

# ਪ੍ਰ⊌ਗ International School

Shree Swaminarayan Gurukul, Zundal

SHMMAT	IVE ASSIC	INMENT	-2. 2.	020 - 21

Grade – 6

**Subject- SCIENCE** 

**Syllabus – CH-10,11,12,14,15,16 FROM TEXTBOOK** 

## SUMMATIVE ASSESSMENT – II [2020-21]

Q-1.Multiple Choice Questi	ions.	
1. The system of units now u	sed is known as	
a) Indian system of units		
b) International system of u	nnits	
c) Russian system of units		
2. The SI Unit of length is		
a) Km	b) Meter	c) Cm
3. In rectilinear motion, the o	bjects move along	
a) Closed line	b) perpendicular line	c) straight line
4. The unit is used for measur	ring large distances	
a) Km	b) mm	c) Cm
5. In periodic motion, the obj	ects repeat itself after	
a) Very small period of time		
b) a large period of time		
c) same period of time		
6. Earliest mode of transport	on water was	
a) aeroplane	b) howercraft	c) logs tied together
7. To fly from one place to an	nother we use	
a) aeroplane	b) bird	c) boats
8. One of the early measures	of distance was	
a) Litre	b) gram	c) paces

9. A curved line can be meas	ure using	
a) Ruler	b) string and ruler	c) beaker
10. Hands of the clock show		
a) circular motion	b) periodic motion	c) both (a) and (b)
11. Swing shows	_	
a) circular motion	b) linear motion	c) periodic motion
12. A car moving in a straigh	t line on the road shows	
a) circular motion	b) linear motion	c) periodic motion
13. Which of the following g	ives us light?	
a) Fan	b) tube light	c) toaster
14. What do we call the insec	ets which give off light?	
a) Blow worms	b) glow worms	c) glass worms
15. A shadow is formed on the	ne side of the light?	
a) Same	b) opposite	c) none of these
16. Which objects use the ref	lection of light?	
a) Periscope	b) mirror	c) wooden table
17. Which one is natural sour	rce of light?	
a) Tubelight	b) electric bulb	c) Sun
18. The object which allow to	pass most of the light falling	on them are called
a) Transparent	b) translucent	c) opaque
19. Image formed by the pinh	nole camera is	
a) Erect	b) inverted	c) all of these
20. The moon is		
a) luminous	b) non-luminous	c) Both (a) and (b)
21. The shape of the shadow	depends upon the	
a) shape of the opaque obje	ct	
b) colour of screen		

c) colour of the object		
22. Light travels in		
a) straight line	b) curved line	c) zig-zag line
23. Which of the following is	s the source of electricit	ty in a mobile phone?
a) solar cell	b) charger	c) primary cell
24. The filament of an electric	c bulb is made of a thin	n wire of
a) copper	b) aluminium	c) tungsten
25. An electric cell has	_ terminals.	
a) 1	b) 2	c) 3
26. An electric cell has		
a) positive and negative ter	minal	
b) two positive terminals		
c) two negative terminals		
27. An electric cell does not	produce electricity when	n
a) chemicals inside get comp	letely used up	
b) the terminals are not conne	ected properly	
c) both (a) and (b)		
28. An electric cell uses	to produce electricit	ty
a) heat	b) light	c) chemicals
29. The process of changing	of water into vapour is	
a) evaporation	b) condensation	c) relaxation
30. The collection of rain wa	ter and stored for later u	use is known as
a) green revolution	b) white revolution	c) rain water harvesting
31. The main source of water	ris	
a) The lake	b) the ocean	c) the rain
32. When is the water day ce	lebrated all over the wo	orld?
a) 8 <sup>th</sup> March	b) 22 <sup>nd</sup> March	c) 14 <sup>th</sup> April

