The actual test paper has 35 questions. Time allowed : 60 minutes. There are 3 sections: 5 questions in section I, 10 in section II and 20 in section III.

SYLLABUS

Section – I (Mental Ability) : Number and Numeration, Addition, Subtraction, Multiplication, Division, Geometrical Shapes, Measurement of Time, Measurement of Length, Mass, Perimeter and Capacity, Money, Fractional Numbers, Pictorial Representation of Data, Roman Numerals, Numbers upto one Lakh, Multiples and Factors.

Section – II (Logical and Analytical Reasoning) : Problems Based on Figures, Find Odd Numeral out, Series Completion, Coding-Decoding, Mathematical Reasoning, Mirror Images, Embedded Figures.

Section – III (Computers and IT) : About Computers (General Information), Parts of Computer, Input and Output Devices, Hardware, Software, MS-Word, Using MS-Windows, Introduction to Internet, Computer Networks, Uses of Internet, MS-Paint.

National Cyber Olympiad

The actual test paper has 35 questions. Time allowed : 60 minutes. There are 2 sections: 10 questions in section I and 25 in section II.

SYLLABUS

Section – I (Mental Ability) : Number and Numeration (5 digit numbers), 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) : Plants, Animals, Human Body, Water, Matter and Materials, Transport, General Activities, Earth and Universe.

National Science Olympiad

The actual test paper has 35 questions. Time allowed : 60 minutes. There are 3 sections: 10 questions in section I, 15 in section II and 10 in section III.
Section – I : Logical Reasoning, **Section – II :** Mathematical Reasoning &
Section – III : Everyday Mathematics

SYLLABUS

Numerals and Number Name (5 digit numbers), Place Value, Roman Numerals, Addition and Subtraction, Geometry : Square, Rectangle, Circle, Closed, Open Figure, Multiplication and Division, Factors and Multiples, Fractions, Measurement, Pictorial Representation of Data, Money, Time, Weight and Capacity, Series and Pattern Formation of Numbers and Figures, Conversions, Comparison, Perimeter of Various Shapes, Direction Sense, Mirror Images, Embedded Figures, Number Ranking, Alphabetical Test, Coding-Decoding, Mathematical Reasoning, Symmetry.

International Mathematics Olympiad

The actual test paper consists of 35 questions. Time Allowed : 60 minutes. There are 3 sections.

SYLLABUS

Section-I: Word and Structure Knowledge : Adverbs, Prepositions, Pronouns (possessive, demonstrative, etc.), Simple tenses, Irregular verbs, Modals (of ability and permission, etc.), Basic questions, etc., Collocations, Spellings, Words related to animals, Household things, Clothes, Basic emotions, Food, Animals and pets, etc.
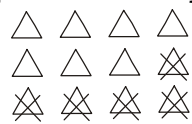
Section-II: Reading : Search for and retrieve information from various text types like stories, Anecdotes, etc., Understand information through pictures, Time-table format, etc., Acquire broad understanding of and look for specific information in short texts like messages, Invitations, etc.

Section-III: Spoken and Written Expression : Ability to understand situation-based variations in functions like apology, greeting, introduction, request, etc.
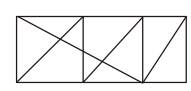
International English Olympiad

N C O National Cyber Olympiad

MENTAL ABILITY

1. 5 is one of the factors of
(A) 36   (B) 30   (C) 42   (D) 21

2. The fraction which represents the objects cancelled in the collection

△ △ △ △
△ △ △ ⊠   is
⊠ ⊠ ⊠ ⊠

(A) $\dfrac{5}{12}$ (B) $\dfrac{12}{5}$ (C) $\dfrac{1}{2}$ (D) $\dfrac{2}{3}$

3. There were 3856 trees in a forest. In another forest there were 4795 trees. How many more trees were there in the second forest?
(A) 930   (B) 939   (C) 1689   (D) 1600

4. Perimeter of the figure given here is

(A) 40 cm   (B) 50 cm

(C) 45 cm   (D) 55 cm
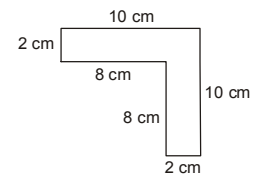
LOGICAL & ANALYTICAL REASONING

5. What is the next number in the pattern below?

125, 150, 175, 200, ...

