



# Global Science Olympiad

## CLASS 8<sup>th</sup> SYLLABUS & SAMPLE QUESTIONS

Corp Production, Microorganism, Useful materials, Metals and non-metals, Combustions, Conservation of resources, Life Process, Reproduction, Force & its effects, Pressure, Sound, Chemical Effect of Current, Light, Universe, Natural Resources, General and applied science.

*The Actual Question Paper Contains 70 Questions. The Duration of the Test Paper is 60 Minutes.*

1. Given below a U tube:



The blue dots represent the water. The two sides of the tube are separated by a semi permeable membrane that only allows movement of water. The number of blue dots is higher on left side of the tube. Which one of the following statements is true about the movement of water inside the tube?

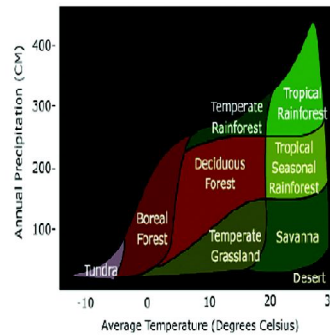
- (A) The level of water will rise on the left side.
- (B) The level of water will remain same.
- (C) The water will start moving out of the tube.
- (D) The level of water will rise on the right side.
- (E) None of these

2. The below graphic shows a compound microscope with three objectives. The three objectives are of different length. Which one of the three objectives has the highest magnifying power?



- (A) The objective with minimum length.
- (B) The objective with maximum length.
- (C) The objective with intermediate length.
- (D) All the three objectives have same magnifying power.
- (E) Magnification of object observed under microscope entirely depends on the fine and coarse adjustments done

3. The following graph shows how biomes are affected by changes in both annual precipitation and annual average temperatures:



In the preceding graph, what are the distinguishing characteristics of tropical rainforest?

- (A) High average temperature
- (B) High annual precipitation
- (C) Dry climate
- (D) Both A and B
- (E) None of these





4. Given below are the various stages of ecological succession along with their respective main flora:

Stage	Flora
I	None (bare land)
II	Annual grasses
III	Shrubs
IV	Birch and cherry trees
V	Oak woodland

Which of the above mentioned stages represents the climax community?

- (A) I                                      (B) II  
 (C) III                                    (D) IV  
 (E) V

5. Following Pictures represent the different methods of heating of substances :



(1) Rod heated over a burner



(2) Microwave oven



(3) Bulb



(4) Ice in hand



(5) Hot air balloon

Which of the above pictures represent examples of conduction, convection, and radiation?

- (A) Figure 1 : Convection, Figure 2 : Radiation, Figure 3 : Convection, Figure 4 : Conduction, Figure 5 : Conduction  
 (B) Figure 1 : Conduction, Figure 2 : Convection, Figure 3 : Radiation, Figure 4 : Conduction, Figure 5 : Conduction



- (C) Figure 1 : Conduction, Figure 2 : Radiation, Figure 3 : Radiation, Figure 4 : Conduction, Figure 5 - Convection  
 (D) Figure 1 : Conduction, Figure 2 : Radiation, Figure 3 : Convection, Figure 4 : Conduction, Figure 5 : Conduction  
 (E) None of these

6. Which one of the following forces works on an airplane while flying in the sky?

- (A) Thrust                                (B) Drag  
 (C) Lift                                    (D) All of these  
 (E) None of these

7. Match the following:

- |                      |            |
|----------------------|------------|
| 1. Solid metals      | A Sodium   |
| 2. Solid non metal   | B Bromine  |
| 3. Gaseous non metal | C Chlorine |
| 4. Liquid non metal  | D Sulphur  |

- (A) 1-A, 2-D, 3-C, 4-B  
 (B) 1-A, 2-C, 3-D, 4-B  
 (C) 1-A, 2-B, 3-C, 4-D  
 (D) 1-B, 2-D, 3-C, 4-A  
 (E) None of these

8. A student is performing an experiment in laboratory that uses a stone of 35 gm. For reading he converts the weight of stone to microgram. Which one of the following is the correct answer after conversion of weight into microgram?

- (A) 35000 microgram  
 (B) 35000000 microgram  
 (C) 350 microgram  
 (D) 3500 microgram  
 (E) None of these

9. Here is a list of substances. Group them as metals and non metals. Cadmium, hydrogen, sulphur, lead, magnesium, radium, halogen

- (A) **Metals:** Cadmium, sulphur, radium.  
**Non metals:** Hydrogen, lead, magnesium, halogen



- (B) **Metals:** Cadmium, sulphur, radium, halogen. **Non metals:** Hydrogen, lead, magnesium.
- (C) **Metals:** Cadmium, magnesium lead, radium. **Non metals:** Hydrogen, halogen, sulphur
- (D) **Metals:** Cadmium, sulphur, radium, lead  
**Non metals:** Hydrogen, , magnesium, halogen
- (E) None of these

**10. What will happen if you shuffle across a wool rug and then hold your finger very close but not in contact with a metal doorknob or radiator?**

- (A) You will feel the shock because current can pass through the air in spite of being an insulator.
- (B) You will not feel the shock because air is insulator and it is between your finger and metal doorknob or radiator.
- (C) You will feel the shock because air is insulator and it is between your finger and metal doorknob or radiator
- (D) All of these (E) None of these

**11. Water is heated in a beaker. It turns into water vapor. If chemical formula of water is  $H_2O$ , then what is the chemical formula of water vapor?**

- (A)  $H_2$  (B)  $O_2$   
(C)  $H_2O_2$  (D)  $H_2O$   
(E) None of these

**12. Given below is a list of substances and its density:**

Substance	Density
Water	1.0 g/mL
Oil	0.80 g/mL
AB	.88 g/mL
Mercury	8.6 g/mL

**A student fills all these above substances into a graduated cylinder. Define where the AB will appear after filling all substances in the graduated cylinder.**

- (A) AB will appear between Oil and Water in the graduated cylinder
- (B) AB will appear between mercury and Water in the graduated cylinder
- (C) AB will appear between mercury and Oil in the graduated cylinder
- (D) AB will appear above the mercury in the graduated cylinder

**13. A boy is slapped by another boy. While slapping certain force was used. Slapping is an application of Newton's \_\_\_\_\_ law of motion.**

- (A) First law (B) Second law  
(C) Third law (D) All of these  
(E) None of these

**14. Which of the following is/ are the characteristics of sound?**

- (A) Pitch (B) Intensity  
(C) Timbre (D) All of these  
(E) None of these

**15. If an element A has 38 electrons and 15 neutrons. What is the average atomic mass of the element A?**

- (A) 38 (B) 53  
(C) 40 (D) 23  
(E) None of these

**ANSWERS**

1. (D) 2. (B) 3. (D) 4. (E) 5. (C) 6. (D) 7. (A) 8. (B)  
9. (C) 10. (B) 11. (D) 12. (A) 13. (C) 14. (A) 15. (B)