SNBP INTERNATIONAL & Sr. SECONDARY SCHOOL, CHIKHALI, PUNE Affiliation No. 1130703 5

<b>EY</b> 2024-25
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PT 4 ANS KEY 2024-25								
	ADE:		SUBJECT:		DATE:	TIME:	MARKS:	
V	/		SCIENCE		12.03.2025	3HRS	60	
SECTION A								
OI.	Multiple Choice Questions. (16Q X 1M =16M)							
1.	-	Which of the following is used in air conditioners?						
	a. CFC		b. Ozone	c. Nitrogen	d. Carbon dioxide			
2.								
	a. Earthquakes b. Heavy rainfall c. Landslides d. Volcanic Eruption							
3.								
	a. Gibbous moon b. Half-moon c. Full moon d. New Moon							
4.								
	a. Cars and factories b. Trees c. Birds d. Water bodies							
5.		is a miscibl						
	a. Vineg		b. Kerosene	c. Diesel	d. Oil			
6.	-	the Moon?						
	a. A pla	net b. A	satellite of Earth	c. A star d. A	comet			
7.	-		m a well using a					
	a. Pulle		Inclined plane	c. Wedge	d. Screw			
8.								
		on dioxide	b. Oxygen	c. Neon	d. Nitrogen			
9.								
	a. Oxyg	-	b. Nitrogen	c. Argon	d. Carbon dioxide	:		
10.		15 Mar		C				
		. Mar 1						
				With at later d of		ala arrea in tha i		
	a Wata		What kind of environmental issue is shown in the ima				mage?	
11	a. Water pollution b. Deforestation c. Air pollution d. Soil erosion							
11.								
10	a. Lever		•		/edge			
12.	When a piece of wood burns, it undergoes a: a. Physical change b. Chemical change c. Neither d. Both physical and chemical change							
10	a. Phys	fical change	e b. Chemical ch	ange c. Neithe	er d. Both physical	and chemical c	nange	
13.			CARRIER CONTRACTOR					
	- ALLER							
				What disas	ter cause the destruction	on shown in the	image?	
	a. Earth	auske	b. Flood c. Tsu	nami d V	olcanic eruption			
1/		•	ise diseases like					
14.	a. Typh				d. Polio			
15	• •		ch other substance		<b>u.</b> 1 0110			
13	a. Solut		vent c. Solution		nese			
05.15			ENCE/ 2024-25	u. All 01 ll				

# **16.** \_\_\_\_\_ layer is the nearest layer to the Earth?

a. Troposphere b. Stratosphere c. Mesosphere d. Exosphere

#### **SECTION-B**

#### Q.II. Fill in the Blanks.

- **1.** The waste from animals is called manure.
- 2. The first artificial satellite launched into space in 1957 was called Sputnik-1.
- 3. Seismologists study the frequency and magnitude of earthquakes.

### Q.III True or False.

- 1. Earthquakes in the sea causes tsunamis. True
- 2. Using too many chemicals can pollute the soil. True
- 3. It is safe to view the solar eclipse without protective eye wear. False

#### QIV. Match the following:

'A' 'B' 1. CFC's a. Causes tides 3 2. Scanty rainfall b. Global warming 1 3. Moon c. Drought 2

#### SECTION-C

#### Q.V Answer in Short.

1. Give any two steps how you can control pollution? (Any 2 points)

Ans; We should plant more trees as they release oxygen into the air and keep the air pure.

- We should increase the use of solar energy and depend less on energy acquired by
- burning fossil fuels. This will reduce the amount of greenhouse gases released into the air and also reduce air pollution.
- We must stop the use of plastic bags and instead promote the use of cloth, jute bags.
- We must prevent deforestation, or limit it to a reasonable amount.
- Jars, bottles and newspapers should be recycled to make other useful things.
- Factories and chimneys should be equipped with waste treatment facilities and smoke .
- 2. What causes landslides?

Ans- A landslide happens, when large stones and rocks slide down the slopes of mountains and hills with the mud, with great speed and force, which damages the land and also harms the people and property in the area. Landslides generally occur during the rainy season.

3. Why do the sun and the moon appear to be of the same size?

Ans- In the sky, the Moon and the Sun appear to be of the same size. But the Sun is much bigger. As the Moon is closer to the Earth, it appears as big as the Sun.