(A) 205   (B) 215   (C) 225   (D) 250

6. If 'a' means '+' ; 'b' means '−' ; 'c' means '÷' and 'd' means '×' then the expression 16a 4b 4c 4d2 =

(A) 10   (B) 7   (C) 18   (D) $2\dfrac{1}{2}$

7. How many triangles are there in the following figure?
(A) 15   (B) 18
(C) 17   (D) 20

8. Choose the correct mirror image of the word FIXING
(A) GNIXIF   (B) ＦＩＸＩＮＧ   (C) ＧＮＩＸＩＦ   (D) GNIXIꟻ

COMPUTERS & INFORMATION TECHNOLOGY
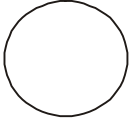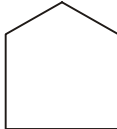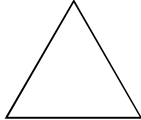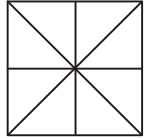
9. Without this we cannot interact with a computer. What is this?
(A) Scanner   (B) Input device   (C) Output device   (D) Printer

10. This key is used to move cursor to the beginning of the line or the screen depending on the software used. Identify the key.

(A) End   (B) Home   (C) Page Up   (D) Page Down

11. 1024 bytes equals
(A) 1 Kilo byte (KB)   (B) 1 Mega byte (MB)
(C) 1 Giga byte   (D) 1 Character

12. Who among the following is known as father of computers ?
(A) Charles Babbage
(B) John Napier
(C) Blaise Pascal
(D) Lady Ada Augusta Lovelace

13. While working with MS-Paint which option is used to add name to your drawing ?
(A) Text tool
(B) Pencil
(C) Edit
(D) Brush

14. Which of the following is a correct internet address?
(A) ww.yahoo.com
(B) www.cartoonnetwork.co
(C) www.hotmail.com
(D) www.indiatime.comm

15. Which of the following is termed as nervous system of a computer?
(A) CPU
(B) ALU
(C) CU
(D) MU

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

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

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

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

4. The number of squares in the figure is

(A) 5
(B) 6
(C) 4
(D) None of these

5. 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

6. The time it takes for Earth to rotate on its axis is one
(A) Day
(B) Month
(C) Season
(D) Year

7. When the layer of air that surrounds the Earth presses down, this is
(A) Heat
(B) Temperature
(C) Air pressure
(D) Precipitation

8. The energy an object gets from its motion is –
(A) Electrical energy
(B) Chemical energy
(C) Kinetic energy
(D) Potential energy

9. The pull or push is
(A) Gravity   (B) Friction   (C) Force   (D) Inertia

10. The time it takes the Earth to orbit the Sun is one
(A) Year   (B) Season   (C) Month   (D) Day

11. A force that pulls two objects together is –
(A) Speed   (B) Friction
(C) Force of attraction   (D) Inertia

12. Plants use sunlight to make sugar in the process of –
(A) Oxidation   (B) Reproduction
(C) Photosynthesis   (D) Fertilization

13. Energy that results from chemical changes is –
(A) Friction   (B) Mechanical energy
(C) Kinetic energy   (D) Chemical energy

14. Rubber, glass and plastic are good –
(A) Conductors   (B) Generators
(C) Insulators   (D) Electromagnets

15. The tiny part of a seed that can grow into a plant is the –
(A) Pistil   (B) Spore   (C) Fruit   (D) Embryo

I M O International Mathematics Olympiad

1. There are eighty-six thousand four hundred seconds in a day. How else could this number be written?
(A) 80,064   (B) 80,640
(C) 86,400   (D) 86,404

