap can be used in hard water.										
2. Detergents are preferred in hard water.	2. Soaps are better cleansing agents than detergents.										
3. Soaps form scum in hard water.	3. Soap solution will turn blue litmus to red.										
4. NaCl is used for precipitation of soap.	4. Soap is a biodegradable polymer.										

## Chemistry in everyday life

**Solutions****(A) Therapeutic action of drug:**

	CARD-01		CARD-02																				
1.	Bromphenaramine	1.	Antiseptic																				
2.	penicillin	2.	Cemetidine																				
3.	Analgesics	3.	Mifepristone																				
4.	furacine	4.	Antifertility drugs																				
		5.	Antiseptic.																				
	CARD-03		CARD-04																				
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	CARD-05		CARD-06																				



Q	State whether true or false.	Q	What is the action of following drugs on the human body-
1.	F	1.	Tranquilizers
2.	F	2.	Anti-histamine
3.	T	3.	Anti-histamine and Antacid
4.	T	4.	Anti-biotic
5.	T	5.	Antifertility drug

**(B) Chemicals in food:**

	CARD-01		CARD-02												
1.	Anti-oxidants	Q	State whether true or false.												
2.	Preservatives	1.	T												
3.	Artificial Sweeteners	2.	T												
		3.	F												
		4.	T												
	CARD-03		CARD-04												
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Preservative	Sodium benzoate														
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Natural sweetener	Sugar														
Artificial sweetener	Aspartame														
		1.	The people suffering from diabetes are advised to use artificial sweeteners because they do not add calories												
		2.	Aspartame is used in cold food items only because it breaks at cooking temperature.												
		3.	Alitame is not much in use as artificial sweetener because with this it is hard to control sweetness.												
		4.	Antioxidants are generally reducing agents because they will be easily oxidized by air in comparison to food.												

**(C) Cleansing agents:**

	CARD-01		CARD-02										
1.	Chemically soaps are sodium or potassium salts of fatty acids	1.	Match the following:										
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Soap	Sodium stearate												
3.	Lauryl sulphate is an example of detergent. Sodium palmitate is an example of soap.												
4.	Among detergent and soap, detergent is better cleansing agent.												
	CARD-03		CARD-04										

Q.	Give reason for the following:	Q	State whether true or false.
1.	Nowadays long chain hydrocarbon is preferred over branched one to prepare detergents because they are bio degradable	1.	F
2.	Detergents are preferred in hard water because they do not form scum with hard water.	2.	F
3.	Soaps form scum in hard water because it forms insoluble calcium and magnesium salts with soap	3.	F
4.	NaCl is used for precipitation of soap for salting out.	4.	T

- i) Bharat Kumar Pandya   ii) Sajeesh Kumar TV   iii) Satheesh Kumar TTV  
iv) Anil Kumar Sharma   v) Pratheesh N