



UNIFIED CYBER OLYMPIAD

CLASS - 6

Question Paper Code : UC394

KEY

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

SOLUTIONS

MENTAL ABILITY

01. (B) $1^2 - 2^2 + 3^2 - 4^2 + 5^2 - 6^2 + 7^2 - 8^2 = 1 - 4 + 9 - 16 + 25 - 36 + 49 - 64$
 $= (1 + 9 + 25 + 49) - (4 + 16 + 36 + 64)$
 $= 84 - (4 + 16 + 36 + 64)$
 $= 84 - 120$
 $= -36$

02. (D) $\left(\frac{4.2 \times 4.2 \times 2.1}{6.7 \times 6.3 \times 10 \times 10} \right) = \frac{4.2 \times 4.7 \times 2.1}{0.7 \times 10 \times 0.3 \times 10}$
 $= \frac{\cancel{4.2}^{0.6} \times \cancel{4.2}^{1.4} \times 2.1}{\cancel{7}^1 \times \cancel{3}^1}$
 $= 1.764$

03. (C) Required fraction = $19 - 7\frac{3}{5}$
 $= 19 - \frac{38}{5}$
 $= \frac{95 - 38}{5}$
 $= \frac{57}{5}$
 $= 11\frac{2}{5}$

04. (A) 2023 hours = 84 days and 7 hours

$$\begin{array}{r} 24 \overline{) 2023} \quad (84 \\ \underline{192} \\ 103 \\ \underline{96} \\ 7 \end{array}$$

05. (D) Let the two numbers be a & b.

$$\therefore \text{LCM} \times \text{HCF} = a \times b$$

$$\Rightarrow \text{LCM} \times 18 = 16200$$

$$\text{LCM} = \frac{16,200}{18} = 900$$

$$= 900$$

06. (C) Let the fourth term be 'x'

Given 6, 4.5, 4.8 and x are in proportion.

\therefore Product of extremes = Product of means

$$\therefore 6x = 4.5 \times 4.8$$

$$x = \frac{4.5 \times 4.8}{6} = 3.60$$

07. (D) A cube has 12 edges

Given each edge length = 4 cm

\therefore Sum of all edges of a cube

$$= 12 \times 4 \text{ cm} = 48 \text{ cm}$$

08. (A) If $x = -5$ then

$$2(-5) + 10 = -10 + 10$$

$$= 0$$

$$\therefore x = -5$$

09. (C) Let the cost of 23 kgs wheat ₹ x.

$$\therefore 50 \text{ kg} : ₹ 1470 = 23 \text{ kg} : ₹ x$$

Product of means = product of extremes

$$\therefore 50x = 23 \times ₹ 1470$$

$$x = \frac{23 \times ₹ 1470}{50} = ₹ 676.2$$

$$= ₹ 676.2$$

10. (B) Given $4s = 800 \text{ m}$

$$s = \frac{800}{4} \text{ m}$$

$$s = 200 \text{ m}$$

$$\text{Area of square} = s \times s = 200 \text{ m} \times 200 \text{ m}$$

$$= 40,000 \text{ square meters}$$


11. (A) Volume of a cuboid = $l b h$

$$= 8 \frac{1}{19} \times 5 \frac{8}{17} \times 3 \frac{2}{31} \text{ cubic meters}$$

$$= \frac{153^9}{19^1} \times \frac{93^3}{17^1} \times \frac{95^5}{31^1} \text{ cubic meters}$$

$$= 135 \text{ cubic meters}$$

12. (B) Total number of sweets the four children have = 30

Since each  represents 2 sweets, the number of symbols in the pictograph =

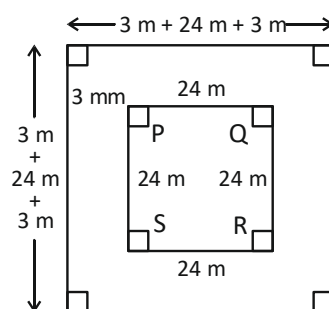
$$\frac{30}{2} = 15$$

13 symbols are already present in the pictograph

Therefore, Anu has $(15 - 13) \times 2$ sweets
 $= 2 \times 2 = 4$ sweets

13. (C) Side of the outer square

$$= 3 \text{ m} + 24 \text{ m} + 3 \text{ m} = 30 \text{ m}$$



$$\text{Total area} = \text{Area of the outer square} = s \times s = 30 \text{ m} \times 30 \text{ m} = 900 \text{ m}^2$$

$$\text{Area of the inner square} = s \times s = 24 \text{ m} \times 24 \text{ m} = 576 \text{ m}^2$$

