



Global Science Olympiad

CLASS 9th SYLLABUS & SAMPLE QUESTIONS

Matter in our Surrounding, Is matter around us pure, Atoms and Molecules, Structure of atom, Classification of organism, Diversity in Living World, Why do we fall ill, Natural resources, Improvement of food resources, Motion, Force, Work and Energy, Heat, Sound, Gravitation, General and applied science.

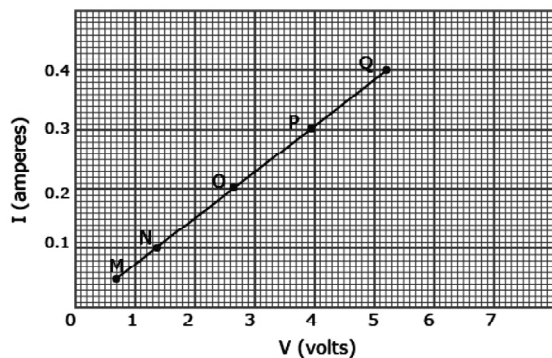
The Actual Question Paper Contains 70 Questions. The Duration of the Test Paper is 60 Minutes.

1. Below is a picture of a disease caused by a eubacteria. Identify the disease.



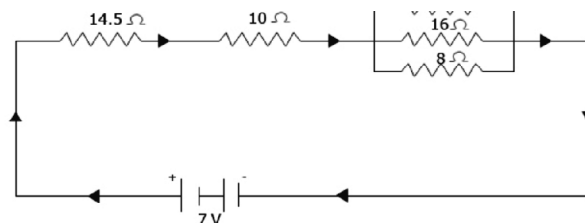
- (A) Typhoid fever (B) Tetanus
(C) Tuberculosis (D) Staph infection
(E) None of these

2. Examine the graph and calculate the resistance of the coil at the point Q?



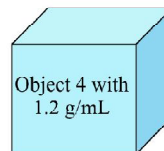
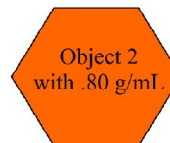
- (A) 12 Ohms (B) 5.2 Ohms
(C) 13 Ohms (D) 0.4 Ohms
(E) None of these

3. Examine the above circuit and calculate the total current flowing in the circuit.



- (A) 28 ampere (B) 4 ampere
(C) 0.25 ampere (D) 3.7 ampere

4. Predict what will happen when you place the following objects in the water?



- (A) Object 1 and Object 3 will sink and Object 2 and Object 4 will float in the water
(B) Object 1, Object 2, and Object 3 will sink and Object 4 will float in the water
(C) Object 1, Object 3, and Object 4 will sink and Object 2 will float in the water
(D) Object 4, Object 3 and Object 2 will sink and Object 1 will float.



5. Given below are two statements:
Statement A: Bacteriophage is a virus that attacks bacterial cells.

Statement B: Viruses have a specific shape that fits only a certain type of cell.

Which one of the following is correct with regard to the above statements?

- (A) Only Statement A is correct
- (B) Only Statement B is correct
- (C) Both Statement A and Statement B are correct
- (D) Both Statement A and Statement B are incorrect
- (E) None of these

6. Humans are classified according to the following hierarchy:

Animalia



Chordata



Mammalia



Primates



Hominidae



Homo



Homo sapiens

Which category is represented by Primates in the above hierarchy?

- (A) Order (B) Genus
- (C) Kingdom (D) Family
- (E) None of these

7. Match the following:

- | | |
|---------------|-----------------|
| 1. Sulphur | (A) monoatomic |
| 2. Nitrogen | (B) tetraatomic |
| 3. Argon | (C) poly-atomic |
| 4. Phosphorus | (D) diatomic |

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

8. There are various substances that will float easily in ocean or salt water, but these substances will sink in pure water. Why these substances will float in pure water but can not float in ocean water or salt water?

- (A) The ocean water is lighter than the pure water.
- (B) The mass of ocean water is greater than the pure water.
- (C) The ocean water has greater density than the pure water.
- (D) The ocean water has less density than the pure water.
- (E) None of these

9. What is the full form of IUPAC?

- (A) International union of pure and applied chemistry
- (B) International unit of pure and applied chemistry
- (C) International union of pure and applied chemistry
- (D) International unit of pure and applied chemistry
- (E) None of these

10. Steve throws a ball vertically upwards while playing with his friends in the ground. The force applied by him made the ball reach to the height of 19.6 meters. How much time does the ball take to reach the highest point and return back to Steve?

- (A) 2 seconds (B) 3 seconds
- (C) 4 seconds (D) 5 seconds
- (E) None of these



11. A student has three cubes, one is steel cube with 40 g mass and 100 cm³ volume, second is silver cube with 30 g mass and 10 cm³ volume, and third is iron cube with 80 g mass and 100 cm³ volume. Compare the cube and find out which one of the following cube has the highest density?

- (A) Steel cube has highest density
- (B) Iron cube has highest density
- (C) Silver cube has highest density
- (D) Steel and silver has same density
- (E) None of these

12. Which one of the following statements correctly describes the relationship between the buoyant force and an object in a fluid?

- (A) The buoyant force is equal to the volume of the fluid that the object displaces.
- (B) The buoyant force is equal to the density of the fluid that the object displaces.
- (C) The buoyant force is equal to the volume of the fluid that the object displaces.
- (D) The buoyant force is equal to the weight of the fluid that the object displaces.
- (E) None of these

13. A student in laboratory designs an experiment to find out the effectiveness of five mouthwashes of different brands, against some bacteria. The student cuts five square shaped paper towels and soaks each in a different brand of

mouthwash. Then the student places the paper towel soaked in mouthwash on a nutrient agar-coated Petri dish that was covered with bacteria commonly found in the mouth. The plate was incubated for 24 hours. Which one of the following will improve this experiment?

- (A) Use different kinds of bacteria
- (B) Use a smaller Petri dish
- (C) Use the same type of mouthwash on each square shaped paper
- (D) Use the same size paper squares for all mouthwashes
- (E) None of these

14. An experiment is performed to find out the effect of sunlight on the growth of plant. Three small plants are used for this experiment. One of the plants was planted in shadow and another two were planted such that they receive different amounts of sunlight. All the three plants were given equal amount of water and fertilizer. The growth of the plants was observed for a week. The growth of the plant in this experiment is

- (A) Control
- (B) Constant
- (C) Independent variable
- (D) Dependent variable
- (E) None of these

15. A driver decreases the speed of a school bus from 40 m/s to 20m/s in 10 seconds. Calculate the acceleration of the bus?

- (A) 2 m/s² (B) 6 m/s²
- (C) -2 m/s² (D) -6 m/s²
- (E) None of these

ANSWERS

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