2. Leena and her mother made a quilt. They used 56 squares and made 8 rows. How many squares are in each row?
(A) 6   (B) 7   (C) 8   (D) 9

3. Jyoti walked 3 km each day. How many kilometre had she walked after 14 days?
(A) 42   (B) 32   (C) 14   (D) 11

4. Ram, Rahul, and Rohit shared a bag of marbles. The bag contained 272 marbles. How many marbles were left over after the friends shared them equally?
(A) 90   (B) 91   (C) 6   (D) 2

5. How many vertices does this pyramid have?

(A) 4   (B) 5

(C) 6   (D) 8
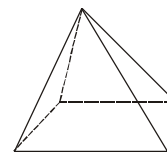
6. Start at 23.
Count by 10 two times.
Add 1.
What number are you at?
(A) 33   (B) 44   (C) 55   (D) 45

7. If $\diamond \times 4 = \star$

$\star - \diamond = 330$, then

What is $\star + \diamond$?

(A) 110   (B) 440   (C) 550   (D) 990

**8.** Justin solved the problem below. Which expression could be used to check his answer?

$$3\overline{)1364} \quad \frac{454}{} \quad : \text{Remainder} = 2$$

(A) (454 × 3) + 2   (B) (454 × 2) + 3
(C) (454 + 3) × 2   (D) (454 + 2) × 3

---

9. Which set of numbers is in order from greatest to least?
(A) 147, 163, 234, 275   (B) 275, 234, 163, 147
(C) 275, 163, 234, 147   (D) 163, 275, 234, 147

---

10. Aunt Ruby's clock is shown here.
If her niece is going to pick her up in 30 minutes,
what time will be shown on the clock?

12:40
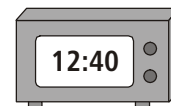
(A) 12 : 10   (B) 12 : 70   (C) 1 : 10   (D) 1 : 60

---

11. What is the best unit to use for measuring the amount of soda in a drink can?
(A) Millilitre   (B) Gallon   (C) Tablespoon   (D) Cup

---

12. What is the rule for this number pattern?

1, 1, 2, 6, 24, 120, . . .

(A) Add 0, then add 1, then add 2, and so on
(B) Multiply by 1, then multiply by 2, then multiply by 3, and so on
(C) Multiply by 1, then add 1
(D) Multiply by two, then subtract 1

---

13. Danny and Julie have new sticker books. Danny will put 4 stickers in his book every day and Julie will put 6 stickers in her book every day.
How many stickers will Danny have when Julie has 30 in her book?

Day	Danny	Julie
1	4	6
2	8	12
3	12	18

(A) 20   (B) 24   (C) 28   (D) 30

---

14. When a number is put into the machine below, a different number comes out.
If 2 goes in, 6 comes out. If 4 goes in, 12 comes out. If 5 goes in, 15 comes out.
If 8 goes in, what number should come out?

Input 8

Number Machine

? Output

(A) 32   (B) 24
(C) 16   (D) 12

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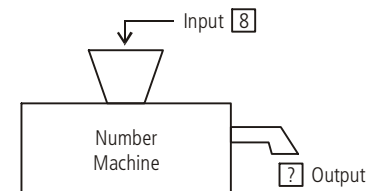
15. There are 3 rows of strawberry plants. Each row has 6 plants. How many strawberry plants in all?
(A) 9   (B) 18   (C) 22   (D) 24

WORD AND STRUCTURE KNOWLEDGE

1. I build bridges. I am _____.

(A) A plumber   (B) An engineer   (C) A carpenter

2. Choose the odd one.

(A) Sandals   (B) Shoes   (C) Scarves

3. Given below are three sentences. One of them is incorrect. Find the incorrect sentence and mark it in your answer sheet.

