

**SYLLABUS**

**Section – 1 :** Verbal and Non-Verbal Reasoning.

**Section – 2 :** Integers, Fractions and Decimals, Exponents and Powers, Algebraic Expressions, Simple Linear Equations, Lines and Angles, Comparing Quantities, The Triangle and its Properties, Symmetry, Congruence of Triangles, Rational Numbers, Perimeter and Area, Data Handling, Visualising Solid Shapes, Practical Geometry.

**Section – 3 :** The Syllabus of this section will be based on the syllabus of Mathematical Reasoning.

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

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

**LOGICAL REASONING**

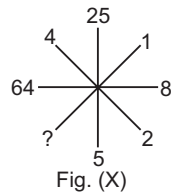
1. Which will come next in the series?

az, by, cx,    ?

- (A) ef (B) gh  
(C) ij (D) dw

2. Which number will replace the (?) in Fig. (X)?

- (A) 1  
(B) 2  
(C) 3  
(D) 4



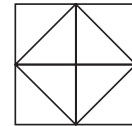
3. Which of the following options most closely resembles the mirror image of the given word, if the mirror is placed vertically to the left?

**STROKE**

- (A) STROKE (B) EKORTS  
(C) ROKETS (D) EKORTS

4. Count the number of triangles in the given figure.

- (A) 8  
(B) 10  
(C) 12  
(D) 14



**MATHEMATICAL REASONING**

5. The value of  $4\frac{3}{4} - 2\frac{1}{2} =$

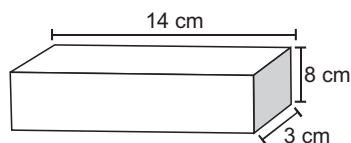
- (A)  $1\frac{1}{4}$  (B)  $1\frac{3}{4}$   
(C)  $2\frac{1}{4}$  (D)  $2\frac{3}{4}$

- (A)  $25n$  (B)  $25 - n$   
(C)  $25 + n$  (D)  $25 \div n$

8. What is the prime factorization of 45?

- (A)  $2^3 \times 5$  (B)  $3^2 \times 5$   
(C)  $5^2 \times 3$  (D)  $5^2 \times 9$

6. This rectangular prism has a length of 14 cm, a height of 8 cm, and a width of 3 cm. What is the volume?



- (A) 25 cu cm (B) 42 cu cm  
(C) 112 cu cm (D) 336 cu cm

9. The value of  $11.3 \times 2.7 =$  \_\_\_\_\_.

- (A) 29.31  
(B) 29.51  
(C) 30.31  
(D) 30.51

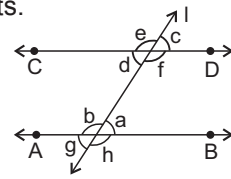
10. Mohit gains 60 paise on ₹ 60. His gain percent is \_\_\_\_\_.

- (A) 1%  
(B) 0.1%  
(C) 2%  
(D) 1.1%

## EVERYDAY MATHEMATICS

- 11.** Kartik can throw a ball  $50\frac{3}{5}$  metres high. Ayan can throw the same ball  $48\frac{1}{3}$  metres high. How much farther can Kartik throw the ball than Ayan?
- (A)  $2\frac{2}{15}$  m                      (B)  $2\frac{4}{15}$  m  
 (C)  $2\frac{3}{5}$  m                        (D)  $2\frac{4}{5}$  m
- 12.** In a parking lot, 1 out of every 8 cars is blue. What percent of the cars in this lot are blue?
- (A) 1.25%                      (B) 7%  
 (C) 9%                            (D) 12.5%
- 13.** A duck flew at speed of 18 km per hour for 3 hours, then at speed of 15 km per hour for 2 hours. How far did the duck fly in all?  $\left( \text{Speed} = \frac{\text{Distance}}{\text{Time}} \right)$
- (A) 69 km                      (B) 75 km  
 (C) 81 km                      (D) 84 km

## ACHIEVERS SECTION

- 14.** In a quiz, 40 prizes consisting of 1<sup>st</sup> and 2<sup>nd</sup> prizes only are to be given. 1<sup>st</sup> and 2<sup>nd</sup> prizes are worth ₹ 2500 and ₹ 1500, respectively. If the total prize money is ₹ 85,000, then
- (i) The equation formed is  
 (ii) The number of 1<sup>st</sup> prizes are  
 (iii) The number of 2<sup>nd</sup> prizes are
- |   | (i) | (ii) | (iii) |
|---|-----|------|-------|
| (A) $2500x + 1500(40 - x) = 85000$      | 25  | 15   |       |
| (B) $2500x - 1500(40 - x) = 85000$      | 36  | 4    |       |
| (C) $2500x \times 1500(x - 40) = 85000$ | 20  | 20   |       |
| (D) $2500x - 1500(x - 40) = 85000$      | 15  | 25   |       |
- 15.** Study the given statements.
- Statement - I :** e and h are supplementary angles.
- Statement - II :** c and g are equal angles.
- 
- Which of the following options is correct?
- (A) Both statement-I and statement-II are true.  
 (B) Statement-I is true and statement-II is false.  
 (C) Statement-I is false and statement-II is true.  
 (D) Both statement-I and statement-II are false.

