

# Olympiad Foundation

SAMPLE PAPER CLASS-6<sup>th</sup>



## Division of Marks

S.No.	Topic/Section	No. of Question	Marks
1	MATHEMATICS	25	25
2	HOTS (High Order thinking Skill)	10	10
3	Reasoning & Mental Ability	15	15
	Total	50	50

### INSTRUCTIONS :

1. Use Blue/Black ballpoint pen only to darken the appropriate circle.
2. Mark should be dark and should completely fill the circle.
3. Dark only one circle for each entry.
4. Dark the circle in the space provided only.
5. Rough work must not be done on the answer sheet and do not use white -fluid or any other rubbing material on Answer sheet.
6. Each question carries one mark.

Select the correct answer and darken your answer in the table :

**MATHEMATICS**

1. What is the reduced form of the following expanded form  $7 \times 10000 + 5 \times 100 + 6$ 
  - (A) 70546
  - (B) 7546
  - (C) 75460
  - (D) 07546
  
2. How many prime numbers are there between 10 to 50
  - (A) 10
  - (B) 12
  - (C) 13
  - (D) 13
  
3.  $[(563 \times 8) + 70] - 4384 \div 10$ 
  - (A) 60
  - (B) 45
  - (C) 19
  - (D) 24
  
4. Convert  $11/2$  into a mixed fraction
  - (A)  $5\frac{1}{2}$
  - (B)  $3\frac{1}{2}$
  - (C)  $1\frac{1}{2}$
  - (D) All of these
  
5. What should be divided by  $6/11$  to get  $3/5$ 
  - (A)  $18/55$
  - (B)  $8/55$
  - (C)  $9/18$
  - (D)  $10/5$
  
6. What is the reciprocal of the shaded part in the picture given below?
  - (A)  $1/6$
  - (B)  $1/3$
  - (C)  $6/5$
  - (D)  $3/2$
  
7. Simplify  $(67.89 \times 2 - 3) + 34.05$ 
  - (A) 199.453
  - (B) 189.567
  - (C) 190.197
  - (D) 100.125
  
8. Which 4 ones, 2 tens, 6 hundred, 3 thousand and 9 tenth hundredths, 2 thousandths as decimal number.
  - (A) 3624.942
  - (B) 1235.97
  - (C) 2643.954
  - (D) None of these

9. Find the least number which is exactly divisible by each of 28 and 42?

- (A) 64  
(C) 52

- (B) 84  
(D) 53

10. Find the product of LCM and HCF of 45 and 35?

- (A) 1575  
(C) 3000

- (B) 1000  
(D) 2345

11. Consumption of milk in a day is 6 litre. Find the ratio of consumption of milk in month of April and quantity of milk in a day?

- (A) 99 : 2  
(C) 123 : 3

- (B) 30 : 1  
(D) 47 : 3

12. The cost of 40 boxes is 600 Rs. Find the cost of 20 such boxes.

- (A) 200 Rs.  
(C) 250 Rs.

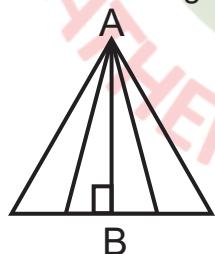
- (B) 300 Rs.  
(D) 175 Rs.