33. We should save energy di	rop of water as it is	
a) Essence of life	b) cheap	c) costly
34. The solid form of water is	S	
a) Ice	b) steam	c) smoke
35. The circulation of water b	between ocean and land is	
a) water cycle	b) carbon cycle	c) nitrogen cycle
36. Excessive rains may caus	e	
a) rain	b) flood	c) drought
37. No rainfall for a year or n	nany more lead to in	that region.
a) rain	b) flood	c) drought
38. Moving air is called		
a) cyclone	b) wind	c) storm
39. When air is passed through	gh lime water it turns milky, th	is is due to
a) water vapour	b) Co2	c) Nitrogen
40. The layer of air around the	e earth is called	
a) atmosphere	b) hydrosphere	c) lithosphere
41. Air is		
a) a mixture	b) a compound	c) an element
42. Which component of the	air is used in fire extinguisher	?
a) oxygen	b) nitrogen	c) carbon dioxide
43. Name the object which is	inflated by the air	
a) balloon	b) table	c) chair
44. Give the % of nitrogen ga	as in air	
a) 30%	b) 60%	c) 78%
45. Which gas is used by gree	en plants to produce starch?	
a) O2	b) N	C) Co2
46. The method of preparing	compost with the help of earth	nworms is called

a) composting	b) vermin composting	c) decomposing
47. If you dump kitchen was	te in a pit, it may after some	time
a) convert into compost		
b) convert into vermincoms		
c) remain as such		
48. Which of the following a disposal?	ctivities does not reflect resp	ponsible behavior with regard to waste
a) Goods carried in paper bag	gs	
b) waste collected in polyth	ene bags	
c) making handicrafts with u	sed up notebooks	
49. The Swacch Bharat Miss	ion was launched on	
a) 2 <sup>nd</sup> October 2014		
b) 2 <sup>nd</sup> October 2016		
c) 2 <sup>nd</sup> October 2018		
50. Recycling can be done of	f	
a) paper	b) food waste	c) ceramics
51. Which one can be used for	or making manure	
a) Earthworms	b) Houseflies	c) Eagle
52. Garbage from cities is co	llected at	
a) landfill areas	b) riversides	c) near every colony
53. 3'R' means		
a) reduce, reuse, recycle		
b) rain, reuse, recycle		
c) rotting, reuse, recycle		
54. Ratting is carried out by		
a) microbes	b) insects	c) ants
Q-2. State whether the state	ement is true or false.	

1. Our senses are reliable for accurate measurement. F

- 2. The choice of device used for the measurement depends on the type of measurement to be made. T
- 3. 1m = 100 cm. T
- 4. 5km = 5000cm. F
- 5. Motion of a wheel of a cycle is random motion. F
- 6. Any non-luminous body can be made luminous by heating it. T
- 7. Any material through which light energy pass partially or wholly is called an opaque object. F
- 8. A cardboard is an example of an opaque object. T
- 9. A glass is a transparent. T
- 10. A shadow is colourful. F
- 11. Electric current can flow through metals. T
- 12. Instead of metal wires, a jute string can be used to make a circuit. F
- 13. Electric current can pass through a sheet of thermo Col. F
- 14. The metal disc is the positive terminal. F
- 15. Brass is a conductor. T
- 16. Insulators allow current to pass through them. F
- 17. Water drops appear on the outer surface of a glass containing cold water. F
- 18. Steam rising from wet clothes while they are ironed. F
- 19. Fog appearing on a cold winter morning. T
- 20. Blackboard dries up after wiping it. F
- 21. Steam rising from a hot girdle when water is sprinkled on it. T
- 22. The process of water changing into its vapour is called evaporation. T
- 23. The evaporation takes place only in sunlight. F
- 24. Air is found everywhere. T
- 25. Soil does not contain air. F
- 26. The moving air makes it possible for you to fly your kite. T
- 27. Carbon dioxide supports burning of a candle. F
- 28. Birds, bats and insects can fly due to the presence of air. T
- 29. The packaging material of flour, biscuits and milk go out as garbage. T
- 30. We generate so much garbage in our day to day activities. T
- 31. Garbage contains only non-useful components. F
- 32. Garbage heaps of dried leaves should not be burnt. T

