

ADVANCED OLYMPIAD FOUNDATION

MODEL QUESTION PAPER

6TH

National Mathematics Olympiad

CLASS



Instructions:

Total Duration:1.5 hours (90 minutes) **Total Marks:**60

- The paper consists of four sections. Each question carries the same marks as mentioned in each section.
- There is no negative marking.

Section 1:

Arithmetic (20 marks) Each question carries 4 marks.

- 1. Solve: \(234 + 567 89 \) 2. Multiply: \(23 \times 15 \)
- 3. Divide: \(144 \div 12 \)
- 4. Find the value of \(\frac{5}{8}\) of 64.
- 5. If a pen costs \$15 and you buy 8 pens, how much will it cost in total?

Section B:

Geometry (15 marks) Each question carries 3 marks.

- 6. Calculate the area of a rectangle with length 10 cm and width 5 cm.
- 7. What is the perimeter of a square with each side measuring 7 cm?
- 8. Name a three-dimensional shape with six square faces.
- 9. Draw and label an acute angle.
- 10. Calculate the area of a triangle with base 8 cm and height 6 cm.

Section C:

Data Handling (10 marks) Each question carries 2 marks.

- 11. If there are 5 red balls, 7 blue balls, and 8 green balls in a bag, how many balls are there in total?
- 12. Represent the following data using a bar graph:
 - Apples: 10, Bananas: 15, Cherries: 5
- 13. Calculate the median of the numbers: 12, 15, 14, 10, 18.
- 14. Arrange the following numbers in ascending order: 23, 12, 45, 19, 30.
- 15. What is the mode of the numbers: 4, 6, 4, 8, 4, 7, 6?



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Section D:

Logical Reasoning (15 marks) Each question carries 3 marks.

- 16. Complete the series: 3, 6, 9, 12, ____
- 17. Choose the odd one out: 16, 25, 36, 48, 49
- 18. If $\langle A = 5 \rangle$, $\langle B = 3 \rangle$, and $\langle C = 7 \rangle$, find $\langle A \rangle$
- 19. Which number comes next in the pattern: 2, 4, 8, 16, ____
- 20. If today is Wednesday, what day was it 5 days ago?

Answers:

- 1.712
- 2. 345
- 3. 12
- 4. 40
- 5. \$120
- 6. 50 cm²
- 7. 28 cm
- 8. Cube
- 9. Acute angle (Answer may vary)
- 10. 24 cm²
- 11. 20 balls
- 12. Bar graph representation
- 13. 14
- 14. 12, 19, 23, 30, 45
- 15. 4
- 16. 15
- 17.48
- 18. 22
- 19.32
- 20. Friday