#### Q,VI Answer in brief : (Any 5)

(5QX3M=15M)

1)

# (3QX2M=6M)

(3QX1M=3M)

(3QX1M=3M)

(3QX1M=3M)

- 1. Explain different ways in which drinking water can be cleaned.
  - **Ans-** The purification of water can be carried out in the following ways:
  - Water can be purified using potassium permanganate or alum.

• We can also make use of ultraviolet water filters. So that the filter itself does not become contaminated, we must clean it frequently.

• To make water safe for drinking, it can be boiled for 10-15 minutes. On a large scale, sedimentation, filtration and distillation are carried out in towns and cities

2. How is the Taj mahal affected by the pollution.

**Ans-** Taj Mahal is a structure made entirely of white marble. But it is slowly turning yellow. This is because the harmful pollutants in the air mix with the rainwater and produce acid rain. This acid rain is slowly ruining the quality of the white marble of the Taj Mahal. In order to save this monument, many factories have been closed down or relocated. More trees have been planted around the Taj Mahal to keep the area clean.

3. Why is there no life on the Moon?

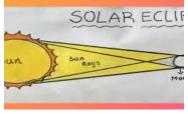
**Ans-** The atmosphere on the Moon is like a vacuum, The Sun's strong rays are especially harsh on the Moon's surface as it does not have a protective atmosphere. The side facing the Sun becomes very hot while the side facing away is very cold. The Moon does not have water or life-supporting air. So, we cannot breathe in air. We cannot hear any sound on the Moon, as there is no air to let the sound waves travel. There are no clouds to be seen above the Moon. The Moon does not have any form of life.

4. What is natural calamity? How is different from volcano?

Ans- When the natural forces cause damage and destruction to life and property, it is called a <u>natural</u> <u>calamity</u>.

A natural calamity causes economic and environmental damage. Sudden changes in the temperature, pressure, sea level and some other causes bring natural calamities. Volcanoes are a type of natural calamity. It is the eruption of extremely hot magma from under the Earth's crust in the form of lava.

5. Draw and label the solar eclipse?



Ans :

6. Define simple machines and explain their uses.

Ans- Tools that make our work easier and faster are called simple machines.

- 1)They help us to change or increase the direction of force by applying force at a convenient point.
- 2) They transfer energy from one form to another.
- 3) Increasing the distance or speed of a force.

## Q.VII Answer in detail.

1. Explain greenhouse gases and lists their names.

**Ans-** Gases that cause the greenhouse effect are:

- Methane: Released by herbivores when their food is digested. Also released by fertilisers.
- Carbon dioxide: Biotic components exhale carbon dioxide. Burning of fossil fuels and cutting of

(2Q X 5M = 10M)

trees release carbon dioxide.

• Ozone: Ozone is present in the stratosphere, which is a layer of the atmosphere. The layer in which ozone is present is called the ozone layer. The ozone layer blocks the harmful ultraviolet rays which produce harmful radiations and harm the environment.

• Water vapour: Released into air by evaporation and transpiration.

•CFC (Chlorofluorocarbons): Appliances like refrigerators, air conditioners, electrical devices tend to warm up the atmosphere.

2.



- a. Name the natural calamity? Ans; Flood
- b. Give any 4 problems that can be faced by the affected area? (Any 4 points) Ans: 1) Serious floods submerge the land. 2) Sometimes after floods, the sanitary requirements of places and people might not be given as much importance. As a result, diseases and epidemics can break out and cause even more problem. 3) The loss of life and property greatly affects the survivors of floods 4) The loss of a close relative, friend or neighbor would emotionally affect the survivors. 5) After a natural calamity, survivors might experience emotional trauma or fear, the community might get displaced and family and friends might get separated. Many businesses shut down permanently. Floods sweep away homes and their possessions.

#### **QVIII** Case based Question.

#### (1Q X4 M = 4M)

- 1. The Role of Satellites in Space Exploration and Communication Answers :
- 1. What is the main purpose of weather satellites? (2M) Answer: The main purpose of weather satellites is to monitor weather patterns and forecast conditions like storms, cyclones, forest fires, and floods.
- 2. Multiple Choice Questions. (2Qx1M = 2M)
- a. Resource mapping satellites are used to:
  - b) Locate natural resources like coal and petroleum a) Send television broadcasts c) Predict weather patterns
    - d) Explore space for new planets

#### **Answer:** b) Locate natural resources like coal and petroleum

- b. What is the main role of communication satellites?
  - a) To observe forest fires b) To send messages and TV programs across countries
  - c) To map the Earth's crust d) To study the Moon

Answer: b) To send messages and TV programs across countries