#### Q-3. Fill in the blanks.

1. One metre is **100** cm.

- 2. Five kilometer is **5000** m.
- 3. Motion of a child on a swing is **oscillatory** motion.
- 4. Motion of the needle of a swing machine is **periodic** motion.
- 5. Motion of wheel of a bicycle is **circular** motion.
- 6. The standard unit of length is **metre**.
- 7. Length more than one thousand metres are measured in kilometers.
- 8. Motion of a car on straight road is **rectilinear** motion.
- 9. **Transparent** objects do not caste any shadow.
- 10. Moon is a **non-luminous** object.
- 11. Shadows give us information about the **shape** of the object.
- 12. A **mirror** changes the direction of light that falls on it.
- 13. A highly polished furniture acts like mirror.
- 14. Wooden piece is an **opaque** object.
- 15. A device that is used to break an electric circuit is called **switch**.
- 16. An electric cell has **two** terminals.
- 17. A material that does not allow electric current to pass through it called **insulator**
- 18. Device that converts chemical energy to electricity is called **battery**.
- 19. The process of changing water into water vapour is called **evaporation**.
- 20. The process of changing water vapour into water is called **condensation**.
- 21. No rainfall for a year or more may lead to **drought** in that region.
- 22. Excessive rains may cause flood.
- 23. Water present in ocean and sea is **unfit** for drinking.
- 24. Water covers more than two thirds of the earth's surface.
- 25. When air is in **motion** is called wind.
- 26. Air is really not one substance but a **mixture**.
- 27. Air contains **dust** particles.
- 28. The component of air that supports burning is called **oxygen.**
- 29. Our earth is surrounded by air.
- 30. Nitrogen of air is used on a large scale to manufacture fertilizer.
- 31. **Compressed** air is used in tyres of vehicles.
- 32. **Atmosphere** is the place in nature for gaseous exchange.
- 33. Air is present in atmosphere, water and soil.
- 34. **Safai karamcharis** take the garbage from the bins.
- 35. Biodegradable wastes could be converted into useful compost.
- 36. Drains get choked due to **plastic** thrown by us.
- 37. Redworms do not survive in very **hot** or very **cold** surrounding.

#### Q-4. Answer in one word or one sentence.

1. Which measuring device can be used to measure the girth of tree?

Ans: Measuring tape

2. Write the type of motion in which a body moves along a straight path.

Ans: Rectilinear or linear motion

3. Which unit of length is used to measure a large distance?

Ans: Kilometre

## 4. Write one example of circular motion.

Ans: Motion of hands of a clock.

## 5. Name the type of motion in which a body moves along a curved path.

Ans: Circular or Rotational motion.

## 6. Name the type of motion in which motion repeats after equal time interval.

Ans: Periodic motion

#### 7. Define 'unit'.

Ans: The fixed quantity with which we compare an unknown quantity is called unit.

#### 8. When object is said to be in rest?

Ans: If the position of an object does not change with time, it is said to be at rest.

#### 9. Write the four conventional method of measurement.

Ans: Hand span, cubit, arm length, foot step

## 10. Give two examples of periodic motion.

#### Ans:

- (i)Pendulum
- (ii)Child on the swing.

## 11. The distance between Radha's home and her school is 3250 m. express this distance into km.

Ans: 3250 m = 3250/1000 km = 3.250 km (1 m = 1/1000 km)

## 12. What is luminous object?

Ans: Objects which emit their own light are called luminous objects. Ex. A candle, electric torch.

#### 13. What is non-luminous object?

Ans: Objects which do not have their own light and are seen by the light scattered by them are called non-luminous objects. Example: moon, chair, table, etc.

#### 14. What are conductors?

Ans: Materials that allow electric current to pass through them. All metals are good conductors of electricity. Ex: Copper wire

#### 15. What are insulators?

Ans: Materials which do not allow electric current to pass through them. Example: plastic, rubber, wood, glass, polythene, PVC, etc.

#### 16. Define shadow.

Ans: A **shadow** is the 'region of absence of light'. Light from a source is cut off by an obstacle and shadow is formed.

## 17. What is light?

Ans: Light is form of energy which excites the sensation of vision.

## 18. Is moon a luminous or non-luminous body?

Ans: Moon is a non-luminous body.

## 19. How does light travel?

Ans: Light travels in straight line.

