SMO – SYNERGY MATH OLYMPIAD

CLASS VI – EXAMINATION FRAME WORK

CLASS VI SMO THEME

Learn the concept → recognize the pattern → apply the mathematics →

reason logically → solve beyond the obvious.

EXAMINATION FRAMEWORK

Section	Domain	Marks
A	Mathematical & Logical Reasoning	10
B	Algebra & Mathematical Patterns	10
C	Geometry & Measurement	10
D	Problem Solving	10
E	Brain Teasers & Synergy Challenge – Think Beyond	10
TOTAL		**50**

Time: 60 Minutes

CLASS VI DIFFICULTY PROFILE

Skill Level	Approx. Weight
Conceptual / Fundamental	25%
Application	30%
Logical Reasoning	20%
Higher-Order Thinking	15%
Brain Teasers / Visual Thinking	10%

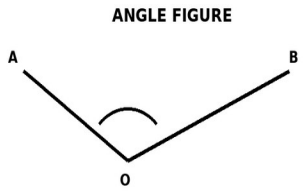
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CLASS VI – SAMPLE QUESTIONS

1. Look at the diagram. Which statement is correct about angle AOB?

A. It is an acute angle B. It is a right angle

C. It is an obtuse angle D. It is a straight angle



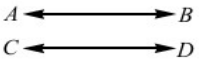
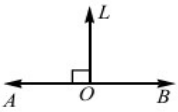
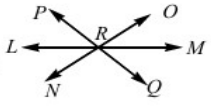
2. Observe the number line and state which of the following statement is not true?



A. B is greater than −4. B. A is smaller than 7

C. B is smaller than −5. D. A is greater than 2.

3. Matrix Matching type questions

Column I	Column II
a) Concurent lines	i) 
b) Parallel lines	ii) 
c) Perpendicular lines	iii) 
d) Intersecting lines	iv) 

A. a-iv; b-i; c-iii; d-ii B. a-i; b-ii; c-iii; d-iv

C. a-iv; b-ii; c-i; d-iii D. a-iii; b-i; c-iv; d-ii

4. A ribbon is divided into 8 equal parts. Riya uses 3 parts. What fraction of the ribbon is still unused?

A. 3/8 B. 5/8 C. 8/3 D. 1/8

5. The temperature is 4°C. It falls by 7°C during the night. What is the new temperature?

A. −11°C B. −3°C C. 3°C D. 11°C

6. The area of a rectangle is 630 cm2 and its length is 35cm, what is its perimeter?

A. 102 cm B. 104 cm C. 106 cm D. 108 cm

7. If TRUTH is coded as SUQSTVSUGI, then the code for FALSE will be ( )

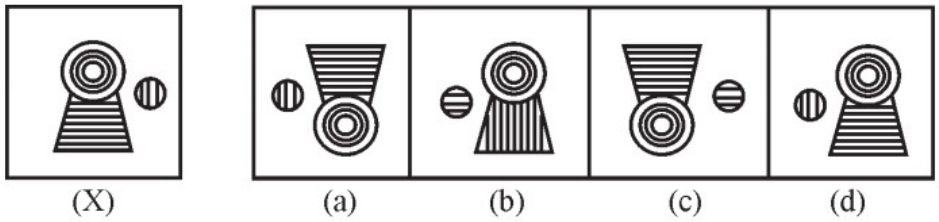
A. FGZBKNRTDF B. EGZBKMRDE

C. EGZKMRTDF D. EGZBKMRTDF

8. Find the average of all the numbers between 6 and 34 which are divisible by 5.

A. 18 B. 20 C. 24 D. 30

9. Choose the correct mirror image of the given figure (X) from amongst the four alternatives.



A. a B. b C. c D. d

10. Study the bar graph. Which student read the greatest number of books?

A. A B. B

C. C D. D



KEY

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