



# Young Scholars Foundation

**Prizes**

**MATHEMATICS**

**GRADE  
5**

<p><b>1st Rank</b> <b>₹50000</b></p> <p>+</p> <p>Gold Medal + Certificate of Excellence</p>	<p><b>2nd Rank</b> <b>₹25000</b></p> <p>+</p> <p>Silver Medal + Certificate of Excellence</p>	<p><b>3rd Rank</b> <b>₹10000</b></p> <p>+</p> <p>Bronze Medal + Certificate of Excellence</p>
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**4<sup>th</sup> TO 10<sup>th</sup>  
Rank**  
**Rs 1100**

+ Certificate of Excellence

**11<sup>th</sup> TO 50<sup>th</sup>  
Rank**  
**Wrist Watch**

+ Certificate of Excellence



## Instructions

Time : 1 hour

Maximum Marks : 50

- Maximum Time is 1 hour & You will get additional ten minutes to fill up information about yourself on the OMR Sheet, before the start of the exam.
- Write your **Name, School Code, Class, Roll No.** and **Mobile Number** clearly on the **OMR Sheet** and do not forget to sign it.
- The Question Paper comprises four sections: **Mathematical Reasoning** (5 Questions), **General Maths** (15 Questions), **Logical Reasoning** (10 Questions) and **Wise Wizard** (10 Questions). Each question in Wise Wizard carries two marks each, whereas all other questions carry one mark each.
- All questions are compulsory. There is no negative marking. Use of calculator is not permitted.
- To mark your choice of answers by darkening the circles on the OMR Sheet, use **HB Pencil** or **Blue / Black ball point pen** only.

Roll No

Student Name

Father's Name

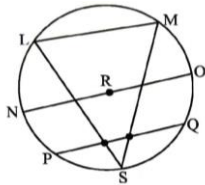
## SECTION - A (MATHEMATICAL REASONING)

- Q1. If I add the number of sides that a hexagon has to the number of sides that a \_\_\_\_\_ has, then the sum is odd.
- a. Hexagon                      b. Cube                      c. Pentagon                      d. Rectangle
- Q2.  $50 + 30 \times 20 + 20 \times 0 =$  \_\_\_\_\_
- a. 10                      b. 120                      c. 650                      d. 1500
- Q3. My elder brother is 6 years older than I am, and the sum of our ages is 30. How old is my older brother?
- a. 22                      b. 35                      c. 18                      d. 31
- Q4. If I double \_\_\_\_\_ and then subtract 50, I get 160.
- a. 150                      b. 100                      c. 50                      d. 105
- Q5. I have 500 coins. If I spend 6 coins a day until I can no longer do so, at the end of one of the days I will have exactly \_\_\_\_\_ coins left?
- a. 9                      b. 8                      c. 11                      d. 13

## SECTION - B (GENERAL MATHS)

- Q6. Which one of the following expressions will give the smallest value among all?
- a.  $4 \times 3 + 2 - 1$   
b.  $1 \times 4 + 2 - 3$   
c.  $3 \times 1 + 4 \div 2$   
d.  $3 \times 2 - 4 \div 1$
- Q7. Sum of a number of two digits and the number obtained by reversing the digits of the first number is 110. If the difference of the digits is 4, then the number is \_\_\_\_\_
- a. 62                      b. 73                      c. 84                      d. 51
- Q8. How many  $\frac{1}{16}$ 's make  $3\frac{1}{4}$ ?
- a. 26                      b. 52                      c. 24                      d. 39
- Q9. Divide 31.64 by the difference of 98 tenths and 580 hundredths the quotient is \_\_\_\_\_
- a. 7.91                      b. 8.20                      c. 7.66                      d. 6.83

- Q10. Which of the following is a better buy?
- 6 apples for ₹ 30
  - 4 apples for ₹ 16
  - 5 apples for ₹ 25
  - 8 apples for ₹ 48
- Q11. A recipe needs sugar and flour in the ratio 1:3. If 750 grams of flour is used in the recipe, how much sugar is needed?
- 500 grams
  - 250 grams
  - 700 grams
  - 200 grams
- Q12. Find the average of 12,18,25,45
- 4
  - 25
  - 100
  - none of these
- Q13. There are 500 students in a school in which 36% are girls. The difference between the numbers of boys and girls is.
- 140
  - 120
  - 180
  - 320
- Q14. Which one of the following is not a composite number?
- 92
  - 97
  - 57
  - 104
- Q15. How many chords and radii have been shown in the given circle?



