

Class : 8<sup>th</sup>

SUBJECT: SCIENCE 2019 – 20

Time : 90m

SUMMATIVE ASSESMENT - 1

Marks:40

ANSWER THE FOLLOWING QUESTIONS:

1. One of the following does not belong to the group

1 X 6 = 6

A] Water      B] Forests      C] Petrol      D] Soil.

2. Fill in the box with the name of the appropriate organism

Gass →  → Frog → Snake → Eagle

A] Deer      B] Lizard      C] Grass hopper      D] Rat.

3. The heaviest fundamental particle is

A] Proton      B] Electron      C] Neutron      D]Hydrogen .

4. Gram atomic mass of a substance contains ----- atoms

A]  $6.023 \times 10^{23}$       B]  $60.23 \times 10^{23}$       C]  $602.3 \times 10^{23}$       D]  $6.023 \times 10^{22}$  .

5. One of the following is the smallest organelle in a cell

A] Lysosome      B] Nucleus      C] ribosome      D] mitochondrion .

1 X 4 = 4

6. A kingdom consisting of single celled, prokaryotic organisms is

A] mycota      B] monera      C] plantae      D] protista .

7. Match the following :

A	B	Answer
1. familiaris	a. class	
2. Primates	b. Phylum	
3. anacardiaceae	c. species	
4. magnoliophyta	d. order	
	e. family	

Answer the following:

1 x 4 = 4

8. Define Acceleration

9. State first law of motion or State law of inertia

10. State law of conservation of energy.

11. Write any two characteristics of physical change.

12. Write different type of Chemical Reactions.

2 x 8 = 16

13. Write any three uses of chlorine.

14. A body does 20 J of work in 5 s. What is its power ?

15. Calculate the force required to change the velocity of an object of mass 4 kg from  $2 \text{ ms}^{-1}$  to  $4 \text{ ms}^{-1}$  in one second.

16. Write three equations of motion .

17. list any three differences between a plant cell and an animal cell.

18. Draw a diagram of typical bacterium and label its parts.

19. To prepare one gram of hydrogen molecules using hydrochloric acid, how many grams of zinc

Should be taken ?



$$3 \times 2 = 6$$

20. Write down the different characteristics of anode rays.

21. Complete the Table

Name of the disease	Disease causing microbe	Symptoms	Mode of transmission	Preventive measure
Influenza				
Cholera				

22. Draw the diagram and label the part of Animal cell or Plant cell

$$4 \times 1 = 4$$

**KEY ANSWERS GOVT URDU HIGH SCHOOL YELLAGONDAPALYA**

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A	B	Answer
1. familiaris	a. class	Species
2. Primates	b. Phylum	order
3. anacardiaceae	c. species	family
4. magnoliophyta	d. order	Phylum
	e. family	

Answer the following:

**1 x 4 = 4**

8. Define Acceleration

Ans: Acceleration can be defined as the rate of change of velocity or change in the velocity of an object in Unit time.

9. State first law of motion or State law of inertia

Ans: “ A body continues in its state of rest or of uniform motion in a straight line, unless it is compelled To change that state by forces impressed on it ”

10. State law of conservation of energy.

Ans: “Energy can neither be created nor destroyed. It can be converted from one form to another”

11. Write any two characteristics of physical change.

1. It is temporary and is easily reversible.
2. Now new substance is formed during the change.

12. Write different type of Chemical Reactions.

Ans: Chemical combination, Chemical decomposition, Chemical displacement  
Chemical double decomposition or exchange.

$$2 \times 8 = 16$$

13. Write any three uses of chlorine.

- Ans: 1. Chlorine is used in the manufacture of bleaching powder.  
2. It is used in the manufacture of hydrochloric acid.  
3. It is used in paper and pulp industry.  
4. It is used as a bleaching agent and in purification of water.

14. A body does 20 J of work in 5 s. What is its power ?

Ans: Power =  $\frac{\text{Work done}}{\text{time taken}}$  [ Here work = 20 joule, time = 5 seconds ]

$$\text{Power} = \frac{20 J}{5 s}$$

$$\text{Power} = 4 W$$

Thus the power of this body is 4 watt.

