

CLASS

7

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) : Integers, Fractions and Decimals, Data Handling, Simple Equations, Lines and Angles, The Triangle and its Properties, Congruence of Triangles, Comparing Quantities, Rational Numbers, Practical Geometry, Perimeter and Area, Algebraic Expressions, Exponents and Powers, Symmetry, Visualising Solid Shapes.

Section – II (Science) : Heat, Motion and Time, Electric Current, Light, Water, Acids, Bases and Salts, Physical and Chemical Changes, Life Processes, Earth and Environment, Fibres to Fabrics

11. Which of the following is not a unit of time ?
 (A) Light year (B) Nano second (C) Micro second (D) Second (E) None of these.
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12. The increase in area of the solid on heating is called
 (A) Superficial expansion (B) Linear expansion (C) Cubical expansion
 (D) Quadra expansion (E) None of these.
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13. The temperature at which no more energy can be removed from matter is called
 (A) Absolute zero (B) Boiling point (C) 32° F (D) 32°c (E) None of these.
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14. A lightning conductor is a
 (A) Piece of wire with spikes through which current can flow
 (B) Substance that can be charged by clouds
 (C) Copper plate buried in a ground
 (D) Plastic rod (E) None of these.
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15. Which one of the following is true for all chemical reactions?
 (A) There is a change in volume (B) Heat is evolved
 (C) Chemical bonds are broken or formed
 (D) There is a change in mass (E) None of these.
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16. The movement of oxygenated blood from the left auricle to left ventricle and then to aorta to all parts of the body is called
 (A) Extracellular circulation (B) Pulmonary circulation
 (C) Systemic circulation (D) Intracellular circulation (E) None of these.
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17. The process of crossing two varieties with different characters to obtain new variety is called
 (A) Introduction (B) Selection
 (C) Hybridization (D) Conservation (E) None of these
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18. Chipko movement is concerned with
 (A) Conservation of natural resources (B) Plant/forest conservation
 (C) Plant hybridization (D) Environmental pollution.
 (E) None of these
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19. Match List I with List II and select the correct answer using the codes given below the Lists :
- | List I | | | | List II | | | |
|---------------|--|---|---|----------------|-------------|--|--|
| a. | Melting of ice | | | 1. | Radiation | | |
| b. | Heat coming from the Sun | | | 2. | Convection | | |
| c. | Air circulation from sea level to higher altitudes | | | 3. | Latent heat | | |
| d. | Heating of a metal rod by keeping one end of it in a flame | | | 4. | Conduction | | |
| | a | b | c | d | | | |
| (A) | 1 | 2 | 3 | 4 | | | |
| (B) | 3 | 4 | 1 | 2 | | | |
| (C) | 4 | 1 | 3 | 2 | | | |
| (D) | 3 | 1 | 2 | 4 | | | |
| (E) | None of these | | | | | | |
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20. Which metal is present in the human body in greater percentage ?
 (A) Calcium (B) Sodium (C) Potassium (D) Iron (E) None of these.

ANSWER KEY

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