CLASS
8

SCIENCE OLYMPIAD FOUNDATION

SAMPLE PAPER 2026-27

SOF INTERNATIONAL MATHEMATICS OLYMPIAD

Total Questions : 50 | Time : 1 hr.

PATTERN & MARKING SCHEME				
Section	(1) Logical Reasoning	(2) Mathematical Reasoning	(3) Everyday Mathematics	(4) Achievers Section
No. of Questions	15	20	10	5
Marks per Ques.	1	1	1	3

SYLLABUS

Section – 1 : Verbal and Non-Verbal Reasoning.

Section – 2 : A Square and A Cube, Exponents and Powers, A Story of Numbers, Quadrilaterals, Number Play, We Distribute, Yet Things Multiply, Proportional Reasoning, Fractions in Disguise, The Baudhayana– Pythagoras Theorem, Exploring Some Geometric Themes, Data Handling, Algebra Play, Area.

Section – 3 : Syllabus as per Section – 2.

Section – 4 : Higher Order Thinking Questions - Syllabus as per Section – 2.

LOGICAL REASONING

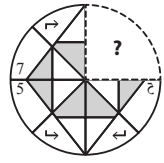
1. Select a figure from the options which when placed in the blank space of the given figure would complete the pattern.

(A) 

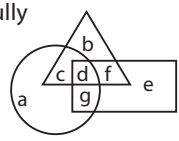
(B) 

(C) 

(D) 



2. Study the following Venn diagram carefully and answer the question that follow. Which of the following letters represents female science students who are not studying in private school?



△ → Science students

▭ → Students studying in private school

◯ → Females

(A) d (B) f (C) b (D) c

3. Find the missing number in the given number pattern.

2, 4, 9, 19, ?, 62

(A) 38 (B) 36 (C) 34 (D) 48

MATHEMATICAL REASONING

4. Find the value of x, if

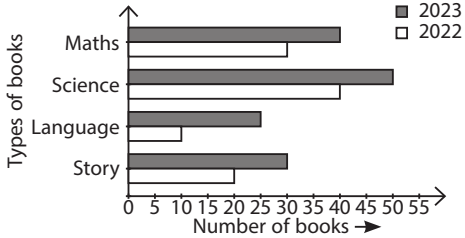
$3^{3.5} \times 21^2 \times 42^{2.5} \div 2^{2.5} \times 7^{3.5} = (21)^x$.

(A) 8 (B) 10 (C) 12.5 (D) 6.5

5. The given bar graph shows the number of books available in a school library for the years 2022 and 2023.

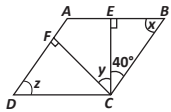
Find the increase in total number of books in 2023.

(A) 40 (B) 45
(C) 50 (D) 30



6. *ABCD* is a parallelogram. Find the angles *x*, *y* and *z* respectively in the given figure.

(A) 40°, 50°, 60°
(B) 60°, 60°, 60°
(C) 50°, 50°, 50°
(D) 60°, 70°, 70°



EVERYDAY MATHEMATICS

7. 4096 soldiers are arranged in an auditorium in such a manner that there are as many soldiers in a row as there are rows in the auditorium. How many rows are there in the auditorium?

(A) 94 (B) 58 (C) 44 (D) 64

8. Forty percent of the employees of a certain company are men and 75% of the men earn more than ₹ 25,000 per year. If 45% of the company's employees earn more than ₹ 25,000 per year, then what fraction of the women employed by the company earn ₹ 25,000 or less per year?

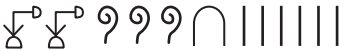
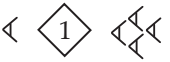
(A) $\frac{1}{4}$ (B) $\frac{3}{5}$ (C) $\frac{3}{4}$ (D) None of these

ACHIEVERS SECTION

9. Read the given statements carefully and select the CORRECT option.
Statement-I : If a certain sum, at compound interest become five times in 3 years, then in 9 years, it will be 25 times at the same rate of interest per annum.
Statement-II : If ₹ 8920 becomes ₹ 13380 in 3 years at a certain rate of compound interest, then in 6 years it becomes ₹ 20070 at same rate of compound interest.

(A) Both Statement-I and Statement-II are true.
(B) Both Statement-I and Statement-II are false.
(C) Statement-I is true but Statement-II is false.
(D) Statement-I is false but Statement-II is true.

10. Convert the sum of MDCLXVI + DCL into Egyptian number system.

(A) 
(B) 

(C) 
(D) None of these

ANSWER KEY

1. (B)	2. (D)	3. (B)	4. (A)	5. (B)	6. (C)	7. (D)	8. (C)	9. (D)	10. (A)