



# UNIFIED COUNCIL

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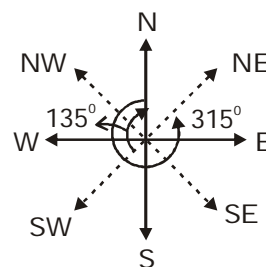
## UNIFIED CYBER OLYMPIAD - UC 326

### Solutions for class : 5

#### Mental Ability

- (B)** Smallest 6 digit odd number = 100001  
Largest 4 digit even number = 9998  
Difference = 90003
- (C)** LCM of 10 and 12,  
 $= 2 \times 3 \times 5 \times 2 = 60$
- (D)** Present age of Adarsh = 3 (Anish's age)  
Adarsh's age 5 years ago = 4 (Anish's age - 5)  
 $\Rightarrow$  Adarsh's age - 5 = 4 (Anish's age - 5)  
 $\Rightarrow 3(\text{Anish's age}) - 5 = 4 \text{ Anish's age} - 20$   
 $\Rightarrow$  Anish's age =  $20 - 5 = 15$   
 $\therefore$  Adarsh's age = 45  
 $\therefore$  Difference =  $45 - 15 = 30$  years
- (C)**  $1827 \times 891$   
 $= 2000 \times 900$
- (B)**  $4 \div 1000 = 0.4 \div ?$   
 $\Rightarrow \frac{4}{1000} = \frac{4}{100} \div ?$   
 $\Rightarrow 0.01 = 1 \div ?$   
 $\Rightarrow ? = \frac{1}{0.01} = 100$
- (B)** 845 minutes =  $845 \div 60$   
 $= 14.08 = 14.1$
- (B)**  $\square : 56 : 72 = 6 : \square : 18$   
 $\Rightarrow \square : 56 : 72 = 6 \times 4 : \square \times 4 : 18 \times 4$   
 $\Rightarrow \square : 56 : 72 = 24 : \square : 72$   
 $\Rightarrow \square : 56 : 72 = 24 : 14 \times 4 : 72$   
 $\therefore$  The missing numbers are 24 and 14 whose sum is 38.

8. **(C)**



$\therefore$  Harsh was facing south-west before he made the turns

- (C)**  $970 - 24 \div (3 \times 4) + 132 = \square \times 100$   
 $\Rightarrow 970 - 24 \div 12 + 132 = \square \times 100$   
 $\Rightarrow 970 - 2 + 132 = \square \times 100$   
 $\Rightarrow 1100 = \square \times 100$   
 $\Rightarrow$  The missing number is  $\frac{1100}{100} = 11$
- (A)** Ratio of length of three pieces = 4 : 9 : 3  
Length of longest piece =  $\frac{9}{16} \times 2 \text{ m} = 1.125 \text{ m}$   
Length of shortest piece =  $\frac{3}{16} \times 2 \text{ m} = 0.375 \text{ m}$   
Difference =  $(1.125 - 0.375) \text{ m} = 0.75 \text{ m}$
- (B)** 4 books + 3 magazines = ₹ 22  
1 book + 1 magazine = ₹ 6  
3 books + 3 magazines = ₹  $6 \times 3$   
= ₹ 18  
 $\therefore$  Cost of 1 book = ₹  $(22 - 18)$   
= ₹ 4  
Hence, the cost of 1 magazine = ₹  $(6 - 4) = ₹ 2$
- (C)** Quantity of rice eaten in a week = 8.4 kg  
 $= 8.4 \times 1000 \text{ g}$   
 $= 8400 \text{ g}$