15. Calculate the force required to change the velocity of an object of mass 4 kg from  $2 \text{ ms}^{-1}$  to  $4 \text{ ms}^{-1}$  in one second.

Solution: Acceleration,  $a = \frac{v - u}{t} = \frac{4 - 2}{1} = 2 \text{ ms}^{-2}$ .

$$F = ma$$

$$m = 4 \text{ kg}, a = 2 \text{ ms}^{-2}. F = ?$$

$$F = 4 \text{ kg} \times 2 \text{ ms}^{-2}$$

$$F = 4 \times 2 = 8 \text{ kg ms}^{-2}. \text{ OR } 8 \text{ newton or } 8 \text{ N.}$$

16. Write three equations of motion .

Solution: [1]  $v = u + at$  [2]  $s = ut + \frac{1}{2} at^2$  [3]  $v^2 - u^2 = 2as$

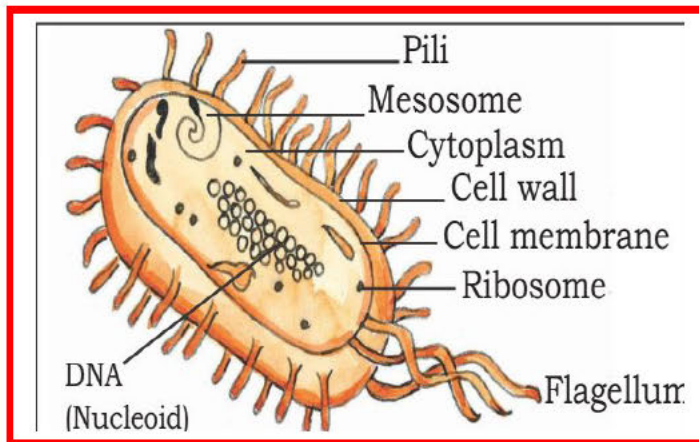
‘u’ for initial velocity ‘v’ for final velocity ‘t’ for time ‘s’ for distance travelled

17. list any three differences between a plant cell and an animal cell. Ans:

Plant cell	Animal cell
1. Cell wall is present	Cell wall is absent.
2. Plastids present	Plastids are absent.
3. Mitochondria are less in number.	More Mitochondria present.
4. Lysosomes absent.	Lysosomes are usually present.

18. Draw a diagram of typical bacterium and label its parts.

Solution:



19. To prepare one gram of hydrogen molecules using hydrochloric acid, how many grams of zinc should be taken?



Gram atomic mass of zinc is 65g and that of hydrogen molecule is 2g. From the above equation we can understand that 65g of zinc gives 2g of hydrogen molecules. To prepare 1 gm of hydrogen molecules we need 32.5gm of zinc.

$3 \times 2 = 6$

20. Write down the different characteristics of anode rays.

- A] They consist of positively charged particles.
- B] They are deflected by electrical and magnetic fields. The deflection is very little when compared to the deflection of cathode rays because they consist of heavy particles ( nucleus ).
- C] The deflection of the anode rays depends on the nature of the gas in the discharge tube. Heavier the gas lower the deflection.

