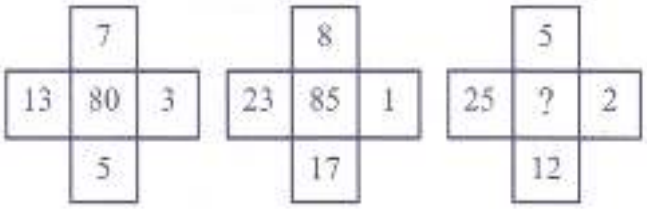
International Foundation Mathematics Olympiad(IFMO)
CLASS 7
WORKSHEET – 5

SECTION-A (Logical Reasoning)

1. Choose the appropriate number which follow the given pattern.



a) 172 c) 176
b) 174 d) 178

2. In each of the following questions, a number series is given with one missing term. Choose correct alternative that will continue the same pattern and fill in the blank spaces.

8, 43, 11, 41, ___39, 17

a) 8 c) 43
b) 14 d) 44

3. In each of the following letter series, some of the letters are missing, which are given in such order as one of the alternatives below it. Choose the correct alternative.

c__bba__cab__ac__ab__ac

a) abebe c) babec
b) acbcb d) bcacb

4. In each of the following letter series, some of the letters are missing, which are given in such order as one of the alternatives below it. Choose the correct alternative.

JAK, KBL, LCK, MDN, _____

a) OEP c) MEN
b) NEO d) PFQ

5. In each of the following questions, some groups of letters are given, all of which, except one, share a common similarity while one is different.
Choose the odd one out.

a) HSRI
b) MVUN
c) OLKP
d) PJQX

6. In a certain code, CALANDER is written as CLANAEDR. How is CIRCULAR written in that code?

a) CRIUCLRA
b) ICRCLUAR
c) CRIUCAL
d) ICCRLURA

7. In each of the following questions a find out how many such pairs of letters are there in the given word each of which has as many letters between thm in the word as in the English alphabet.
HORIZON

a) Four
b) Three
c) Two
d) One

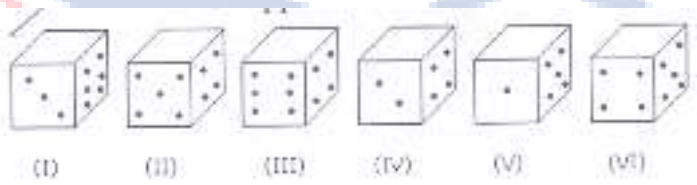
8. Ankit is the son of Zubin. Manju is the daughter of Anil. Sheela is the mother of Manju. Mohan is the brothr of Manju. How is Mohan related to Sheela?

a) Brother
b) Father
c) Son
d) None of these

9. After walking 6 km. I turned to the right and then walked 2 km. After that I turned to the left and walked 10 km. In the end, I was moving towards the North. From which direction did I start my journey?

a) North
b) South
c) East
d) West

10. Six dice with upper faces erased are shown as:



The sum of the numbers of dots on the opposite face is 7.
If even numbered dice have even number of dots on their top faces, then what would be the total number of dots on the top faces of their dice?

a) 12
b) 14
c) 18
d) 24

SECTION-B (Day to Day Mathematics)

11. The additive inverse of 7.22 is added to the additive identity of 3.6. What is the sum obtained?

a) 10.82
b) -7.22
c) 3.62
d) -10.82

12. The sum of two numbers is 12. If one of them is $-\frac{7}{9}$, what is the other?

a) $\frac{113}{9}$
b) $\frac{115}{9}$
c) $\frac{117}{9}$
d) $\frac{103}{9}$

13. Find the product of sum of -6 and 17 and difference of -12 and 15.

a) 33
b) -29777
c) -33
d) 297

14. $(0.25)^2$- $(0.19)^2$ =?

a) 0.0264
b) 0.264
c) 2.64
d) 0.204

15. Rs. 20 is the true discount on Rs. 260 due after a certain time. What will be the true discount on the same sum due after half of the former time, the rate of interest being the same?

a) Rs. 10
b) Rs. 10.40
c) Rs. 15.20
d) Rs. 13

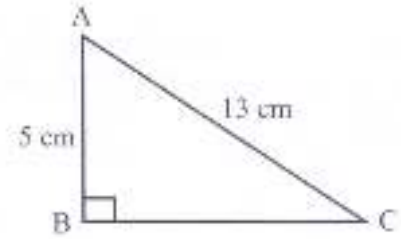
16. $(17)^{3.5} \times (17)^{?} - 17^8$

a) 2.29
b) 2.75
c) 4.25
d) 4.5

17. What is the mean of first 12 multiples of 7?

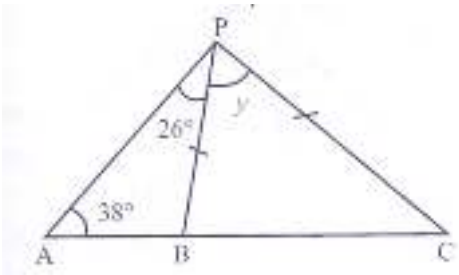
a) 45
b) 46
c) 45.5
d) 46.5

18. In $\Delta ABC, \angle B = 90^0$, AB = 5CM and AC=13 cm then BC=?



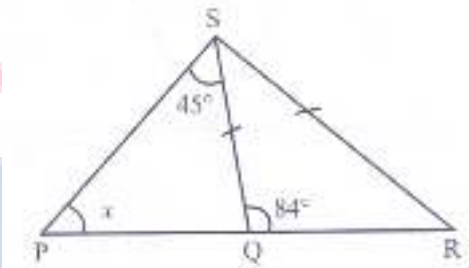
a) 18 cm
b) 12 cm
c) 8 cm
d) None of these

19. In the given figure, ABC is a straight line. What is the value f y?



a) 42^0
b) 52^0
c) 62^0
d) 32^0

20. In the given figure, PQR is a straight line. What is the value of x?



a) 39^0
b) 49^0
c) 59^0
d) None of these

21. A man sold an article for Rs. 630 and he lost 10% on it. What is the cost price of the article?

a) Rs. 700
b) Rs. 720
c) Rs. 680
d) Rs. 690

22. Simplify a(b-2c) + 2b(c-2a) + c (3a -2b).

a) 2ab-ac
b) ab-ac
c) ac-3ab
d) ab-3ab

23. The runs scored by 11 members of a cricket team are 35, 53, 28, 65, 62, 0, 46, 31, 08, 24. What is the median score?

a) 28
b) 31
c) 35
d) 39

24. A rectangular field is to be fenced on three sides leaving a side of 20 feet uncovered. If the area of the field is 680 sq. feet, how many feet of fencing will be required?

a) 34
b) 40
c) 68
d) 88

25. What is the height of a circular cone?

I. The area of that cone is equal to the area of a rectangle whose length is 33 cm.

II. The area of the base of that cone is 154 sq. cm.

a) I alone sufficient while Ii alone not sufficient to answer.

b) II alone sufficient while I alone not sufficient to answer.

c) Either I or II alone sufficient to answer

d) Both I and II are not sufficient to answer.

ANSWER IFMO CLASS 7 – WORKSHEET - 5																			
1	D	2	B	3	B	4	B	5	D	6	C	7	C	8	C	9	B	10	C
11	B	12	B	13	D	14	A	15	B	16	D	17	C	18	B	19	B	20	A
21	A	22	C	23	C	24	D	25	D										