



UNIFIED CYBER OLYMPIAD

CLASS - 05
Question Paper Code : 3B107

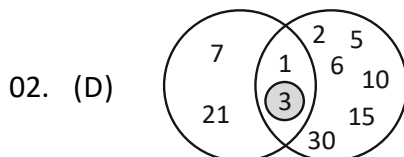
KEY

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

SOLUTIONS

MENTAL ABILITY

01. (C) The number that is 50 less than 1 million is 999,950. The digit in the thousands place is 9.



03. (B) $2864 \div 8 = 358$
04. (B) Since 2.74 is 174 divided by 100, the calculation 2.74×18 is the same as dividing the result of 274×18 by 100.

$$2.74 \times 18 = \frac{4932}{100} = 49.32$$

05. (D) $3004 \times 1000 = 3004000$

06. (A) $\frac{3}{8} \times 24 = 9$ hours

07. (D) $\frac{7}{8} = \frac{21}{24} = \frac{77}{88}$

Option (A) : $\frac{2}{3} = \frac{16}{24}$

Option (B) : $\frac{5}{8} = \frac{15}{24}$

Option (C) : $\frac{9}{11} = \frac{72}{88}$

Option (D) : $\frac{11}{12} = \frac{22}{24}$

08. (C) $96 = 1 \times 96$
 $= 2 \times 48$
 $= 3 \times 32$
 $= 4 \times 24$
 $= 6 \times 16$
 $= 8 \times 12$

Multiples of 6 : 6, 12, 18, 24, **30**, 36, 42, 48...

09. (C) Length of ribbon that is needed to tie all 6 presents = $0.85 \times 6 = 5.1$ m

Additional length of ribbon that Ravali needs = $5.1 - 5 = 0.1$ m

$= (0.1 \times 100)$ cm = 10 cm

10. (D) One million, two hundred and six thousand, nine hundred and two.

11. (D) Arun score = 72

Bunny score = $72 + 10 = 82$

Charan's score = $82 + 15 = 97$

Sum of their scores = $72 + 82 + 97 = 251$

12. (A) Subtract the correct change from the amount mistakenly given.

$36.75 - 31.75 = 5.00$ So, Sheela received ₹ 5.00 extra.

13. (C) Multiples of 6 are formed by multiplying 6 by natural numbers, and 6 itself is divisible by both 2 and 3 : $6 = 2 \times 3$ Hence, all multiples of 6 are divisible by both 2 and 3.

14. (C) $(5 \times 20) + (5 \times 3)$
 $= 5(20 + 3)$
 $= 5 \times 23$

$\therefore w = 23$

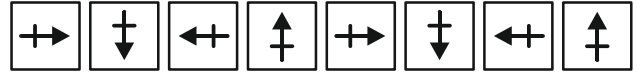
15. (C) There are 10 divisions between 38 and 39 and M is marked at the 7th place.

Hence, $M = 38 \frac{7}{10}$

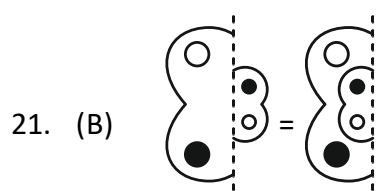
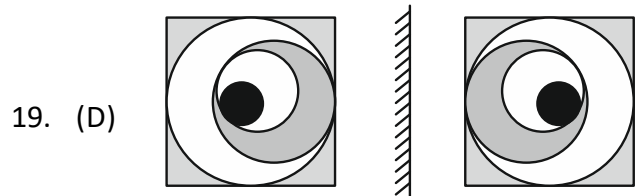
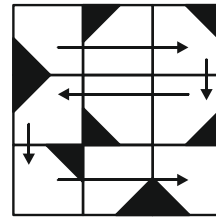
REASONING

16. (B) TEN is 10, HUNDRED is 100. THOUSAND is 1000. MILLION is 1000000. BILLION is 1000000000. Hence, number after the word gives number of trailing zeroes in the number represented by the word.

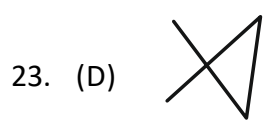
17. (C)



18. (A) As shown in the image below, the black triangle keeps shifting to the next corner of the square in the clockwise direction.



22. (B) Using the code : C = 7, O = 15, D = 4, E = 5
 So, DECODE -> 4-5-7-15-4-5



24. (B) Rearranging the letters of "LISTEN" can form the word "INLETS," which is a place where water flows into a larger body of water.

25. (B) $n + 2$
 $16 + 2 = 18$

26. (C)

	Foot ball	Cricket	Hockey	Basket ball
W	✓	✓		✓
X	✓	✓	✓	
Y		✓	✓	✓
Z	✓		✓	✓

W, Y and Z play basket ball

27. (B) All the letters in Affix, Berry and Empty are arranged in alphabetical order except in Writer.

28. (D) The options are polygons with a different number of sides, but one has an even number of sides.

