

SILVERZONE FOUNDATION New Delhi, India

# STEM OLYMPIAD

Science | Technology | Engineering |

# SILVERZONE FOUNDATION





Geniuses are born, not made.



# About

SilverZone STEM Innovation Olympiads (STEM) is a noble pursuit encouraging our bright youth to take part in a cause that is much bigger than themselves. A forward-thinking movement to achieve excellence in the field of Science, Technology, Engineering and Mathematics.

## Structure of the Olympiad

The Olympiad is open for Classes from 3rd to Class 10th and will be conducted in two stages.

### **Stage 1: National Stage**

In this stage the student will compete with their counterpart from their home country. They will qualify for Stage 2 only after scoring a cutoff marking of 75%.

### Stage 2: Inernational Stage

In this stage the student will compete with all the students from other countries along with their home country. The top 100 winners scoring more than 75% in Stage 1 from every class of each country will be taking part in stage 2.

### **Test Paper**

The language medium is English only. The examination is being conducted for all classes from 3rd to 10th with the following details.

For Classes 1-2: There will be 25 questions and the duration will be 40 Minutes.

For Classes 3-5: There will be 35 questions and the duration will be 40 Minutes.

For Classes 6-10: There will be 40 questions and the duration will be 50 Minutes.

The questions will be of objective type in nature with multiple choice answers. There is no negative marking.



# Syllabus & Sample Questions

Science: Animals; Plants; Food, Air and Water; Human Body; Our Universe.

**Technology & Engineering:** Introduction to Computer, Types of computer, Uses of Computer, Parts of Computer, Working of Computer, Keyboard and Mouse, Introduction to Artificial Intelligence, Intelligence Assessment with Logical Reasoning.

Mathematics: Knowing Numbers, Fundamental Operation of Numbers, Patterns, Uses of Numbers in Daily Life, Measurement, Identifying 2D and 3D Shapes.

# Science



Which among the following animals has fins?





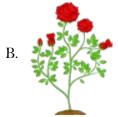


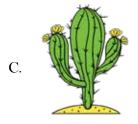




# Which among the following plants grow in water?









Which of the following activities causes air pollution?



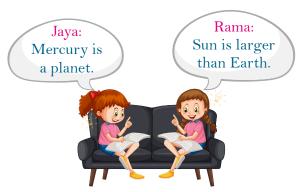
Activity 1



Activity 2

- Activity 1 only A.
- Both the activities C.

- B. Activity 2 only
- D. Neither of the activities
- Who of the following is correct?



- A. Jaya
- Both are correct

- B. Rama
- D. Both are incorrect

# Technology & Engineering



Match the following:

Column (A)

- 1. Special key
- 2. Alphabetic key
- 3. Numeric key
- 4. Function key
- A.  $1 \rightarrow i$ ,  $2 \rightarrow ii$ ,  $3 \rightarrow iii$ ,  $4 \rightarrow iv$
- C.  $1 \rightarrow iv$ ,  $2 \rightarrow iii$ ,  $3 \rightarrow i$ ,  $4 \rightarrow ii$

Column (B)



- ii. **0**
- iii. W
- iv.
- B.  $1 \rightarrow iv$ ,  $2 \rightarrow i$ ,  $3 \rightarrow iii$ ,  $4 \rightarrow ii$
- D.  $1 \rightarrow iv$ ,  $2 \rightarrow iii$ ,  $3 \rightarrow ii$ ,  $4 \rightarrow i$

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Match the following with their names:

Column (A)

- 1. Printer
- 2. Speakers
- 3. Microphone
- 4. Scanner
- 5. Web camera
- A.  $1 \rightarrow P, 2 \rightarrow S, 3 \rightarrow T, 4 \rightarrow R, 5 \rightarrow Q$
- C.  $1 \rightarrow R, 2 \rightarrow S, 3 \rightarrow T, 4 \rightarrow P, 5 \rightarrow Q$

Column (B)











- B.  $1 \rightarrow R$ ,  $2 \rightarrow Q$ ,  $3 \rightarrow T$ ,  $4 \rightarrow P$ ,  $5 \rightarrow S$
- D.  $1 \rightarrow S$ ,  $2 \rightarrow R$ ,  $3 \rightarrow P$ ,  $4 \rightarrow T$ ,  $5 \rightarrow Q$



Which of the following is an input unit of a computer?













Find the next two figures to complete the figure pattern given below.









# **Mathematics**



B. 
$$53 + 640 = 100 + 943$$

C. 
$$53 + 640 = 1000 + 143$$

D. 
$$503 + 640 = 1000 + 143$$



each will get \_\_\_\_\_







11 Raj has

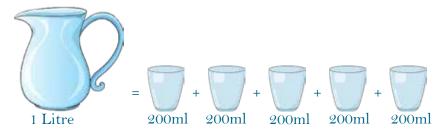


He has the total amount same as \_\_\_\_\_.





# Statement 1:



## Statement 2:



Which of the following is true?

- A. Statement 1 is true and Statement 2 is false.
- B. Statement 1 is false and Statement 2 is true.
- C. Both the statements 1 and 2 are true.
- D. Both the statements 1 and 2 are false.

ANSWERS												
	(C) (B)		` '		` '		` '		` /		` '	



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