Area of the path = Total area – area of inner square

$$= 900 \text{ m}^2 - 576 \text{ m}^2$$

$$= 324 \text{ m}^2$$

14. (B) $LCM = 2 \times 2 \times 3 \times 5 \times 7 \times 3 \times 4 = 2520$

2	1, 2, 3, 4, 5, 6, 7, 8, 9
2	1, 1, 3, 2, 5, 3, 7, 4, 9
3	1, 1, 3, 1, 5, 3, 7, 2, 9
	1, 1, 1, 1, 5, 1, 7, 2, 3

15. (A) $1\frac{1}{2} - \frac{1}{3} - \frac{3}{2} - \frac{1}{3} = \frac{9-2}{6} = \frac{7}{6}$

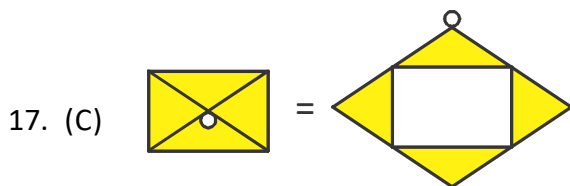
$2\frac{1}{2} - \left(1\frac{1}{2} - \frac{1}{3}\right) = \frac{5}{2} - \frac{7}{6} = \frac{15-7}{6} = \frac{8}{6}$

$1\frac{3}{4} - \left\{2\frac{1}{2} - \left(1\frac{1}{2} - \frac{1}{3}\right)\right\} = \frac{7}{4} - \frac{4}{3} = \frac{21-16}{12} = \frac{5}{12}$

$\therefore 3\frac{1}{12} + \left[1\frac{3}{4} - \left\{2\frac{1}{2} - \left(1\frac{1}{2} - \frac{1}{3}\right)\right\}\right] = \frac{37}{12} + \frac{5}{12}$
 $= \frac{37+5}{12} = \frac{42}{12} = 3\frac{1}{2}$

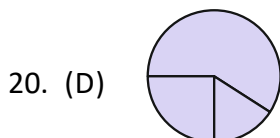
REASONING

16. (B) J is the 10th letter in the English alphabet and A is the first letter in the English alphabet. Multiplying the two numbers we get 10. Similarly C = 3 and E = 5 multiplying the two we get 15.

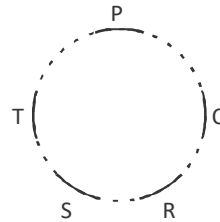


18. (D) 7 2 6 4 5 1 3, 7 2 5 4 6 1 3
 U N I F I E D, U N I F I E D

19. (C) The correct answer is C. After interchanging the positions as mentioned, the new arrangement becomes: X, E, H, C, N, A, E, G. The third letter to the right of the seventh letter from the left end is "C".



21. (B)



In the above arrangement P is next to Q, R is between Q and S and T is sitting to the left of P. "S" is sitting between T and R.

22. (C) The name of a game is 'ASTRONAUT'. The first and last letters are 'A' and 'T' respectively.

23. (D) $4 \times 16 + 5 - 4 \div 2$

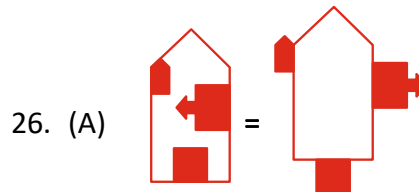
$4 \times 16 + 5 - 2$

$64 + 3 = 67$

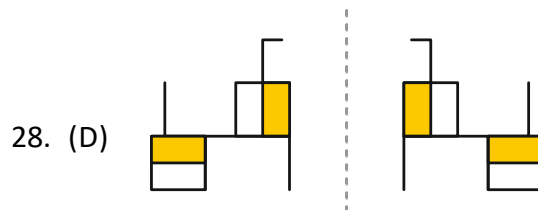
24. (C) In each of the pair except (C), the ratio of the two numbers is 7 : 8.

