

# International Olympiad for Aptitude — Sample Paper ✨

## Grade Group 6–8

1. Which number should come next in the pattern: 2, 4, 8, 16, ?  
A) 20  
B) 24  
C) 32  
D) 64
2. If TOMATO is coded as UPNBUP, how is POTATO coded?  
A) QPUBUP  
B) QPUAUP  
C) QPVAVQ  
D) RQUBUP
3. A cube has how many faces?  
A) 6  
B) 8  
C) 10  
D) 12
4. Choose the odd one out:  
A) Lion  
B) Tiger  
C) Cheetah  
D) Whale
5. What comes next: Monday, Wednesday, Friday, ?  
A) Sunday  
B) Saturday  
C) Monday  
D) Tuesday
6. If 3 pens cost Rs.30, how much will 10 pens cost?  
A) Rs.90  
B) Rs.100  
C) Rs.110  
D) Rs.120
7. In which direction does the sun rise?  
A) West  
B) North  
C) East  
D) South
8. If 5 books weigh 10 kg, how many books weigh 30 kg?  
A) 10  
B) 12  
C) 15  
D) 20

**9. Which shape has 4 equal sides and 4 equal angles?**

- A) Triangle
- B) Rectangle
- C) Circle
- D) Square

**10. Find the missing number: 5, 10, 20, 40, ?**

- A) 45
- B) 60
- C) 70
- D) 80

### ✨ Grade Group 9–11

**11. If TRAIN is coded as WUDLQ, how is PLANE coded?**

- A) SODQH
- B) SOEQH
- C) SREFH
- D) SODRH

**12. Which of these is not a prime number?**

- A) 2
- B) 3
- C) 9
- D) 13

**13. A rectangle has length 8 cm and breadth 4 cm. Its area is:**

- A) 12 sq.cm
- B) 24 sq.cm
- C) 32 sq.cm
- D) 36 sq.cm

**14. Identify the pattern: ACE, BDF, ?**

- A) CEG
- B) CGE
- C) CFI
- D) CEH

**15. A clock shows 3:15. What is the angle between hour and minute hands?**

- A)  $0^\circ$
- B)  $7.5^\circ$
- C)  $15^\circ$
- D)  $30^\circ$

**16. What comes next in the series: 1, 4, 9, 16, 25, ?**

- A) 30
- B) 36
- C) 40
- D) 49

**17. Which is the odd one out:**

- A) January
- B) March
- C) June
- D) Thursday

**18. A man walks 5 km east, 3 km north, then 5 km west. How far is he from starting point?**

- A) 3 km
- B) 4 km
- C) 5 km
- D) 6 km

**19. What is 25% of 80?**

- A) 15
- B) 18
- C) 20
- D) 25

**20. If 'BAG' is coded as 2137, what is 'CAB'?**

- A) 3121
- B) 3127
- C) 3217
- D) 3213

## **Grade Group 11–12**

**21. A man buys an item for Rs.500 and sells it for Rs.600. Profit percentage?**

- A) 10%
- B) 15%
- C) 20%
- D) 25%

**22. If  $x = 2$  and  $y = 3$ , then value of  $x^2 + y^2$  is:**

- A) 5
- B) 10
- C) 12
- D) 13

**23. Which number is both a perfect square and perfect cube?**

- A) 16
- B) 36
- C) 64
- D) 81

**24. Which word does NOT belong to this group: Circle, Triangle, Square, Sphere?**

- A) Circle
- B) Triangle
- C) Square
- D) Sphere

25. If  $3x - 5 = 16$ , find  $x$ .  
A) 6  
B) 7  
C) 8  
D) 9
26. A train travels 60 km in 1 hour and 30 minutes. Speed in km/hr is:  
A) 40  
B) 45  
C) 50  
D) 60
27. If  $a:b = 2:3$  and  $b:c = 4:5$ , then  $a:c = ?$   
A) 8:15  
B) 4:15  
C) 2:5  
D) 8:5
28. Which shape has more than one line of symmetry?  
A) Parallelogram  
B) Scalene triangle  
C) Equilateral triangle  
D) Trapezium
29. Find missing term: 3, 6, 11, 18, ?  
A) 27  
B) 28  
C) 29  
D) 30
30. Averages of 5 numbers is 20. What is total sum?  
A) 80  
B) 90  
C) 100  
D) 120