

CLASS

6

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

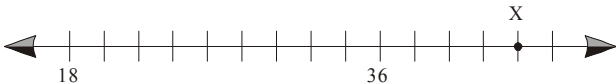
Section – I (Mental ability) : Roman numerals, Number sense, HCF and LCM, Addition and subtraction, Multiplication and division, Fractional numbers, Decimal fractions, Geometrical shapes, Angles, Arithmetical ability, Measurements, Area and perimeter of rectangle, square, circle, triangle, Volume, Pictorial representation of data, Integers, Factors and multiples, Ratio and proportion, Percentage, Problems based on figures, Find odd numeral out, Series completion, Coding-decoding, Mathematical reasoning, Mirror images, Embedded figures, Patterns, Direction sense, Number ranking, Alphabetical test.

Section – II (Science) : Motion and Measurement of Distances, Light, Shadows and Reflections, Electricity & Circuits, Fun with Magnets, Air & Water, Sorting Materials into Groups, Separation of Substances, Changes Around Us, Living Organisms & Their Surroundings, Food, Health & Hygiene, Fibres to Fabrics.



National Science Olympiad

MENTAL ABILITY

- Find L.C.M. of following numbers.
12, 24, 48, 108
(A) 504 (B) 432 (C) 405 (D) 440.
- Gita has 558 flags to pack into boxes. Each box will hold 62 flags. How many boxes will Gita need to hold all the flags?
(A) 34,596 (B) 0.9 (C) 9 (D) 620.
- You would need to know the perimeter of something if you were
(A) Buying a box big enough to hold a clock
(B) Buying enough tiles to cover the floor of a room
(C) Buying enough wood to make a frame for a picture
(D) Buying a tablecloth big enough to cover a table
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Which best describes the location of point X?
(A) 58 (B) 40 (C) 44 (D) 54.
- What is the area of a rectangle that measures 5 meters wide and 6 meters long?
(A) 11 m² (B) 22 m² (C) 30 m² (D) 16 m².
- If n represents a number, which of these means the same as the expression $n + 6$?
(A) Six more than a number (B) Six divided by a number
(C) Six less than a number (D) Six times a number.
- Which can be solved by using the open sentence $K + 10 = ?$
(A) Mohan did 10 times as many push-ups as Kiran. If K is the number of push-ups Kiran did, how many push-ups did Mohan do?
(B) Sharon did 10 more sit-ups than Kevin. If K is the number of sit-ups Kevin did, how many sit-ups did Sharon do?
(C) John ran 10 fewer meters than Kiran. If K is the number of meters Kiran ran, how many meters did John run?
(D) Kavita takes 10 minutes to run each lap around the gymnasium. If K is the number of laps Kavita ran, how long did she run?

SCIENCE

- If your diet is deficient in vitamin A then you are supposed to suffer from
(A) Rickets (B) Beri Beri
(C) Scurvy (D) Night blindness.
- The tail of a comet always points towards the Sun.
(A) False (B) True
(C) Cannot say (D) Sometimes true, sometimes false

10. Which of the following is necessary for burning (combustion) ?
(A) Oxygen (B) Petrol
(C) Carbon (D) Nitrogen.
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11. The body system that gives you support and allows movement is the
(A) Skeletal system (B) Circulatory system
(C) Respiratory system (D) Excretory system .
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12. Which food group BEST provides the necessary nutrients for healthy teeth and bones ?
(A) Milk and dairy products (B) Fruits and vegetables
(C) Bread and cereal (D) Meat.
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13. The Sun is a
(A) Comet (B) Star
(C) Huge planet (D) Satellite.
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14. The Earth is surrounded by an insulating blanket of gases which protects it from the light and heat of the Sun. This insulating layer is called the
(A) Hydrosphere (B) Lithosphere
(C) Atmosphere (D) Biosphere.
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15. Which part of the body receives messages transmitted by nerve cells located throughout the body ?
(A) Heart (B) Lungs
(C) Brain (D) Liver.
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16. Which of the following has an organic origin ?
(A) Sand (B) Bakelite
(C) Nylon (D) Coal.
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17. Which is usually NOT a reason why foods are processed ?
(A) More nutritious (B) Easier to package
(C) Last longer on the shelf (D) Easier to transport to the store
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18. What force pulls things toward the centre of Earth ?
(A) Friction (B) Gravity
(C) Magnetism (D) Electricity.
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19. Who discovered the circulation of blood ?
(A) Edward Jenner (B) William Harvey
(C) Hargobind Khorana (D) Louis Pasteur.
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20. If you dissolved a lot of salt in some water in a large flat dish and put the dish in bright sunlight on a hot day, what would be left in the dish after a long time ?
(A) Dry salt (B) Water with no salt
(C) The same salty water as before (D) Nothing.
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