25. (B) The pattern is $\times 2 + 1, \times 2 + 2, \times 2 + 3 + \dots$

So, missing term = $59 \times 2 + 4 = 122$



27. (D) In the given series rotating 90° and cut half.



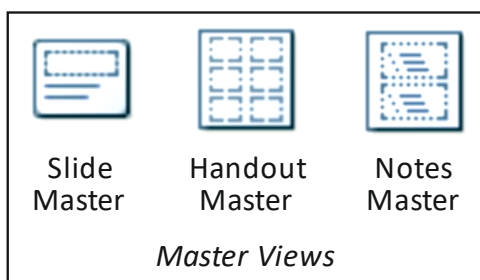
29. (C) Inner arrows are in anti clock wise direction outer arrows are in clock wise direction.

30. (A) is first rotating 90° Anticlockwise and flip horizontally.

COMPUTERS

31. (C) left-1, right-1, top-1, bottom-1
32. (A) The TODAY() function in Excel returns the current date. The NOW() function returns the current date and time. The DATE() function is used to create a specific date with year, month, and day as arguments.
33. (B) Rehearse timings button
34. (C) The short cut keys to select open item in office menu of MS - word is ctrl + O, Alt + F + O.
35. (A) The status bar doesn't display the title of your document. The document title is typically shown at the top of the Word window.
36. (D) PowerPoint allows integration with various MS-Office add-ins.
- Equation Editor: You can insert mathematical symbols and equations.
 - Organization Chart: Before the introduction of SmartArt, Organization Chart was a standalone tool/add-in used for creating hierarchical diagrams.
 - Photo Album: This is a feature in PowerPoint that allows users to create a presentation composed of digital photos in just a few clicks.
37. (D) The zoom percentage in excel 2010 is 10 to 400.

38. (A)

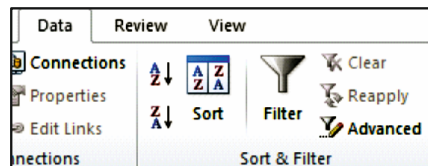


39. (A) Except option (A) all are in the status bar.
40. (D) The FLOOR function in Excel is used to round a given number down, to the nearest multiple of a specified significance.
- Syntax: FLOOR(number, significance)
- Number - the number you want to round.
- Significance - the multiple to which you wish to round the number.

=FLOOR(14,4) = 12 Here 4 rounds down the nearest multiple of 4 ($4 \times 3 = 12$ is nearer)

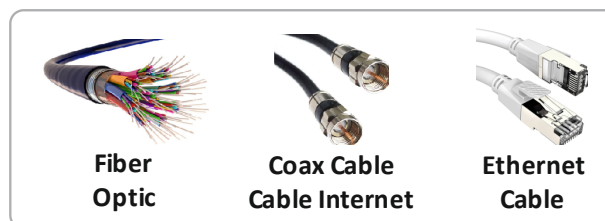
41. (B) In Microsoft PowerPoint, design templates are saved with the ".pot" extension. These templates can be used as a starting point for new presentations, providing consistent design and formatting.

42. (B)



43. (A) The Amazon Kindle is designed mainly as an e-reader, which means it's used for reading digital versions of books, known as e-books. While it has other features, its primary function is to provide a convenient way to read books electronically.
44. (C) "Garbage In, Garbage Out" means that if you provide a computer with incorrect or nonsensical input (garbage in), it will produce incorrect or nonsensical output (garbage out). Computers operate based on the data they are given; they don't inherently know if that data is accurate or not. This highlights the importance of ensuring the accuracy of the input data to get the desired or accurate output.

45. (A)



ENGLISH

46. (C) Most tree trunks are solid except for the bamboo which is hollow.
47. (C) Couldn't, town's wasn't
∴ Three apostrophes are missing.
48. (B) Correct spelling is "convenient".
49. (D) The word in the sentence with three missing letter is 'flooded'.
50. (C) Corrupt people bite their own nest.