(A) Tina is watching television.   (B) I lose my pen yesterday.

(C) I like playing football.

4. Choose the odd one.

(A) Doctor : Stethoscope   (B) Carpenter : Hammer

(C) Mason : Scissors

5. Complete each word using the letters from the box.

When the boy whistled, the dog __ willingly let go of the bone.

(A) Un   (B) In   (C) Im

Direction (Q. No. 6 to 8) : Fill in the blanks. Choose the right answer.

6. Ann always .... a lot of mistakes when she speaks English.

(A) Make   (B) Makes   (C) Made

7. .... of the girls in the class did not want to play football.

(A) Little   (B) Much   (C) Some

8. I am looking forward .... the birthday party.

(A) With   (B) On   (C) To

9. Complete the sentence with the correct spelling of the word.

My brother travelled to South Korea recently. He likes visiting .... countries.

(A) Phoreign   (B) Foreign   (C) Foriegn

READING

Direction (Q. No. 10 and 11) : Read the paragraph and choose the correct sentence.

Red woods are among the world's tallest trees. They grow 200 to 300 feet high. The wood, when cut remains remarkably free from decay caused by weather and insects. So it is used to build houses and even outdoor furniture.

10. (A) No tree is taller than the red wood tree.

(B) Red wood trees grow very tall.

(C) Trees grow tall all over the world.

11. (A) Red wood tree can be easily destroyed by insects.

(B) Red wood trees decay easily.

(C) Red wood trees are suitable for making long lasting park benches.

Direction (Q. No. 12 and 13) : Read the paragraph and choose the correct sentence.

Many people believe that a house is not a home without a pet. Pets provide companionship and can be a boon to people, especially children. Pets will be there for you through thick and thin. Moreover, caring for a pet teaches you important lessons about taking responsibility, sharing your time and caring for another living creature.

12. "Pets can be a boon to people," because
    (A) They can be good friends (B) They teach children to be responsible
    (C) They will look after children

13. "Through thick and thin" means
    (A) Ing through difficulties (B) When you are very happy
    (C) In good and bad times

SPOKEN AND WRITTEN EXPRESSION

14. Choose the right answer.
    Imran : When does the train for Baroda leave?
    Official : ……………………………………………………..
    (A) Maybe, in a week or so.
    (B) In an hour from platform number 5.
    (C) Just turn around and walk to the end of the road.

15. Sentence 1 is given. Sentence 2 is not. Choose the right option for sentence 2.
    Sentence 1 : A biography is written by a person about the life and activities of another person.
    Sentence 2 : …………………………………………………………………………
    (A) Whereas an autobiography is written by a person about his own life.
    (B) Gandhiji wrote an autobiography called *My Experiments with Truth.*
    (C) People write autobiographies about their own lives.

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

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

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 Cyber Olympiad

1. Ⓐ Ⓑ Ⓒ Ⓓ   2. Ⓐ Ⓑ Ⓒ Ⓓ   3. Ⓐ Ⓑ Ⓒ Ⓓ   4. Ⓐ Ⓑ Ⓒ Ⓓ   5. Ⓐ Ⓑ Ⓒ Ⓓ
6. Ⓐ Ⓑ Ⓒ Ⓓ   7. Ⓐ Ⓑ Ⓒ Ⓓ   8. Ⓐ Ⓑ Ⓒ Ⓓ   9. Ⓐ Ⓑ Ⓒ Ⓓ   10. Ⓐ Ⓑ Ⓒ Ⓓ
11. Ⓐ Ⓑ Ⓒ Ⓓ   12. Ⓐ Ⓑ Ⓒ Ⓓ   13. Ⓐ Ⓑ Ⓒ Ⓓ   14. Ⓐ Ⓑ Ⓒ Ⓓ   15. Ⓐ Ⓑ Ⓒ Ⓓ