- 6,5
  - 5,7
  - 5,2
  - 2,5
- Q16. The area of square is equal to the area of a rectangle of length = 8cm and breadth = 2cm. What is the side of the square?
- 6 cm
  - 4 cm
  - 3 cm
  - 8 cm
- Q17. Which of the following decimals is equivalent to 0.8%?
- 0.008
  - 0.08
  - 0.0008
  - 8
- Q18. Which specific term is used for the number, whose sum of all the factors, except the number itself, is equal to the number?
- Prime number
  - Composite number
  - Perfect number
  - Even number

Q19. Kirti rented a scooty for 330 minutes. How much did she pay for it?

Charges for first hour= Rs. 8.75

Charges for every additional  $\frac{1}{2}$  hour=Rs. 5.25



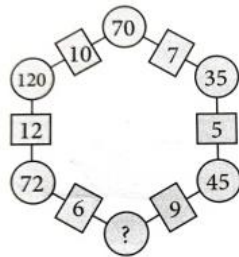
- a. Rs. 56                      b.Rs. 49                      c. Rs. 48.75                      d. Rs. 55.25

Q20. Two wires of length 78cm and 114 cm , respectively are to be cut into pieces of the same length without leaving any remainder. Find the greatest possible length of the pieces.

- a. 12 cm                      b. 4 cm                      c. 6 cm                      d. 8 cm

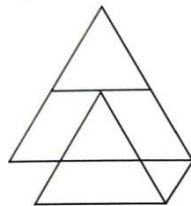
**SECTION - C (LOGICAL REASONING)**

Q21. Which one of the following numbers will replace the question mark(?) in this magic hexagon?




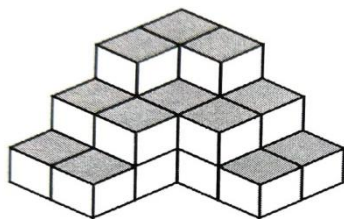
- a. 63                      b. 54                      c. 30                      d. 60

Q22. How many triangles are there in the given figure?



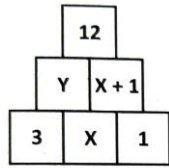
- a. 5                      b. 7                      c. 6                      d.4

Q23. Take  as one cube and then count the number of cubes in the given solid.



- a. 22                      b. 23                      c. 21                      d. 20

Q24. Find the values of X and Y respectively, If each number is the sum of the two numbers directly below it.



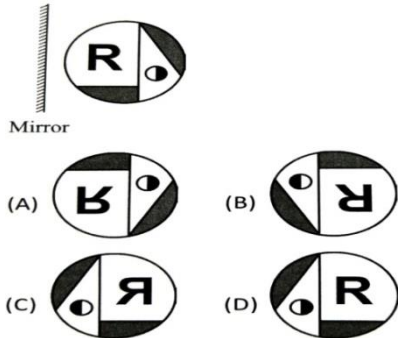
- a. 4 and 7                      b. 5 and 6                      c. 4 and 6                      d. 3 and 7

Q25. Find the next pair of letter in the series given below.



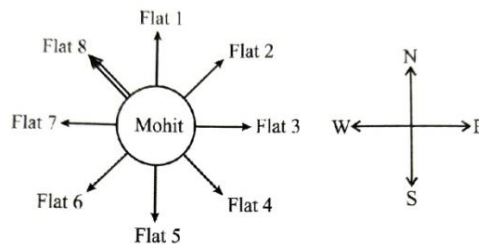
- a. HV                      b. IV                      c. HU                      d. IU

Q26. Find the mirror image of the figure given below.