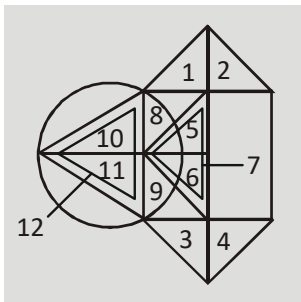
Heptagon (Heptagon has 7 sides, an odd number, while the others have an even number of sides)

29. (C)

3, 10, 101, 10202

$(3 \times 3) + 1$ $(10 \times 10 + 1)$ $(101 \times 101) + 1$ $(10202 \times 10202) + 1$

30. (B)



COMPUTERS

31. (C) The Pascaline was the first mechanical calculator. It was invented by Blaise Pascal in 1642. The Pascaline could perform addition and subtraction through a series of gears and wheels. Pascal created this device to assist his father, who worked as a tax collector, with his calculations.

Options (A) Abacus, (B) Napier's bones and (D) Calculator are incorrect. While the abacus and Napier's bones are early calculating devices, they are not mechanical calculators. The term "calculator" is a generic term for any device used for mathematical calculations, and it includes mechanical calculators like the Pascaline, but it wasn't the specific name of the first mechanical calculator.

32. (D) A touchscreen is a type of input and output device because it allows users to both input commands and receive output directly through the screen. Here's an explanation of how a touchscreen functions as both an input and output device.

33. (D) Optical disks, such as CDs, DVDs and Blu-ray discs are typically slower compared to other types of memory storage, such as RAM, hard disks and magnetic discs, in terms of data access and transfer speeds.

34. (B) Multimedia involves the combination of various forms of media to convey information or entertain users. It includes elements like text, images, audio, video, and animations, often integrated into interactive presentations, websites, games, and educational materials. Therefore, option (B) is the correct definition of multimedia.

35. (D) The short form or abbreviation commonly used for Windows 10 is "Win 10." This abbreviation is widely recognized and used, especially in contexts where brevity is important, such as in technical documentation, discussions, or marketing materials.

36. (C) The blur tool is not typically found directly in the ribbon of MS Paint. It is often accessed from the toolbar located beneath the ribbon.

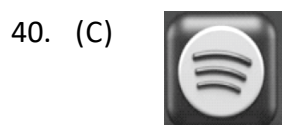
37. (C)

- "In Line with Text": This option places the image within a line of text, so the image is treated as if it were a large letter or character in the text. It does not wrap text around the image but instead adjusts the line spacing to accommodate the image's height.
- "Tight": This option wraps text around the image closely, conforming to the shape of the image itself. It aligns the image with the text but allows the text to flow around the image's contours.

Option (A) incorrectly describes the functionality of "In Line with Text" and "Tight". Option (B) incorrectly describes the functionality of "In Line with Text" and "Tight". Option (D) is unrelated to the alignment options for images in Microsoft Word.

38. (C) A speed test is an internet application used to measure the speed and quality of an internet connection. It typically involves accessing a website or using a dedicated application that initiates data transfers between the user's device and a remote server. The speed test measures parameters such as download speed, upload speed, and latency, providing feedback on the performance of the internet connection. Users often use speed tests to troubleshoot network issues, compare different internet service providers, or ensure that they are receiving the internet speed they are paying for.

39. (D) Reading View allows you to view your presentation in a window without taking up the entire screen. It provides a convenient way to preview the slides and navigate through them while still having access to other parts of the application. This makes it suitable for running a slide show within a window rather than in full screen mode.



Spotify

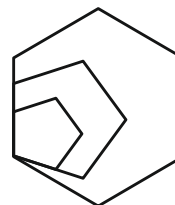
41. (B) Based on the given scenario, a Local Area Network (LAN) would be the most suitable network type for Mr. John. A LAN is a network that connects computers and devices within a limited area, such as a small office or building. It allows for the sharing of resources, such as printers and files, among the connected computers. Since Mr. John wants to share information between his 7 computer stations and have a central printing area, a LAN would provide the necessary connectivity and functionality for his small business.

42. (A) BACK

43. (A) "He is the founder of Facebook" is the correct choice. Mark Zuckerberg is the founder of Facebook, the world's largest social networking platform. He co-founded Facebook in 2004 while studying at Harvard University, and it has since grown into one of the most influential companies globally. SundarPichai (option B) is the CEO of Google, Tim Berners-Lee (option C) invented the World Wide Web, and Bill Gates (option D) founded Microsoft. Therefore, option a is the correct choice for the given personality.

44. (C) Modem converts analog network signals into digital while routers manage the distribution of signals across devices.

45. (A)
- 1 REPEAT 5[FD 100 RT 360/5]
 - 2 REPEAT 5[FD 150 RT 360/5]
 - 3 REPEAT 6[FD 200 RT 360/6]
 - 4 HT



ENGLISH

46. (B) 'Q' has the misspelt word 'physisian'. The correct spelling is 'physician'.

47. (B) The comparative degree 'happier' is not required to be used, as there is nothing to be compared with. Only 'happy' should be used in place of 'happier'. Hence, option (B) : 'Q', is the part of the sentence with a grammatical error.

48. (D) 'victory' can be used to correctly replace the underlined in that sentence, as per the context.

49. (C) 'a cold fish' (idiom) correctly reflects the underlined to fill the blank.

50. (A) Pollution, which we are creating unwillingly, is destroying our environment.