National Science Olympiad

1. Ⓐ Ⓑ Ⓒ Ⓓ   2. Ⓐ Ⓑ Ⓒ Ⓓ   3. Ⓐ Ⓑ Ⓒ Ⓓ   4. Ⓐ Ⓑ Ⓒ Ⓓ   5. Ⓐ Ⓑ Ⓒ Ⓓ
6. Ⓐ Ⓑ Ⓒ Ⓓ   7. Ⓐ Ⓑ Ⓒ Ⓓ   8. Ⓐ Ⓑ Ⓒ Ⓓ   9. Ⓐ Ⓑ Ⓒ Ⓓ   10. Ⓐ Ⓑ Ⓒ Ⓓ
11. Ⓐ Ⓑ Ⓒ Ⓓ   12. Ⓐ Ⓑ Ⓒ Ⓓ   13. Ⓐ Ⓑ Ⓒ Ⓓ   14. Ⓐ Ⓑ Ⓒ Ⓓ   15. Ⓐ Ⓑ Ⓒ Ⓓ

International Mathematics Olympiad

1. Ⓐ Ⓑ Ⓒ Ⓓ   2. Ⓐ Ⓑ Ⓒ Ⓓ   3. Ⓐ Ⓑ Ⓒ Ⓓ   4. Ⓐ Ⓑ Ⓒ Ⓓ   5. Ⓐ Ⓑ Ⓒ Ⓓ
6. Ⓐ Ⓑ Ⓒ Ⓓ   7. Ⓐ Ⓑ Ⓒ Ⓓ   8. Ⓐ Ⓑ Ⓒ Ⓓ   9. Ⓐ Ⓑ Ⓒ Ⓓ   10. Ⓐ Ⓑ Ⓒ Ⓓ
11. Ⓐ Ⓑ Ⓒ Ⓓ   12. Ⓐ Ⓑ Ⓒ Ⓓ   13. Ⓐ Ⓑ Ⓒ Ⓓ   14. Ⓐ Ⓑ Ⓒ Ⓓ   15. Ⓐ Ⓑ Ⓒ Ⓓ

International English Olympiad

1. Ⓐ Ⓑ Ⓒ   2. Ⓐ Ⓑ Ⓒ   3. Ⓐ Ⓑ Ⓒ   4. Ⓐ Ⓑ Ⓒ   5. Ⓐ Ⓑ Ⓒ
6. Ⓐ Ⓑ Ⓒ   7. Ⓐ Ⓑ Ⓒ   8. Ⓐ Ⓑ Ⓒ   9. Ⓐ Ⓑ Ⓒ   10. Ⓐ Ⓑ Ⓒ
11. Ⓐ Ⓑ Ⓒ   12. Ⓐ Ⓑ Ⓒ   13. Ⓐ Ⓑ Ⓒ   14. Ⓐ Ⓑ Ⓒ   15. Ⓐ Ⓑ Ⓒ

ANSWERS

National Cyber Olympiad			National Science Olympiad			International Mathematics Olympiad			International English Olympiad		
1. (B)	2. (A)	3. (B)	1. (C)	2. (B)	3. (B)	1. (C)	2. (B)	3. (A)	1. (B)	2. (C)	3. (B)
4. (A)	5. (C)	6. (C)	4. (A)	5. (A)	6. (A)	4. (D)	5. (B)	6. (B)	4. (C)	5. (A)	6. (B)
7. (C)	8. (B)	9. (B)	7. (C)	8. (C)	9. (C)	7. (C)	8. (A)	9. (B)	7. (C)	8. (C)	9. (B)
10. (B)	11. (A)	12. (A)	10. (A)	11. (C)	12. (C)	10. (C)	11. (A)	12. (B)	10. (B)	11. (C)	12. (A)
13. (A)	14. (C)	15. (A)	13. (D)	14. (C)	15. (D)	13. (A)	14. (B)	15. (B)	13. (C)	14. (B)	15. (A)

Class 4