

CLASS

5

SAMPLE PAPER



## National Science Olympiad

The actual test paper has 50 questions. Time allowed : 60 minutes. There are 2 sections: 15 questions in section I and 35 in section II.

### SYLLABUS

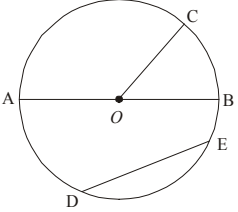
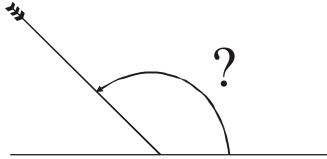
**Section – I (Mental ability)** : Regional and roman numerals, Numbers up to one lakh, Multiples and factors, Fractional numbers, Addition, Subtraction, Multiplication, Division, Estimation, Geometrical shapes and angles, Measurement of Time, Money, Weight, Perimeter and area of square, Rectangle and circle, Pictorial representation of data, HCF and LCM, Problems based on figures, Find odd numeral out, Series completion, Coding-decoding, Mathematical reasoning, Mirror images, Embedded figures, Direction sense, Patterns.

**Section – II (Science)** : Animals, Plants and Food, Human body and Health, Water, Matter, Natural Resources & Calamities, Earth and Universe, General Science.



# National Science Olympiad

## MENTAL ABILITY

1. 27,649 – 6,926 is best described as  
(A) A little more than 11,000 (B) A little more than 20,000  
(C) A little more than 25,000 (D) A little more than 30,000
- 
2. A circle is drawn, with centre point O.  
The line segment from point A to point B, through the centre of the circle, is called –  
(A) An arc (B) A circumference  
(C) A radius (D) A diameter
- 
3. Which could be the measures of the angles of a right triangle ?  
(A) 80°, 50°, 50° (B) 36°, 90°, 54°  
(C) 44°, 96°, 40° (D) 110°, 50°, 20°
- 
4. A race started at 11:16 A.M. The first person to cross the finish line came in at 1:22 P.M. How long did it take the first person to reach the finish line ?  
(A) 13 hours 38 minutes (B) 2 hours 6 minutes  
(C) 1 hours 6 minutes (D) 2 hours 38 minutes
- 
5. An arrow makes an angle with the level ground, as shown in the picture.  
Which best names this angle ?  
(A) Obtuse (B) Right  
(C) Straight (D) Acute
- 
6. If  $A = 5$ , which number sentence is true ?  
(A)  $A \times 4 = 20$  (B)  $A - 3 = 8$   
(C)  $12 + A = 7$  (D)  $15 \div A = 10$
- 
7. Which is true ?  
(A) 2,934,106 < 2,873,014 (B) 2,163,489 < 2,089,634  
(C) 2,874,365 < 2,897,056 (D) 2,457,831 < 2,359,678

## SCIENCE

8. What is matter ?  
(A) Anything that has temperature and takes up space  
(B) Anything that has mass and volume  
(C) Anything that has colour and takes up space  
(D) All of these
- 
9. The jellyfish is an invertebrate because it lacks —  
(A) Eyes (B) Blood (C) Back bones (D) Cells

10. Lime stone is a  
(A) Sedimentary rock (B) Igneous rock  
(C) Hard rock (D) Metamorphic rock
- 
11. Oxygen, nitrogen, and carbon dioxide may be grouped together because at room temperature they are all —  
(A) Colloids (B) Solids  
(C) Gases (D) Liquids
- 
12. The moon revolves around —  
(A) Itself (B) The solar system  
(C) The Earth (D) The star
- 
13. Which of these is a process that allows plants to convert light energy into food energy?  
(A) Photosynthesis (B) Excretion  
(C) Reproduction (D) Digestion
- 
14. A small baby plant coming out of a seed is  
(A) Grain (B) Root  
(C) Dispersal (D) Seedling
- 
15. Which of these is needed to measure the mass of a rock?  
(A) A balance (B) A barometer  
(C) A metric ruler (D) Thermometer
- 
16. Which of these can most easily attract magnets ?  
(A) Wood (B) Notebook  
(C) Iron nails (D) Eraser
- 
17. The substance that makes plants green is known as —  
(A) Water (B) Chlorophyll  
(C) Carbon dioxide (D) Calcium
- 
18. Today, which human activity is responsible for endangering the greatest number of land animal species?  
(A) Accidental starting of forest fires (B) Cutting wildflowers in national parks  
(C) Destruction of habitats (D) Hunting for food and sport
- 
19. Which of these probably causes the most air pollution?  
(A) Cars (B) Wind  
(C) Rain (D) Trees
- 
20. People in very cold places live in  
(A) Stilt house (B) Wooden house  
(C) Igloo (D) House of mud
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