

## UNIT: 4-CHEMISTRY IN DAILY LIFE

Class: VII

Subject: Science

### I. Choose the correct answers

1. A drug effective in the treatment of pneumonia, and bronchitis, is \_\_\_\_\_  
a. Streptomycin      b. Chloramphenicol      **c. Penicillin**      d. Sulphaguanidine
2. Aspirin is \_\_\_\_\_  
a. Antibiotic      **b. Antipyretic**      c. Sedative      d. Psychedelic
3. \_\_\_\_\_ are that neutralize stomach acid.  
**a. Antacid**      b. Antipyretic      c. Analgesic      d. Antihistamics
4. The lowest temperature at which a substance catch the fire is called its \_\_\_\_\_  
a. Boiling point      b. Melting point  
c. Critical temperature      **d. Ignition temperature.**
5. Which is the hottest part in the flame of candle \_\_\_\_\_  
**a. Blue**      b. Yellow      c. Black      d. Way part

### II. Fill in the blanks.

1. Penicillin was first discovered by Alexander Fleming
2. World ORS Day is July 29
3. Combustion is a chemical reaction in which and substance react with oxidizing agent
4. In the presence of water, the ignition temperature of paper is not reached
5. Fire produced by oil cannot be controlled by water

### III. True or False - If False give the correct answer

1. Antibiotics does work for viruses like cold **False**
2. Analgesics are the substances that lower the temperature during fever. **False**
3. All fuels form flame. **False**
4. Oxygen is necessary for combustion **True**
5. Burning wood and coal causes pollution of air **True**

### IV. Match the following

- |                |   |                         |
|----------------|---|-------------------------|
| 1. Antipyertic | - | reduce body temperature |
| 2. Analgestic  | - | reduce pain             |
| 3. Antacid     | - | ORS solution            |
| 4. Phosphrous  | - | Spontaneous combustion  |

5. Carbon dioxide - leads to respiratory problem

### V. Analogy

1. Inner zone of flame :: Black, outer zone of flame :: Blue
2. Tincture :: Antiseptic, cistamine :: Chemical messenger.

### VI. Very short answer

1. First viral disease detected in human being was : Yellow fever.  
(Yellow fever / dengue fever)
2. : CO<sub>2</sub>, Methane, Chlorofluorocarbons (CFC) are called green house gases  
(Fleming / lenis pastor)
3. Name a substance which can be used as an antiseptic as well as disinfectant?  
Garlic, Turmeric, Aloe vera.
4. What are the main constituents of dettol?  
Mixture of chloroxlenol and terpincol
5. Name the unit in which the calorific value of a fuel is expressed? KJ/Kg
6. How many types of combustion are there?
  - Rapid combustion
  - Spontaneous combustion
  - Explosion
7. What are the essential requirements for producing fire?  
Fuel, Heat and Oxygen.

### VII. Short Answer Questions

#### 1. Why should not medicines be taken without consulting doctors?

One should not take medicines without consulting doctors because if a wrong medicine is accidentally eaten for a disease, it may not cure the disease but actually can have harmful side effects to the body.

#### 2. Why do antiseptics differ from disinfectants? Give one example of each.

<u>Antiseptic</u>	<u>Disinfectants</u>
All antiseptic are disinfectants	All disinfectants are not antiseptic
It can be applied on the live tissue	It can be apply on in animate object
E.g. skin / Mucous	E.g. Surface, lab working tables, floor.

### 3. What is ignition temperature?

The minimum temperature at which a substance catches fire and burns is called its ignition temperature..

### 4. If 4.5kg of fuel is completely burnt and amount of heat produced stands measured at 1, 80,000 KJ what is the calorific value.

Amount of fuel = 4.5 kg

Heat produced = 1,80,000 kJ

Calorific value = ?

#### Solution:

Calorific value = Heat produced / Amount of fuel  
= 1,80,000 / 4.5 = 40,000

Calorific value = 40,000 kJ/kg

## VIII. Answer in Detail

### 1. Explain briefly about antibiotic and analgesic?

- Many micro organisms and plants synthesize chemicals which are toxic in nature to protect them from invading organisms.
- Those biosynthesized chemicals can be isolated from the plants/micro organisms and was used as medicines against infectious diseases, these substances were called as antibiotics.
- Ex: Chloramphenicols, tetracyclines, Penicillin derivatives, cephalosporin's and their derivatives.
- The world's first antibiotic penicillin was discovered by Dr. Alexander Fleming.

#### Analgesics:

- Analgesics or pain killers that react like the pain-suppressing chemicals released by the body.
- They suppress the feeling of 'pain.
- This analgesics drug selectively relieves pain by acting either in CNS (Central Nerves System) or on peripheral pain mechanism, without significantly altering consciousness.

### 2. Make labeled diagram of a candle flame.

