UNIFIED COUNCIL

An ISO 9001:2008 Certified Organisation

UCO Unified Cyber Olympiad

UNIFIED CYBER OLYMPIAD - UC315 (LEVEL - 1)

Solutions for class : 4

Mental Ability

1. **(D)** Number of eggs sold by trader in three days = 12 × 25

   = **300**

   Trader is left with 115 eggs after three days

   ∴ Number of eggs he had at first = 300 + 115

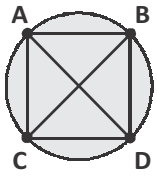
   = 415 eggs.

2. **(C)** The place value and face value of a digit in the **units place** is always equal.

   ∴ The difference between them is zero.

3. **(A)** 72 = 2 × 2 × 2 × 3 × 3 therefore only **2 prime numbers** are the factors of 72 they are 2 and 3. Therefore the answer is at (A).

4. **(B)**



   The line segments formed are AB, BD, CD, AC, AD and CB, which are **6 in number**.

5. **(C)** S is 1444, rounded to nearest 100 will be **1400**.

6. **(D)** A quarter of an hour = $\frac{1}{4}$ × (60 min)

   = 15 min

   ∴ **15 min make a quarter of an hour**.

7. **(C)** Of the given options **5 cm < 2 dm** is a correct comparison.

   1 dm = 10 cm and 2 dm = 20 cm

8. **(B)** The possible number of cards, when he counts 2 at a time are 10 + 1, 12 + 1, 14 + 1, 16 + 1, 18 + 1 = 11, 13, 15, 17, 19 (since, he has left with 1 when he counts 2)

   The possible number of cards, when he counts 5 at a time are 10 + 4, 15 + 4 = 14, 19 (since, he has left with 4 when he counts 5)

   Since, the number 19 is common in both the cases, then the required number of cards are **19**.

9. **(A)** 10 ₹ 10 notes

   = 10 × ₹ 10 = ₹ 100

   80 ₹ 1 notes

   = 80 × ₹ 1 = ₹ 80

   1 ₹ 20 note

   = 1 × ₹ 20 = ₹ 20

   Total = ₹ 100 + ₹ 80 + ₹ 20

   = ₹ 200

10. **(C)** A number to be divisible by 5 must have either 0 or 5 in the units place. The units digit in the product of 448 × 406 would be 8.

    (8 × 6 = 48) adding 2 to it would give a zero and adding 7 would give 5 in the units place. **As the smallest number is required, we choose 2 which is at alternative (C).**

11. **(D)** 0.3 + 0.03 + 0.003 = **0.333**

12. **(A)** If the time reads 3: 33, the next time that all of the digits on the clock are equal to one another is 4: 44. Since the amount of time between 3: 33 and 4: 44 is 1 hour and 11 minutes, the shortest length of time in minutes is 60 + 11 = **71**.

13. **(C)**

    At 6'O clock, angle between the minute and the hour hand is straight i.e., 180°.

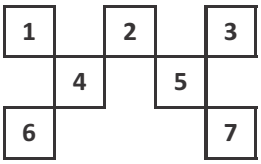
14. **(B)** $1+1+\frac{3}{8}+\frac{7}{8}=\frac{26}{8}=3\frac{2}{8}$

15. **(B)** Weight of one book, one pen and one eraser

$$\frac{300g}{5} = \mathbf{60\,g}$$

Reasoning

16. **(D)**

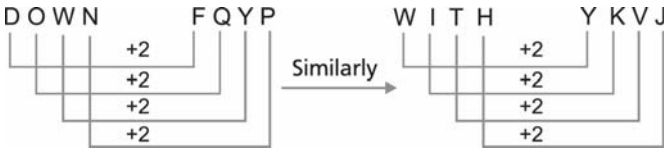


There are 7 squares and each square requires 4 match sticks.

Since there is no common side for any square we can take the product of 7 and 8 i.e., **28 match sticks are required**.

17. **(A)** The lines rotate 90^0 CW and the triangle at its end gets inverted in every step. **The number of lines increases by one in every third step**.

18. **(C)** The letters of the word are moved two steps forward.



19. **(C)** The R.H.S. figure contains one side more than the L.H.S. figure.

20. **(A)**

Hence, LITERATE is coded as **ILETARET**.

21. **(D)** Given,

A = 2, B = 3, C = 4, D = 5, E = 6, F = 7, G = 8, H = 9, I = 10

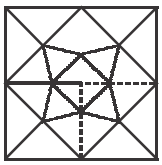
So, B + E = 3 + 6 = 9

The alphabet corresponding to 9 in the given condition is **H**.

22. **(C)**

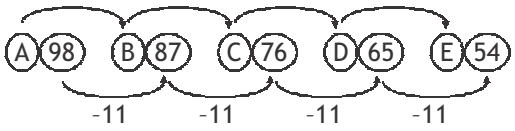
23. **(C)** The shape is completely a curve.

24. **(C)**



25. **(B)** The smaller figure overlaps with half of a similar figure larger in size.

26. **(B)**



∴ **E54 is the missing term in the given series**.

27. **(A)** Six days ago: Friday

Five days ago: Saturday

Four days ago: Sunday

Three days ago: Monday

Two days ago: Tuesday

One day ago: Wednesday

⇒ **Today the day is Thursday.**

Hence, answer is option (A).

28. **(D)** Arranging the letters in alphabetical order we have DEI**N**STY. Clearly, **N lies in the middle**.

29. **(B)** The corner cut off matches exactly the triangle to be subtracted.

NOT A as it has been added.

NOT D as different triangles have been subtracted.

Not C as the large triangle has been subtracted.

Hence, option (B) is the correct answer.

30. **(D)** In all other figures, the two figures on either side of the line are inverted images of one another.

Computers

31. **(C)**

32. **(A)** **Abacus** is the oldest machine ever used for calculations.

33. **(B)** The function of Ctrl + S command in Ms-Word is to **save**.

34. **(D)**

35. **(C)** **Insert** option does not exist in Notepad.

36. **(B)**

37. **(A)** Within a C.P.U., **arithmetic and logic unit** is used for logical operations or comparisons such as less than, equal to or greater than.

38. **(D)**

39. **(B)**

40. **(A)** A **menu bar** is usually located below the title bar that provides categorised options.

41. **(B)** The kind of brush is used for the line Q is an **air brush**.

42. **(A)** **First generation** computers are the largest in size.

43. **(C)** A **Joystick** is not useful in Ms-word document.

44. **(C)** **Turtle** does not belong to command window in MSW LOGO.

45. **(A)** The process that checks the components of a computer are connected and operating properly is called **booting**.

English

46. **(B)** Alphabetical order is chime, click, cycle, **cyst**.

47. **(C)** Industrious is the adjective.

Antonym of Industrious is **lazy**.

48. **(A)** $\underset{P}{\text{would it be}}$ $\underset{Q}{\text{possible for}}$ $\underset{R}{\text{you to drop}}$ $\underset{S}{\text{me at school}}$

49. **(B)** The correct spelling is **buried** not burried.

50. **(C)** Half a glass of water is more than enough to **quench** my thirst.