### 20. Name one living thing which emits light?

Ans: Jugnu(firefly)

#### 21. What are trasparent substances?

Ans: All substances that allow light to pass through them and through which objects can clearly be seen are called transparent substances. Ex: glass, water

#### 22. What is translucent substance?

Ans: A substance that allows light to pass through it only partially is called a translucent substance. Ex: butter paper, tissue paper

#### 23. What are opaque objects?

Ans: Objects that do not allow light to pass through them. Ex: book, bricks

## 24. Write any four sources of light.

Ans: Sun, stars, electric torch, candle flame

#### 25. Which living organism is used for composting?

Ans: Earthworm

### 26. Does the colour of opaque object affect the colour of the shadow?

Ans. No, the colour of opaque object does not affect the colour of the shadow.

#### 27. When shadow cannot be formed?

Ans. Shadow cannot be formed when light is coming from all direction.

#### 28. Name the +ve terminal of dry cell.

Ans: Carbon rod with a metal cap on it.

### 29. What is the direction of flow of current in a dry cell?

Ans: The current flows in closed circuit from +ve to -ve terminal of cell.

#### 30. What is open circuit?

Ans: An electric circuit in which electrical contact at any point is broken is called open circuit.

#### 31. What is the name of thin wire in the electric bulb?

Ans: Filament

## **32.Write any two activities which require more than a bucket of water. Ans.** Washing clothes and irrigation require more than two buckets of water.

#### 33.What is wind?

Ans: Air in motion is called wind.

#### 34. What is air made upof?

Ans: Nitrogen, oxygen, carbon dioxide, water vapour and few other gases.

## 35. From where does oxygen come in the air?

Ans: Plant release oxygen in the air by the process of photosynthesis.

### 36. Suggest some packaging material which can be recycled.

Ans: Glass bottles, recycling polythene and jute bags

#### 37. What is composting?

Ans: The rotting and conversion of some materials into manure is called composting.

### 38. For what purpose blue coloured bins are used?

Ans: The blue bins are used for materials that can be used again – such as plastics, metals and glass.

#### Q-5. Answer in two-three sentences.

#### 1. What do you understand by measurement?

Ans: Measurement mean the comparision of some unknown quantity with a kown fixed quantity of same kind.

#### 2. When the object is said to be in motion?

Ans: When an object changes its position with time with respect to another object, it is said to be in motion.

### 3. What do you understand by standard unit of measurement?

Ans: The unit which is acceptable to the majority of people as a basic unit of measurement is called standard unit of measurement.

# 4. Write the similarities and differences between the motion of a bicycle and ceiling fan that has been switched on.

Ans: Similarities: - Wheel of a bicycle and ceiling fan both shows circular motion.

Differences: - Cycle moves in rectilinear motion but ceiling fan does not move in rectilinear motion.

## 5. Is air around us always transparent? Discuss.

Ans. Normally air around us is transparent but due to the occurrence of thick smoke, fog, or thick clouds, etc. the air does not remain transparent any more.

# 6. Three identical towels of red, blue and green color are hanging on a clothes line in the sun. What would be the color of shadows of these towels?

Ans. This would not affect the color of the shadow as shadows are just dark patches formed as a result of the obstruction of the path of light by an object.

# 7. In a completely dark room, if you hold up a mirror in front of you, will you see reflection of yourself in the mirror?

Ans: In completely dark room, No one can see any image in the mirror, because there is no light falling on the mirror which can be reflected to show the image.

### 8. Will the bulb glow in the circuit shown in given figure. Explain.



Ans. No, bulb will not glow because the circuit is incomplete due to open switch which lead not to flow current from one terminal of cell to another.

#### 9. Why do bulbs have two terminals?

Ans. An electric cell has two terminals; one is called positive (+ ve) while the other is negative (- ve). An electric bulb has a filament that is connected to its terminals. An electric bulb glows when electric current passes through it.

# 10. The handles of the tools like screwdrivers and pliers used by electrician for repair work usually have plastic or rubber covers on them. Can you explain why?

Ans: Plastic and rubber, both is bad conductor of electricity. Hence they protect against electric shock.

11. Water kept in sunlight gets heat from the sun and is evaporated. But how does water kept under the shade of a tree also gets evaporated? Explain.

