



Unified International Cyber Olympiad

UNIFIED INTERNATIONAL CYBER OLYMPIAD

CLASS - 04

Question Paper Code : 3P124

KEY

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

SOLUTIONS

MENTAL ABILITY

01. (C) $\frac{1}{3}$ of 30 = 10

$\frac{1}{2}$ of 30 = 15 so shaded parts should be between 10 & 15

02. (B) Since the number is divisible by 3, the sum of its digits must be divisible by 3.

$2 + \square + 6 = 8 + \square$

Possible digits are 1, 4, 7 because:

$8 + 1 = 9$

$8 + 4 = 12$

$8 + 7 = 15$

All are divisible by 3.

Therefore, 3 different digits can replace $\square$.

03. (B) $38 = 30 + 8$

So, $4 \times 38 = (4 \times 30) + (4 \times 8)$

The student multiplied 30 by 4 but forgot to multiply 8 by 4.

04. (D) Put 8 in the ten thousands place = 80,000

Put 1 in the units place = 1

Difference = 79,999

05. (A) $80 + 240 + 80 + 320 + 80 = 800$

06. (C) Gold coins decreased from 25 to 17.

So, 8 coins were exchanged.

Silver coins become $9 + 8 = 17$

07. (B) 0.30 lies between 0.29 and 0.31

08. (A) 15 baskets = 3 symbols.

Thursday = 6 symbols.

Wednesday = $6 - 3 = 3$ symbols.

So Wednesday should have



09. (D) $3 : 35 + 2$ hours = 5 : 35 p.m.

10. (B) $P > Q > R > S$

11. (D) 1 Mug = 2 Cups

So, 1 Mug = $2 \times 150 \text{ ml} = 300 \text{ ml}$

1 Bucket = 5 Mugs

So, 1 Bucket = $5 \times 300 \text{ ml} = 1500 \text{ ml}$

12. (B) Rs. 150 + Rs. 50 = Rs. 200

Rs. 200 is half of the original amount.

Original amount = Rs. 400

13. (B) The insects must be arranged in groups of 3 (2 butterflies + 1 dragonfly).

More than half of 9 is at least 5.

The possible total number of insects is 6.

6 insects = 4 butterflies + 2 dragonflies.

14. (C) Total of all numbers:

$$1 + 2 + 3 + 4 + 5 = 15$$

If the common sum is 9,

$$\text{Horizontal} + \text{Vertical} = 9 + 9 = 18$$

The centre is counted twice.

$$\text{So, } 15 + \text{Centre} = 18$$

$$\text{Centre} = 3$$

15. (C) First basket = 8 left

Removed from second basket = 8

$$\Rightarrow \text{second basket} = 24 - 8 = 16$$

$$\text{Third basket} = 24 - 5 = 19$$

$$\text{Total} = 8 + 16 + 19 = 43$$

REASONING

16. (D)



17. (B) The 10 meaningful 4-letter words are:

ACRE, CARE, CART, CATE, CERT, RACE, RATE, TACE, TARE, and TEAR.

18. (D) Except option D remaining all the symbols (+, =) shift one position clockwise.

19. (D) The symbols change places in each step. The group that moves to the bottom gets one more symbol, while the group that moves to the top stays the same. So, the next figure has 4 triangles at the top and 4 dots at the bottom. Hence, the correct answer is (D).

20. (C) $\times 3$ each time : $3 \times 3 = 9$,

$$9 \times 3 = 27, 27 \times 3 = 81$$

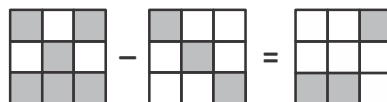
21. (B) $16 + 64 + 81 + 64 = 225$

$$144 + 81 + 36 + 64 = 325$$

$$16 + 9 + 100 + 64 = 189$$

$$81 + 25 + 81 + 64 = 251$$

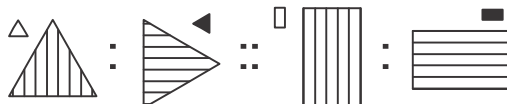
22. (C)



23. (A) From MATHEMATICS = 12345123678:
M=1, A=2, T=3, H=4, E=5, I=6, C=7, S=8.

So, MAHATHMA = 12423412.

24. (D)



25. (D) MOTOR requires two 'O's, but DETERMINATION has only one 'O'.

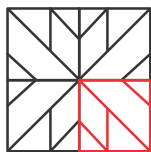
26. (B) The figure contains:

8 small triangles inside the inner square,
4 larger triangles formed by combining the inner triangles,

4 outer triangles around the central square.

$$\text{Total triangles} = 8 + 4 + 4 = 16.$$

27. (C) The pattern repeats every 4 children. In each group of 4, one child wears a white jersey and a green cap. Since $72 \div 4 = 18$, the answer is 18.



28. (D)

29. (C) Follows correct alphabetical order
Accept → Access → Accident.

30. (A) First letters move +2; second letters move -2.

COMPUTERS

31. (B) The marker shown is the Left Indent marker on the ruler. Dragging this marker changes the position of the left indent for the selected paragraph.
32. (B) A mouse is an input device. Since the mouse pointer does not move on Computer R, it most likely has a faulty input device. The other computers either have an output device problem (P) or are functioning normally (Q and S).
33. (A) ERBORWS = BROWSER. It is internet software used to browse websites.
34. (A) She first gives voice input, then hears the teacher through speakers, and watches the presentation on the monitor.
35. (A) Italic after Underline – The correct order is Bold , Italic , Underline ,Strikethrough , Subscript , Superscript. The student placed Underline before Italic.
36. (D) Crop and Rotate are commands in the Image group of MSPaint . The other pairs belong to different categories.
37. (D) Wi-Fi is a wireless communication technology that connects devices to a nearby wireless network. It has a limited range (typically within a home, classroom, or office) and does not connect computers worldwide. Worldwide connectivity is provided by the Internet, not by Wi-Fi.

38. (C) Tablet is a digital device, not a hybrid device. All the other devices are classified correctly.

39. (B) A square has four right angles. The turtle must turn 90° after drawing each side, not 80° .

40. (C) The Leibniz Calculator (Stepped Reckoner) was developed by Gottfried Wilhelm Leibniz. It used a stepped drum mechanism and could perform addition, subtraction, multiplication, and division.

41. (B) A LAN connects computers within a small area, such as a computer lab or library. A WAN connects networks over large geographical areas, such as company branches in different states or countries and international bank offices. Therefore, the correct pair is WAN, WAN.

42. (A) The Memory Unit stores the data and instructions needed for processing. Similarly, Helper X keeps the worksheets ready for use, just as the Memory Unit keeps information ready for the CPU.

43. (B) In MS Paint, Color 1 is the text colour, and Color 2 is the background colour when Opaque is selected. Therefore, the text appears as black letters on a pink background.

44. (A) The Text Highlight Color tool adds a highlight behind the text, similar to using a highlighter pen. It does not change the font colour.

45. (C) A laptop usually has a built-in camera and microphone, making it suitable for online classes without additional devices.

ENGLISH

46. (B)

47. (A)

48. (B)

49. (A)

50. (C)