13. Simplify the  $78 - \left( \frac{7}{9} + \frac{1}{2} + \frac{2}{2} \right)$

- (A)  $75 \frac{5}{18}$   
(C)  $75 \frac{2}{9}$

- (B)  $75 \frac{3}{18}$   
(D)  $71 \frac{7}{18}$

14. The line segment AB in the given figure is :



- (A) Side of triangle

- (B) Median of triangle

- (C) Altitude of triangle

- (D) Vertex of triangle

15. The area of a right angle triangle is

- (A)  $1/2 \times B \times H$   
(C) Base  $\times$  Height

- (B)  $L \times B$   
(D) None of these

16. What will be the height of a triangle if the area of triangle is  $18 \text{ cm}^2$  and base is  $12 \text{ cm}$ ?

- (A) 3 cm

- (B) 9 cm

- (C) 10 cm

- (D) 4 cm

15. The area of a light angle triangle is

(A)  $1/2 \times B \times H$

(B)  $L \times B$

(C) Base  $\times$  Height

(D) None of these

16. What will be the height of a triangle if the area of triangle is  $18 \text{ cm}^2$  and base is  $12 \text{ cm}$ ?

(A) 3 cm

(B) 9 cm

(C) 10 cm

(D) 4 cm

17. Which of the following figure does not have any line of symmetry?

(A) A

(B) B

(C) C

(D) D

18. If  $\frac{5}{3} = \frac{x}{18}$ , then the value of x is :

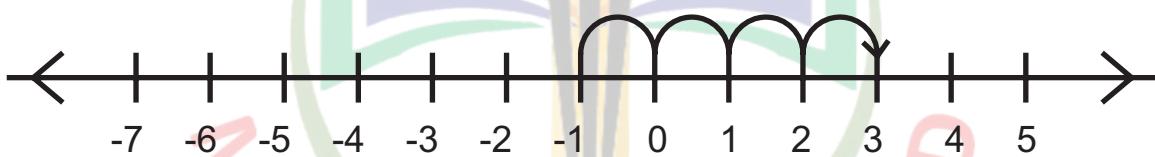
(A) 30

(B) 25

(C) 20

(D) 15

19. Write the Integer Which is represented on following number line.



(A) Stones

(B) Debris

(C) Mantle

(D) Minerals

20. Which of the following will not represent zero :

(A)  $1 + 0$

(B)  $5 < 3$

(C)  $0/2$

(D)  $2 < -3$

21. The largest 5 digit number having three different digits is :

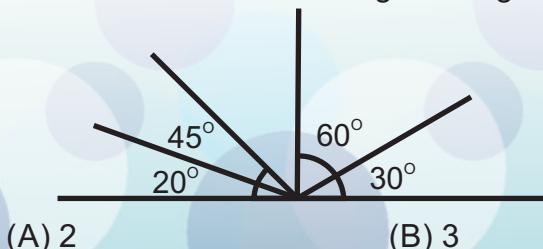
(A) 98978

(B) 99897

(C) 99987

(D) 98799

22. The number of obtuse angles in figure is



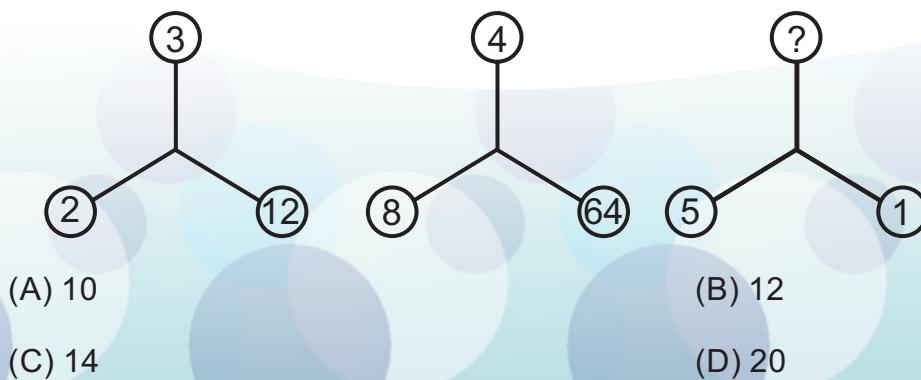
(A) 2

(B) 3

(C) 4

(D) 5





38. Choose the odd one out;

(A) **N**

(B) **F**

(C) **Z**

(D) **E**

39. If P is 40 m South - West of Q and R is 40 m South - East of Q, then what is the direction of R with respect of P

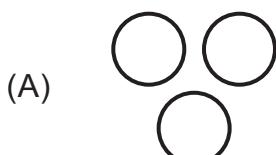
(A) East

(B) West

(C) North-East

(D) South

40. Which of the following Venn diagrams best represent the relationship among India, Asia and Australia?



41. If Monday falls on the second of a month, then which day will fall two days after 10<sup>th</sup>

(A) Tuesday

(B) Tuesday

(C) Friday

(D) Sunday

42. Arrange the following in a logical sequence :

(1) Kid, (2) School Education, (3) Marriage, (4) Birth, (5) College

(A) 42321

(B) 25413

(C) 25143

(D) 12345

43. Arrange the words in meaningful Sequence :

(1) Wall, (2) Clay, (3) House, (4) Room, (5) Bricks

(A) 52143

(B) 25413

(C) 25143

(D) 12345

44. If  $P = 6$ ,  $J = 4$  and  $M = 24$  then  $M + L \times J + P = ?$

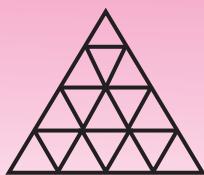
(A) 16

(B) 0

(C) 36

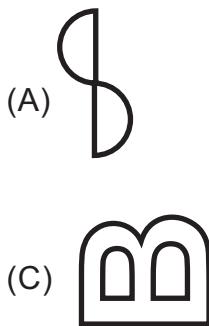
(D) 18

45. Find the minimum number of straight line :



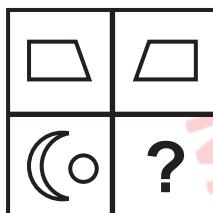



46. Identify the mirror image of



- (B) 

47. In this question, find out which of the answer figure (A), (B), (C) and (D), completes the given figure matrix?



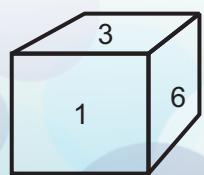
- (A) 

(B) 

(C) 

(D) 

48. Two positions of a dice are shown here. Which of the following will be at the top when 4 is at the bottom ?



- (A) 3      (B) 6  
(C) 2      (D) 1

49. How many triangles are there in the following figure



- (A) 14  
(C) 10

- (B) 12  
(D) 8

50. In this question choose the missing number to complete the series  
1, 9, 17, 33, 49, 73, ?

- (A) 9  
(C) 15

- (B) 10  
(D) 16

ANSWER KEY									
1	A	11	B	21	C	31	C	41	B
2	B	12	B	22	C	32	D	42	D
3	C	13	B	23	B	33	C	43	C
4	A	14	B	24	D	34	D	44	D
5	A	15	A	25	C	35	C	45	C
6	A	16	A	26	C	36	C	46	B
7	C	17	D	27	D	37	A	47	D
8	A	18	C	28	A	38	D	48	B
9	B	19	A	29	B	39	A	49	B
10	A	20	A	30	B	40	D	50	A