**Ans.**Water kept under the shade of a tree gets evaporated due to the heating up of the air during daytime due to presence of sun. The hot air provides heat and evaporates the water kept in shade.

## 12. How do the areas covered with concrete affect the availability of ground water?

**Ans.**Areas covered with concrete reduces the seepage of rain water into the ground. As water from concrete area flows into the drains thereby reducing the availability of ground water.

# 13. Dissolve two spoons of common salt in half a cup of water. Now if you want to get the salt back, what will you do?

**Ans.**To get the salt back we can heat the solution so that water can evaporate leaving the crystals of salt back. This can also be done if the solution is kept in sun for few hours. The water will get evaporated and crystals of salt will be left behind.

## 14. Take out a cooled bottle of water from refrigerator and keep it on a table. After some time vou notice a puddle of water around it. Why?

**Answer:** The puddle of water seen around the cooled bottle of water is due to the condensation effect as the water vapour present in the air around the bottle get condensed after colliding with bottle.

# 15. To clean their spectacles, people often breathe out on glasses to make them wet. Explain why the glasses become wet?

**Answer:** When we breath out, water vapours also come out with exhaled air. These water vapours when come in contact with the glasses of spectacle make them wet.

### 16. How will you show that air is dissolved in water?

**Answer:** When a tumbler containing water is heated, tiny bubbles appear on the inner side. These bubbles appear before the water starts boiling. So, these must be air bubbles. This shows that water contain air.

#### 17. Why does a lump of cotton wool shrink in water?

**Answer:** A lump of cotton wool shrinks in water because the air inside wool cotton is driven out by water. The layers stick together and hence lump shrinks.

#### 18. How do plants and animals help each other in exchange of gases in the atmosphere?

**Answer:** In photosynthesis, plants take carbon dioxide and give out oxygen. The animals breath in oxygen in respiration and carbon dioxide is given out which is again used by plants for photosynthesis, that is, preparation of food by plants.

This is how plants and animals help each other in the exchange of gases in the atmosphere.

### 19. Do you think it is a better to use compost instead of chemical fertilizers? Why?

**Answer:** Yes, i think it is better to use compost instead of chemical fertilisers because:

- (i) It is environment friendly and add natural fertility to the soil.
  - (ii) It doesn't have adverse effect on nature and creates no pollution.
  - (iii) The food items grown are also healthy and do not contains any chemicals.
  - (iv) It is cheaper than the chemical fertiliser.
  - (v) Soil will never loss its fertility if we use compost.

### 20. Why do wet clothes dried on a clothes line get dry after some time? Explain.

**Ans.**Wet clothes when dried on a clothes line get dry after sometime due to the evaporation of the water present in wet clothes and their conversion to water vapour.

## Q-6. Write the question based on diagrams.

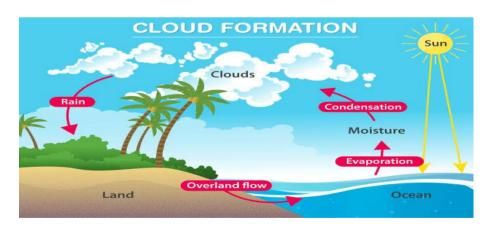
### 1. Explain the process of rooftop rain water harvesting with the help of a suitable diagram.

**Ans.** Rainwater containing soil from the roof is collected from the rooftop and is collected into a storage tank, through pipes. Second step is to filter the stored water. The water can also be transported into a pit in the ground. This then seeps into the soil to recharge or refill the ground water.



#### 2. How are clouds formed?

**Answer:** The process of condensation plays an important role in formation of cloud. As water vapour goes higher from the surface of the earth, it gets cooler. When the air moves up, it gets cooler and cooler. At sufficient heights the air becomes so cool that the water vapour present in it condenses to form tiny water droplets. It is these tiny droplets that remain floating in air and appear to us as clouds.



#### 3. Observe the picture carefully and answer the following questions.



Fig. 15.1

	comment on air quality of the place shown in the diagram?
<b>Ans.</b> (a) A r	
(b) To save	himself from the dirt and the polluted air.
	ity of the place is not good. This is due to the smoke, dust and gases released by the along with dust particles present in the air.