INTERNATIONAL
TALENT
HUNT
OLYMPIAD 2014

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Society of Science Education
New Delhi, India
FOR SUPREMACY IN SCIENCE & MATHEMATICS
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Society of Science Education
NEW DELHI, INDIA

Class 9th | **Syllabus & Sample Questions**

Matter and our surroundings, Atoms and Molecules, Tissues, Diversity in Living Organisms, Force and Laws of Motion, Gravitation, Work and Energy, Sound, Why Do We Fall ill, Natural Resources, Food Resources, Number system, Polynomials, Coordinate Geometry, Linear Equations in Two Variables, Euclid's Geometry, Lines and Angles, Triangles, Quadrilaterals and its Area, Circles, Heron's Formula, Surface Areas and Volumes, Statistics, Probability, Analogy, Blood relation, Classification, Coding Decoding, Direction Test, Letter series, Mixed series, Non verbal, Number series & Syllogism .

The actual question paper contains 40 questions. The duration of the test paper is 60 minutes.

1. **What does atomicity mean?**

   (A) ☐ Number of electrons present in an atom
   (B) ☐ Number of protons present in an atom
   (C) ☐ Number of neutrons present in an atom
   (D) ☐ Number of atoms present in a molecule of a substance
   (E) ☐ None of these

2. **A solution contains 40 ml of ethanol in 100 ml of water. What is the concentration of this solution?**

   (A) ☐ 26.5%   (B) ☐ 27.75%
   (C) ☐ 29.6 %   (D) ☐ 28.57 %
   (E) ☐ None of these

3. **Select the isobar from the following.**

   (A) ☐ $^6C_{12}$ and $^6C_{14}$
   (B) ☐ $^{92}U_{235}$ and $^{92}U_{238}$
   (C) ☐ $^1H_1$ and $^1H_2$
   (D) ☐ $^{18}Ar_{40}$ and $^{20}Ca_{40}$
   (E) ☐ None of these

4. **When 3 g of carbon is burnt in 8 g of oxygen, 11 g of carbon dioxide is produced. What mass of carbon dioxide will be formed when 3 g of carbon is burnt in 50 g of oxygen?**

   (A) ☐ 48 g   (B) ☐ 30 g
   (C) ☐ 22 g   (D) ☐ 11 g
   (E) ☐ None of these

5. **An object is dropped from some height. It moves through a distance of 24.5 m in last second before touching the ground. Find the height from which it was dropped.**

   (A) ☐ 44.1 m   (B) ☐ 49 m
   (C) ☐ 25 m   (D) ☐ 28.5 m
   (E) ☐ None of these

6. **In the following figure, the bisectors of ∠B and ∠C meet at O. Then ∠BOC is equal to:**
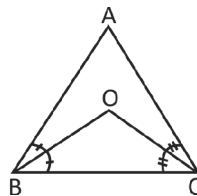
   (A) ☐ $90° + \dfrac{\angle A}{2}$ (B) ☐ $90° + \dfrac{\angle B}{2}$
   (C) ☐ $90° + \dfrac{\angle C}{2}$ (D) ☐ $90°$
   (E) ☐ None of these

**7.** The median of the following frequency distribution is:

x	10	11	12	13	14	15	16	17	18	19	20
f	5	4	3	2	4	5	3	4	5	3	2

(A) ☐ 21 (B) ☐ 17
(C) ☐ 19 (D) ☐ 15
(E) ☐ None of these

8. There are some tickets numbered as 1, 2, 3 .... upto 25, one ticket in drawn at random. What is the probability, that the number on the ticket drawn is either a multiple of 3 or 5?

(A) ☐ $\dfrac{11}{25}$ (B) ☐ $\dfrac{12}{25}$

(C) ☐ $\dfrac{14}{25}$ (D) ☐ $\dfrac{16}{25}$

(E) None of these

9. Find the missing number in the following figure.
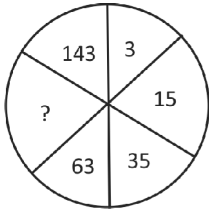
(A) ☐ 56 (B) ☐ 99
(C) ☐ 77 (D) ☐ 117
(E) ☐ None of these

10. Find the area of the shaded region in the following figure, if AB = 24 cm, BC = 12 cm and quadrilateral ABCD is a rectangle.
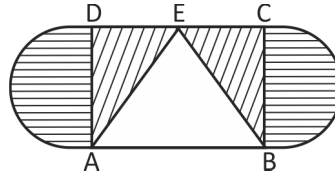
(A) ☐ $72(\pi +4)$ cm^2
(B) ☐ $108(\pi +4)$ cm^2
(C) ☐ $36(\pi +4)$ cm^2
(D) ☐ $256(\pi +4)$ cm^2
(E) ☐ None of these

11. Fill the blank square.

172	V	179	X		Z	193

(A) ☐ 189 (B) ☐ W
(C) ☐ Y (D) ☐ 186
(E) ☐ None of these

12. What are the directions of the route given below?

(A) ☐ NW, SW, NW (B) ☐ SE, NE, SW
(C) ☐ NE, SE, NE (D) ☐ SE, NE, SE
(E) ☐ None of these

Answers

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