21. Complete the Table

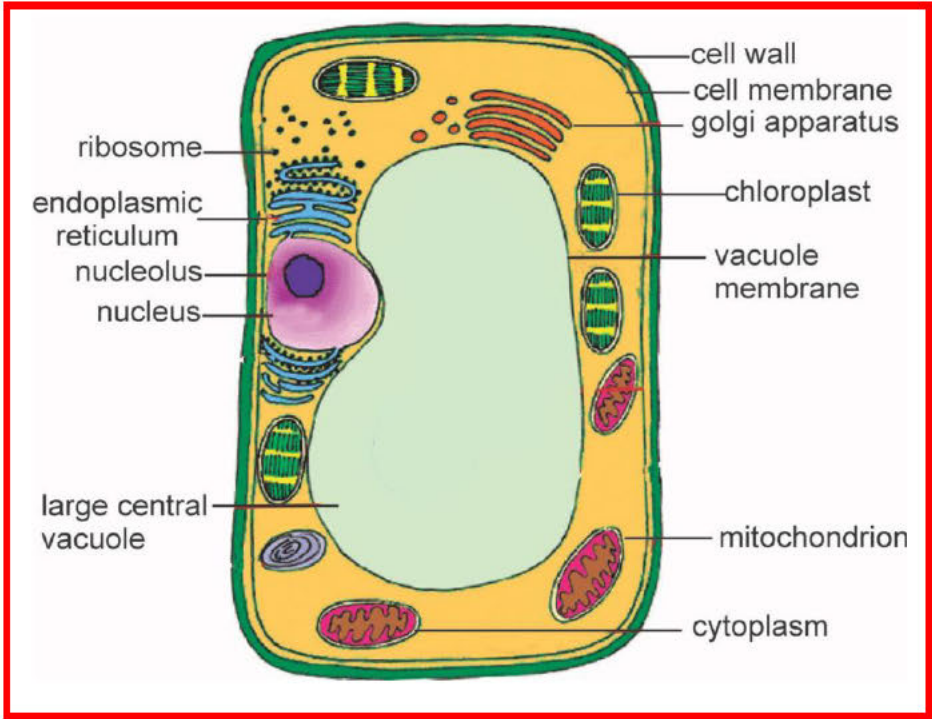
Name of the disease	Disease causing microbe	Symptoms	Mode of transmission	Preventive measure
Influenza				
Cholera				

Solution:

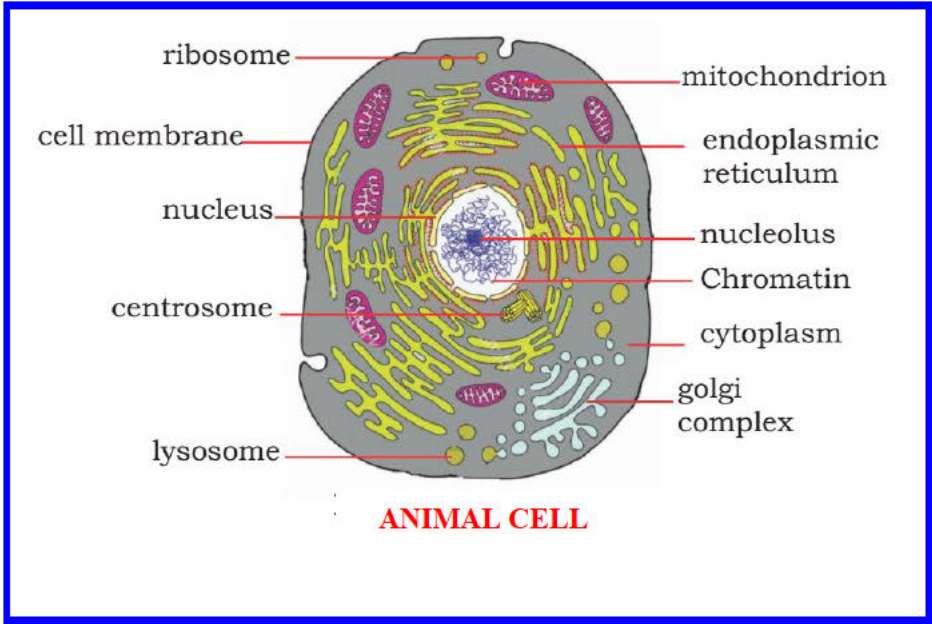
Name of the disease	Disease causing microbe	Symptoms	Mode of transmission	Preventive measure
Influenza	Influenza Virus	Chill, fever sore Throat, cough muscle pains, severe headache	Air , contaminated Handkerchiefs,	Avoid being close To infected people, Do not touch the nose and eyes with Contaminated hands
Cholera	Vibrio Cholerae	Vomiting, diarrhoea Dehydration Stomach pain	Contaminated Water , food	Avoid eating And drinking Contaminated Food water.

22. Draw the diagram and label the part of Animal cell or Plant cell

4 x 1 = 4



**PLANT CELL**



**ANIMAL CELL**