

**GOVERNMENT JUNIOR COLLEGE (HIGH SCHOOL SECTION) SIRA**

**CLASS : 10<sup>TH</sup> A**

**PRE-TEST (2021-2022)**

**MARKS : 20**

**SUB : SCIENCE**

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**TIME : 1 HOUR**

**Four alternatives are given for the following questions. Choose the correct answer and write it along with its alphabet**

**1. The valency of Aluminium and Oxygen are**

- a) 2 and 5                      b) 3 and 2                      c) 1 and 3                      d) 4 and 2

**2. Complete the following table by using the options given below.**

S.No	Behaviour	Solids	Liquids	Gases
01	Arrangement of molecules	Molecules are closely arranged	Molecules are loosely arranged	
02	Compressibility		Compressibility is more	Compressibility is very large
03	Shape	Specific shape		No specific shape

- a) Molecules are freely arranged, Shape is based on the container and Compressibility is least  
b) Molecules are closely arranged, Compressibility is more and No specific shape  
c) Compressibility is very large, Specific shape and Molecules are loosely arranged  
d) Molecules are loosely arranged, Shape is based on the container and Compressibility is least

**3. Identify the best method used to separate the components like ammonium chloride and sodium chloride**

- a) Centrifuge                      b) Distillation                      c) Chromatography                      d) Sublimation

**4. Isotopes**

- a) Two different elements having same atomic mass number but different atomic number  
b) An element is having same atomic number and atomic mass number  
c) An element is having same atomic number but different atomic mass number  
d) An element is having same atomic mass number but different atomic number

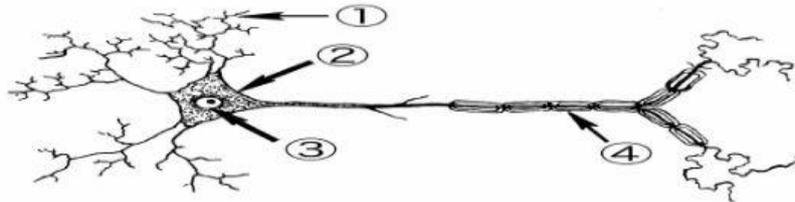
**5. Identify the correct statement**

- a) Prokaryotes means the nucleus is surrounded by specific nuclear membrane  
b) Cell wall is present in both the plant and animal cell  
c) Mitochondria is a non membranous organelle  
d) Protein synthesis is done by ribosomes in the cell

6. The function of stomata in plants is

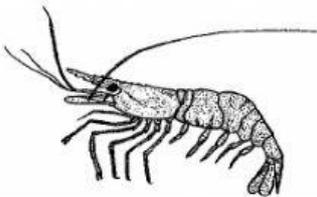
- a) Transpiration and Exchange of gases
- b) Exchange of gases and transportation
- c) Respiration and Digestion
- d) Digestion and Transportation

7. The correct labeling of the given figure is



- a) 1 – Axon, 2 – Nucleus, 3 – Cell body and 4 – Myelin sheath
- b) 1 – Cell body, 2 – Myelin sheath, 3 – Axon and 4 – Dendrites
- c) 1 – Dendrites, 2 – Cell body, 3 – Nucleus and 4 – Myelin sheath
- d) 1 – Dendrites, 2 – Myelin sheath, 3 – Axon and 4 – Cell body

8. Choose the correct based on the diagrams given below.



- a) These belongs to molluscan because they are soft bodied animals
- b) These belongs to porifera because they have tiny pores on their body
- c) These belongs to platyhelminthes because they have flat body
- d) These belongs to arthropods because they have jointed legs

9. The formula used to find out the average speed of the object is

- a)  $\frac{\text{Total time taken}}{\text{Total distance travelled}}$
- b)  $\frac{\text{Initial velocity} + \text{Final velocity}}{2}$
- c)  $\frac{\text{Total distance travelled}}{\text{Total time taken}}$
- d)  $\frac{\text{Initial velocity} + \text{Final velocity}}{\text{Total time taken}}$

10. The adjoining figure indicates

- a) Inertia
- b) Force
- c) Velocity
- d) Speed



11. A 60W bulb is used for about 6 hours in a day. Then the energy consumed by the bulb in units is

- a) 0.36 units                      b) 360 units                      c) 36 units                      d) 3.6 units

12. The minimum distance required to heard an echo is

- a) 7.12 m                      b) 7.2 m                      c) 17.2 m                      d) 1.72 m

13. One of the following group belongs to sexually transmitted disease

- a) Polio and Rabies                      b) Typhoid and Tetanus  
c) Hepatitis – B and Hypertension                      d) Syphilis and Gonorrhoea

14. The increased amount of carbon dioxide leads to

- a) Air pollution                      b) Global warming                      c) Acid rain                      d) Deforestation

15. Acids turn blue litmus paper to red litmus paper. This is because

- a) They do not have any taste                      b) They are sweet in taste  
c) They are sour in taste                      d) They are bitter in taste

16. Bells are prepared by using the metals. This is due to

- a) They are solids at room temperature                      b) They are sonorous in nature  
c) They are shiny in nature                      d) They are good conductors of electricity

17. Reduce, Reuse, Refuse, Recycle and Repurpose helps us to

- a) Increase the different kinds of pollution                      b) Decrease the water pollution only  
c) Save our environment from pollution                      d) None of these

18. A device which converts mechanical energy into electrical energy

- a) Electric generator                      b) Electric motor  
c) Electric micro-oven                      d) Washing machine

19. In an electric circuit the term 'I' refers to

- a) Electric switch                      b) Electric bulb  
c) Electric voltage                      d) Electric current

20. The electronic configuration of Calcium and Chlorine is

- a)  $1s^2, 2s^2 2p^6, 3s^2 3p^6, 4s^2$  and  $1s^2, 2s^2 2p^6, 3s^2 3p^5$   
b)  $1s^2, 2s^2 2p^6, 3s^2 3p^6, 3d^2$  and  $1s^2, 2s^2 2p^6, 3s^2 3p^5$   
c)  $1s^2, 2s^2 2p^6, 3s^2 3p^6, 4s^1$  and  $1s^2, 2s^2 2p^6, 3s^2 3p^6$   
d)  $1s^2, 2s^2 2p^6, 3s^2 3p^6, 3d^1$  and  $1s^2, 2s^2 2p^6, 3s^2 3p^5$