CLASS

4

SAMPLE PAPER

SCIENCE OLYMPIAD FOUNDATION

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) : Number and numeration (5 digit number), Place-value, Addition, Subtraction, Multiplication, Division, Comparison, Geometrical shapes, Symmetry, Measurement of length, weight and capacity, Time, Money, Fractional numbers, Pictorial representation of data, Roman numerals, Multiples and factors, Perimeter of various shapes, Problems based on figures, Find odd numeral out, Series completion, Coding-decoding, Direction sense, Mathematical reasoning, Mirror images, Embedded figures, Patterns, Conversions, Number ranking, Alphabetical test.

Section – II (Science) : Plant and Animal Life, Human Body, Water, Matter, Transport, General activities, Earth & Universe, Life around us.

National Science Olympiad

MENTAL ABILITY

1. Hill 1 is 5,729 metre high. Hill 2 is 4,049 metre high. How much higher is Hill 1 than Hill 2 ?

(A) 1,720 m (B) 680 m

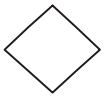
(C) 1,680 m (D) 1,239 m

2. On the first day of their vacation, the Bindal family drove 628 kilometre. On the second day, they drove 602 kilometre. How many kilometre did they drive in these two days ?

(A) 1,226 (B) 1,248

(C) 1,230 (D) 1,330

3. Namita drew a figure with 4 square corners. Which could be the figure she drew ?

(A)  (B) 

(C)  (D) 

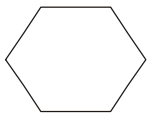
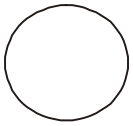
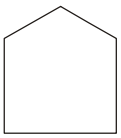
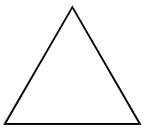
4. What would be the next 3 numbers in this pattern ?

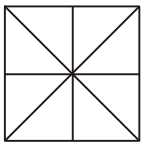
9, 12, 15, 18, 21, 24, 27, __, __, __

(A) 33, 36, 39 (B) 30, 33, 36

(C) 28, 29, 30 (D) 30, 32, 34

5. Which could be one of the faces of a cylinder ?

(A)  (B)  (C)  (D) 

6. The number of squares in the figure is 

(A) 5 (B) 6

(C) 4 (D) None of these

7. Raj has 60 cakes. A quarter of these cakes are distributed. How many cakes are left with him?

(A) 45 (B) 30 (C) 15 (D) 25

SCIENCE

8. When a moving object rubs against something, its motion slows down because of a force called

(A) Speed (B) Gravity

(C) Friction (D) Momentum

9. A leaflike part that protects a flower bud and is usually green in colour

(A) Stamen (B) Sepal

(C) Leaf (D) Petal

10. A barometer measures

(A) Temperature (B) Air pressure

(C) Wind speed (D) Precipitation

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11. The time it takes for Earth to rotate on its axis is one

(A) Day (B) Month

(C) Season (D) Year

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12. When the layer of air that surrounds the Earth presses down, this is

(A) Heat (B) Temperature

(C) Air pressure (D) Precipitation

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13. The energy an object gets from its motion is –

(A) Electrical energy (B) Chemical energy

(C) Kinetic energy (D) Potential energy

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14. The pull or push is

(A) Gravity (B) Friction

(C) Force (D) Inertia

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15. The time it takes the earth to orbit the sun is one

(A) Year (B) Season

(C) Month (D) Day

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16. A force that pulls two objects together is –

(A) Speed (B) Friction

(C) Force of attraction (D) Inertia

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17. Plants use sunlight to make sugar in the process of –

(A) Oxidation (B) Reproduction

(C) Photosynthesis (D) Fertilization

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18. Energy that results from chemical changes is –

(A) Friction (B) Mechanical energy

(C) Kinetic energy (D) Chemical energy

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19. Rubber, glass and plastic are good –

(A) Conductors (B) Generators

(C) Insulators (D) Electromagnets

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20. The tiny part of a seed that can grow into a plant is the –

(A) Pistil (B) Spore

(C) Fruit (D) Embryo

SAMPLE ANSWER SHEET

1. NAME : If your name is SACHIT A IYER, then you should write as follows :

S	A	C	H	I	T		A		I	Y	E	R													

2. Father's Name : If your father's name is SATISH KUMAR SHARMA, then you should write as follows :

S	A	T	I	S	H		K	U	M	A	R		S	H	A	R	M	A							

SCHOOL CODE

M	H	0	5	4	7
A	A	0	0	0	0
B	B	1	1	1	1
C	C	2	2	2	2
D	D	3	3	3	3
E	E	4	4	●	4
F	F	5	●	5	5
G	G	6	6	6	6
H	●	7	7	7	●
I	I	8	8	8	8
J	J	9	9	9	9
K	K				
L	L				
●	M				
N	N				
O	O				
P	P				
Q	Q				
R	R				
S	S				
T	T				
U	U				
V	V				
W	W				
X	X				
Y	Y				
Z	Z				

3. SCHOOL CODE
Write your school code i.e. if your school code is MH0547 darken as follows :

Darken the circle

4. CLASS
If you are in Class 10, then you should darken as follows :

5. ROLL NO.
If your roll no. is 587, then you should write and darken the circles as follows :

Darken the circle

CLASS		ROLL NO.		
1	0	5	8	7
0	●	0	0	0
●	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	●	5	5
6	6	6	6	6
7	7	7	7	●
8	8	8	●	8
9	9	9	9	9

6. GENDER
If you are a boy, then darken **Male** circle

GENDER	
MALE ●	FEMALE ○

CORRECT way to darken the circle ☞ ●

WRONG way to darken the circle ☞ ◉ ○ ✓ ✗

7. If your choice for Answer 1 is C, then you should darken the circle as follows : **1.** Ⓐ Ⓑ ● Ⓓ

MARK YOUR ANSWERS WITH HB PENCIL/BALL POINT PEN (BLUE/BLACK)

National Science Olympiad

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

ANSWERS

National Science Olympiad

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