SCIR NET General Aptitude Life Science PYP Held on June 2023 Shift-1

Q1. If 6 students occupy a bench, one bench will be left completely unoccupied. If 5 students occupy each bench, instead, one student will not find a seat. The number of students is
(a) 30
(b) 31
(c) 36
(d) 42

Q2. Four villages A,B, C and D are connected in that order by a circular road. A car traveling with a uniform speed covers the distance between A and B in 43 minutes. B and C in 23 minutes, C and D in 19 minutes and D and A in 47 minutes. Which of the following will be closest to the time (in minutes) taken to travel from A to C with the same speed along a straight road?
(a) 42
(b) 66
(c) 45
(d) 21

Q3. A test consists of 20 questions and the students are awarded 4 marks for a correct answer, -1 mark for a wrong answer and 0 mark for an unattempted question. Which of the following could be a possible number of questions attempted by a student who secured 27 marks?
(a) 15
(b) 16
(c) 17
(d) 18

Q4. A, B, C, D and E are members of a family. A is a doctor and wife of a lawyer. B is the brother of C and husband of a teacher. C is an engineer and daughter of the lawyer. Which of the following inferences can be definitely made?
(a) D is the lawyer
(b) E is the teacher
(c) A is the wife of D
(d) B is the son of A

Q5. Which of the following correspond to x,y and z. respectively in the following square where sum of elements in each column, row, and diagonal is the same?

16	**11**	**x**
17	**y**	**13**
z	**19**	**14**

(a) (17,15,13)
(b) (18,15,12)
(c) (12.15.17)
(d) (17,16,14)

Q6. P starts a business with an investment of Rs. 30 lakh. Two months later Q joined with Rs.90 lakh. Subsequently R joined with Rs. 180 lakh. The year-end profit of Rs. 1.2 crore was distributed in proportion of the investment and duration in the partnership. If the profit received by R was Rs. 60 lakh, how many months after Q. did R join?

(a) 3
(b) 4
(c) 5
(d) 7

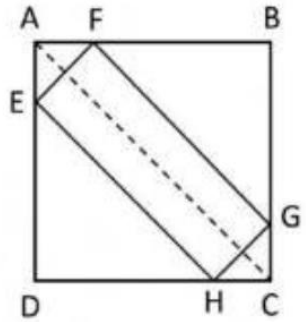
Q7. If the difference between the two-digit numbers made from digits a and b is 27, the difference between a and b is

(a) 2
(b) 1
(c) 4
(d) 3

Q8. Two cards are drawn together at random from a deck of 52 playing cards. What is the probability to get one red and one black card?

(a) $\frac{1}{2}$
(b) $\frac{13}{51}$
(c) $\frac{26}{51}$
(d) $\frac{26\times25}{52\times51}$

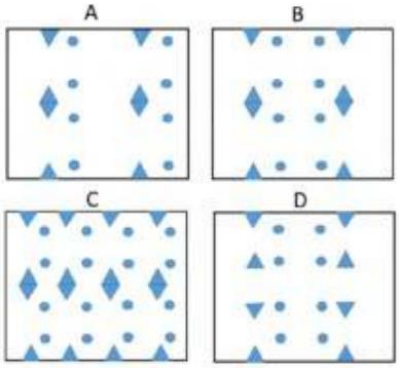
Q9. ABCD is a square. EFGH is a rectangle inscribed within the square with its sides parallel to the diagonal AC of the square. The perimeter of the rectangle EFGH is 16. The side of the square is



(a) $8/\sqrt{2}$
(b) 8
(c) 4
(d) $8\sqrt{2}$

Q10. A square paper is folded twice to a square shape one-fourth in area to the original square. Then equilateral triangles and circles are cut as shown in the figure.

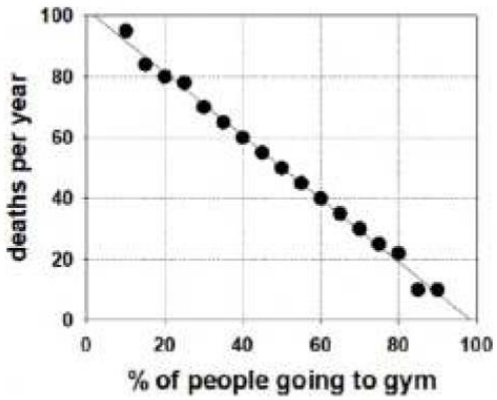
Which one of the following is a possible pattern on the fully unfolded paper?



(a) A
(b) B
(c) C
(d) D

Q11. Two cylindrical candles A and B are of the same height. The radius of A is twice that of B. If A takes 120 minutes to completely burn, how long does B take to burn half its initial height?
(a) 60 min
(b) 30 min
(c) 15 min
(d) 10 min

Q14. Given graph depicts the data of people going to gym and deaths per year in different cities. Which of the following can be definitely concluded from the graph?



(a) Gym makes people fit and improves their health.
(b) None will die if all go to gym.
(c) Gym helps people to save their lives in cities.
(d) In the city where on the average 50% people go to gym, 50 people die per year.

Q16. Choose the option that will make the following statement correct: THE NUMBER OF TIMES THE LETTER "I" OCCURS IN THIS SENTENCE IS
(a) FOUR
(b) FIVE
(c) SIX
(d) SEVEN

Q17. Mary and Mike are married to each other. John is Mary's brother while Douglas is Mike's brother. In a gathering of 2 children of Mary and Mike, 3 of John and 2 of Douglas, the number of first-cousin pairs (sibling's children are first-cousins to each other) is
(a) 3
(b) 6
(c) 10
(d) 21

Q18. In a round-robin tournament (each team plays with all other teams once) between 8 teams, a win fetched 3 points and a draw. 1. After each team had played 4 matches, the total of the points of the teams was 34. The number of drawn games among those played till then was
(a) 7
(b) 2
(c) 6
(d) 14

Q20. The possible number of integers between 1000 and 10000 containing two 2's, one 0 and one 3 (for example, 2023 is such an integer) is
(a) 6
(b) 9
(c) 12
(d) 24