-----  
 SPACE FOR ROUGH WORK

## ANSWERS

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

## How OlympiadHelper.com can help students scoring better in Olympiad examination?



**OlympiadHelper.com** is the most trusted and comprehensive Olympiad exam diagnostic and preparation tool. It provides an objective, in-depth practice platform to the students preparing for various Olympiad examinations. Our assessments bring to light the strengths and weaknesses of a student on the five-core subject English, Science, Mathematics, Computer Skills and General Knowledge. Our “Online Test Series” is designed to handle most of the school level competitive / Olympiad / diagnostic exams; such as

- Science Olympiad Foundation** National Cyber Olympiad (NCO), National Science Olympiad (NSO), International Mathematics Olympiad (IMO), International English Olympiad (IEO), International Sports & Knowledge Olympiad (ISKO) exams, conducted by Science Olympiad Foundation (SOF)
  - Educational Initiatives** ASSET – Mathematics, ASSET – Science and ASSET – English exams, conducted by Educational Initiatives
  - Macmillan Education** IAIS-Mathematics, IAIS-Science, IAIS-English and IAIS - Digital Technology (formerly IAIS-Computer) exams, conducted by Macmillan Education in partnership with Educational Assessment
  - Silver Zone** International Informatics Olympiad (iIO), International Olympiad of Science (iOS), International Olympiad of Mathematics (iOM), International Olympiad of English Language (iOEL), SKGKO and iTHO exams, conducted by Silver Zone
- and many other similar examinations.

Most of the Olympiad exams are conducted on the similar syllabus that kids are studying at school. It means that they do not require additional reference books for the preparation of these exams. However, at the same time questions asked in these exams are quite different than what kids learn in the school. Questions are trickier and conceptual.

We are  
**The Most Trusted  
Olympiad  
Diagnostic and  
Preparation Tool**

[Subscribe Now](#)

Use coupon  
**“Test20”** to get 20%  
discount on  
Subscription

**To excel in ‘Olympiad Exams’, it is essential for the students to understand the exam pattern, evaluate and prepare themselves on the Olympiad standard questions.**

## Following are the few impressive features that make “OlympiadHelper.com” the most comprehensive and trusted tool for Olympiad Exam

Get  
50 Chapter-wise  
20 Sample and  
3 Mock Tests in  
each of the  
following  
subjects

- Cyber/Computer
- Science
- Mathematics
- English
- General Knowledge

Subscribe Now

**1. Comprehensive Dashboard:** Monitor your overall Olympiad preparation progress from a single screen. This screen is very useful for parents. It gives a complete detail about how the kid is using the Tool. It gives details such as till now how many tests they have completed, when was the last time they have completed their chapter-wise, sample, mock or review tests and what was their performance in the last test. Just one glance and you will get a complete understanding on the status of kids preparation.

**2. Chapter-wise Tests:** Currently, the biggest problem to the students appearing in Olympiad Exams is that; exams are conducted in the mid-session. This gives no time to students for preparation. With “Chapter-wise Test Generation” feature students can start their Olympiad Exam preparation as soon as they complete their first chapter. You will get an option of generating 50 chapter-wise tests in each subscribed subject.

**3. Selection of Exam Patterns:** To provide our learners; more realistic feel while taking a practice test, we provide an option to select Exam pattern. It also means that you DO NOT NEED to buy a separate package for the same subject of different exams.

**4. Sample Tests:** 20 Full-length Tests with an option to select exam patterns from All-Inclusive, SOF, SilverZone, IAIS and ASSET

**5. Mock Tests:** 3 Full-length Tests with an option to select exam patterns from All-Inclusive, SOF, SilverZone, IAIS and ASSET

**6. Review Tests:** A revolutionary new feature allows kids to attempt only those questions which they have marked wrong. When exams are nearby, this feature becomes very useful while revising the subject.

**7. Descriptive Answers:** Detailed answers are given to all difficult questions.

**8. Mark Question for Review:** Have doubts in a question and want to discuss with your parent/teacher? This feature can be very useful.

**9. Feedback Option:** You will find a link to send feedback/doubts about the question at the bottom of each question. In case you are not satisfied with the question/answer or answer description, you can communicate the same to us, using the link. Our team will get back to you with explanation / resolution / details with 48 hrs.

[See Free DEMO Test](#)

**10. Detailed Strength and Weakness Report:** After each test, the student will get a detailed diagnostic report that contains student's performance break-up at the chapter level.

Use coupon  
"Test20" to get  
20% discount on  
Subscription

**11. Percentile Score:** At the end of each mock test, kids are presented with the percentile score. If your percentile score is 86, this means 86% of all the kids who appeared in the same exam have scored either less than or equals to your marks. However, it also means that 14% of the kids have scored more than your marks. This feature helps the kids to evaluate their preparation.

**12. Time Tracking:** Monitor time spent on a question as well as on a test paper.

**13. Reset Test:** Facility to re-appear in Chapter-wise / Sample tests.

**14. User-Notes:** Option to maintain customised notes; On question, on chapter, on subject or in general

Visit [www.OlympiadHelper.com](http://www.OlympiadHelper.com) for more information.