Q27. Mohit is facing flat 8 as shown below. To face flat 3, Mohit has to turn:

- a. 270° anti – clockwise  
 b. 225° clockwise  
 c. 315° clockwise  
 d. 225° anti-clockwise



Q28. In a certain code language, “pen” is called “pencil”, “pencil” is called “eraser” and “eraser” is called “book”, then what will be used to erase something?

- a. pen                      b. pencil                      c. eraser                      d. book

Q29. If H =9, HE= 14 and HEN = 28 , then HENT = ?

- a. 47                      b. 48                      c. 46                      d. 49

Q30. Shweta is standing in a row. If she is 14<sup>th</sup> from left end and 8<sup>th</sup> from right end, how many people are standing in the row?

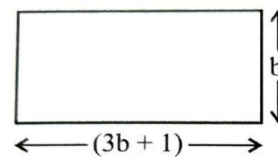
- a. 23                      b. 20                      c. 22                      d. 21

**SECTION - D (WISE WIZARD)**

Q31. How many numbers containing 7 in their tens place are there between 600 to 900?

- a. 30                      b. 27                      c. 40                      d. 36

Q32. The length of a rectangular field is 1 m more than thrice its breadth. If the perimeter of the field is 162m, then find the area of field?



- a.  $840m^2$                       b.  $1660m^2$                       c.  $1220 m^2$                       d.  $4800m^2$

Q33. A herd of cows gives 4 litres of milk each day. But each cow gives one –third of total milk each day. They give 24 litres milk in six days. How many cows are there in the herd?

- a. 4                      b. 5                      c. 6                      d. 3

Q34. Take away one –hundredths seven times from 1 and find the remainder.

- a. 0.43                      b. 0.93                      c. 0.7                      d. 0.3

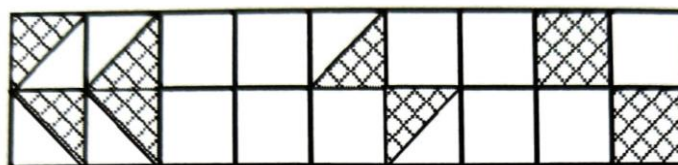
Q35. A and B are two fractions. When twice of A is subtracted from B we get  $\frac{12}{25}$ . If  $B = \frac{3}{4}$ , find the value of A +B

- a.  $\frac{181}{30}$                       b.  $\frac{277}{200}$                       c.  $\frac{200}{277}$                       d.  $\frac{177}{200}$







Q36. By how much the smallest four digit number, which is divisible by 7, is greater than its previous four digit number?

- a. 3                      b. 2                      c. 1                      d. 0

Q37. How many more boxes must be shaded so that  $\frac{1}{3}$  of the figure is shaded?

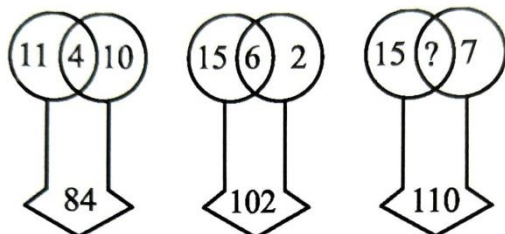


- a. 1                      b. 3                      c. 2                      d. 6

Q38.  +  = 17 and  > 7 but  < 9 if  stands for natural number, then find .

- a. 13                      b. 11                      c. 9                      d. 4

Q39. Which one of the following will replace the question mark in the figure?



- a. 8                      b. 3                      c. 5                      d. 11

Q40. The sum of two numbers is 315 and their difference is  $\frac{1}{9}$  of their sum. Find the HCF of the numbers.

- a. 25                      b. 35                      c. 45                      d. 65

**Space for rough work**

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