

CLASS

5

SAMPLE PAPER

Science
Olympiad
Foundation

For Excellence in Science, Maths & IT

NATIONAL SCIENCE OLYMPIAD

The actual test paper has 50 questions. Time allowed : 60 minutes. There are 2 sections, 20 questions in section I and 30 in section II.

SYLLABUS

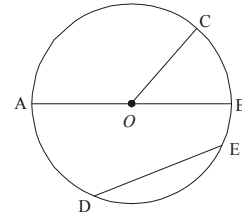
Section I (Mental ability) : Numerals and number name, Addition, Subtraction, Fractional numbers, Multiplication, Division, Time, Straight and curved lines, Calendar, Measurement of weight and capacity, Geometrical shapes, Money.

Section II (Science) : Living Science, Health and diseases, Earth and Universe, Matter, Physical Science, General Science.

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 (E) None of these

2. A circle is drawn, with center point O.
 The line segment from point A to point B, through the center of the circle, is called –



- (A) An arc (B) A circumference
 (C) A radius (D) A diameter
 (E) None of the above

3. Which could be the measures of the angles of a right triangle ?
 (A) $80^\circ, 50^\circ, 50^\circ$ (B) $36^\circ, 90^\circ, 54^\circ$ (C) $44^\circ, 96^\circ, 40^\circ$
 (D) $110^\circ, 50^\circ, 20^\circ$ (E) None of these.

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 (E) None of these.

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
 (E) None of the above.

6. If $A = 5$, which number sentence is true ?
 (A) $A \times 4 = 20$ (B) $A - 3 = 8$ (C) $12 + A = 7$ (D) $15 \div A = 10$
 (E) None of the above.

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) $2,457,831 < 2,359,678$ (E) None of these.

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 (E) None of these.
9. The jellyfish is an invertebrate because it lacks —
 (A) Eyes (B) Blood (C) Back bones (D) Cells (E) None of these.

10. Lime stone is a
 (A) Sedimentary rock (B) Igneous rock (C) Hard rock
 (D) Metamorphic rock (E) None of these.
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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 (E) None of these.
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12. The moon revolves around —
 (A) Itself (B) The solar system (C) The Earth
 (D) The star (E) None of these.
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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 (E) None of these.
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14. A small baby plant coming out of a seed is
 (A) Grain (B) Root (C) Dispersal (D) Seedling (E) None of these.
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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 (E) None of these.
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16. Which of these can most easily attract magnets ?
 (A) Wood (B) Notebook (C) Iron nails (D) Eraser (E) None of these.
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17. The substance that makes plants green is known as —
 (A) Water (B) Chlorophyll (C) Carbon dioxide
 (D) Calcium (E) None of these.
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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 (E) None of these.
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19. Which of these probably causes the most air pollution?
 (A) Cars (B) Wind (C) Rain (D) Trees (E) None of these.
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20. People in very cold places live in
 (A) Stilt house (B) Wooden house (C) Igloo
 (D) House of mud (E) None of these.
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ANSWER KEY

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| 1. (B) | 2. (D) | 3. (B) | 4. (B) | 5. (A) | 6. (A) | 7. (C) | 8. (B) | 9. (C) | 10. (A) |
| 11. (C) | 12. (C) | 13. (A) | 14. (D) | 15. (A) | 16. (C) | 17. (B) | 18. (C) | 19. (A) | 20. (C) |