Quantity of rice eaten each day =  $8400 \div 7$   
 = 1200 g

13. (D) Distance from Town B to Town A = 23.7 km

Distance travelled =  $\frac{2}{3}$  of 23.7 km

$$= \frac{2}{3} \times 23.7 \text{ km}$$

$$= \frac{2}{3} \times 23.7 \times 1000 \text{ m}$$

$$= 2 \times 79 \times 100 \text{ m}$$

$$= 15800 \text{ m}$$

Remaining distance =  $(23700 - 15800) \text{ m}$   
 = 7900 m

14. (B)  $4 + \frac{1}{3}$  of a number =  $\frac{44}{2}$

$$\Rightarrow 4 + \frac{1}{3} \text{ of a number} = 22$$

$$\Rightarrow \frac{1}{3} \text{ of a number} = 18$$

$\therefore$  The required number =  $18 \times 3 = 54$

15. (C) Half of 220 =  $220 \div 2$

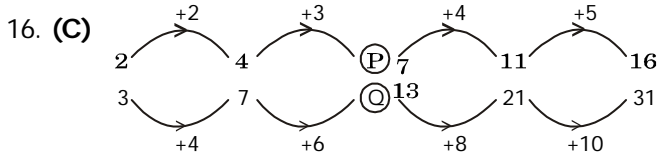
$$= 110$$

$$110 \div 10 = 11$$

$$11 \times 5 = 55$$

$$55 - 10 = 45$$

### Reasoning



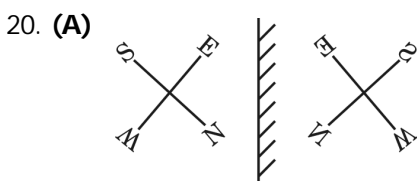
17. (B) 12.05 pm, 12.15 pm, 12.30 pm, 12.50 pm, 13.15 or 1.15  
 + 10 min, + 15 min, + 20 min, + 25 min

18. (D) All the three shapes are different

19. (A)  $17 + 24 = 41$

Similarly  $13 + 19 + \textcircled{9} = 41$

$\therefore$  The missing number is 9



21. (D)  $4096 \div 2 = 2048$

22. (B) Single region squares = 1, 2, 3, 4, 5, 6, 7, 8, 9

1	2	3
4	5	6
7	8	9

Four region squares =  $1 + 2 + 4 + 5,$

$2 + 3 + 5 + 6, 4 + 5 + 7 + 8, 9 + 6 + 8 + 9,$

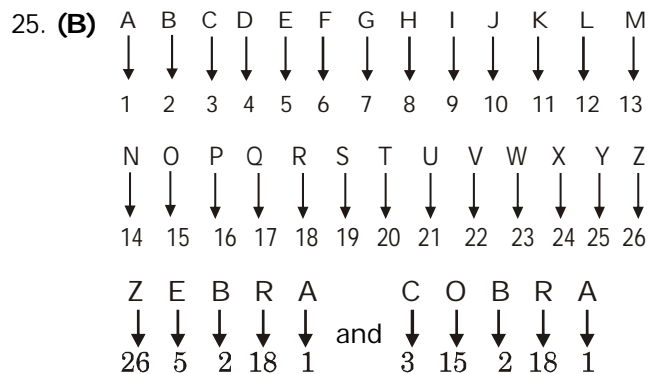
Nine region squares

=  $1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9$

Hence, there are 14 squares.

23. (A) P, as there are odd number of lines

24. (D) The small line in the circle is rotating by  $90^\circ$  in the anti-clock wise and the long line attached to the circle is rotating by  $45^\circ$  in the clock-wise direction.



$\therefore$  COBRA can be written as 3152181

26. (B) % \$ & % \$ & % \$ \$ & & % \$ \$ % % \$  
 $\therefore$  \$ follows % five times in the given sequence.

27. (C) In each pair, the last two digits are reversed and placed as first two digits, then the first two digits are placed beside them.

$\therefore$  The missing number is 4488.

28. (C) The figure in option (C) completes the given pattern.

29. (C) The small circles are decreasing consecutively in number and the black dots are increasing by one.

30. (C) The number of circles and triangles in each pair are equal in number.

### Computers

31. (D)    32. (B)    33. (A)    34. (D)  
 35. (C)    36. (C)    37. (B)    38. (D)  
 39. (D)    40. (Del)    41. (B)    42. (B)  
 43. (A)    44. (A)    45. (C)

### English

46. (D)    47. (A)    48. (B)    49. (B)  
 50. (C)

