



**UNIFIED CYBER OLYMPIAD**

**CLASS - 4**

**Question Paper Code : 3P104**

**KEY**

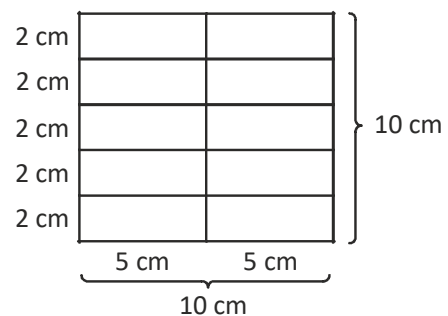
1. C	2. A	3. B	4. C	5. B	6. A	7. C	8. A	9. B	10. A
11. D	12. B	13. D	14. B	15. A	16. C	17. C	18. D	19. B	20. D
21. B	22. C	23. D	24. A	25. D	26. A	27. D	28. A	29. D	30. A
31. B	32. D	33. B	34. B	35. C	36. C	37. C	38. B	39. C	40. D
41. C	42. A	43. B	44. C	45. D	46. D	47. B	48. D	49. A	50. C

**SOLUTIONS**

**MENTAL ABILITY**

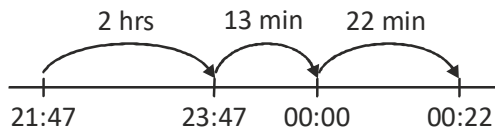
01. (C) S is 1444, rounded to nearest 100 will be 1400.
02. (A) If the time reads 3: 33, the next time that all of the digits on the clock are equal to one another is 4: 44. Since the amount of time between 3: 33 and 4: 44 is 1 hour and 11 minutes, the shortest length of time in minutes is  $60 + 11 = 71$ .
03. (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)

04. (C) Since, the number 19 is common in both the cases, then the required number of cards are 19.
- Ayaan needs a minimum of 10 cards in order to make a square.



05. (B)  $3666 = 3000 + 600 + 60 + 6$
06. (A)  $359 \times 11 = 359 \times 12 - 359 = 4308 - 359$

07. (C) It arrives at 00:22



08. (A) Cards with Ravi = 450

Cards with Hari =  $450 - 128 = 322$

Ravi must give 213 Cards to Hari so that Hari will have 298 cards more than Ravi.

09. (B) From the product it is clear that, when a number is multiplied by 3, the units digit is the same number. Which is possible only in the case of 5. Hence the number AAA must be 555. and  $555 \times 3 = 1665$

$\Rightarrow$  A represents the digit 5

10. (A)  $\frac{5}{12}, \frac{2 \times 4}{3 \times 4}, \frac{3 \times 3}{4 \times 3}, \frac{4 \times 4}{3 \times 4}$

$\frac{5}{12}, \frac{8}{12}, \frac{9}{12}, \frac{16}{12}$

i.e.,  $\frac{5}{12}, \frac{2}{3}, \frac{3}{4}$  &  $\frac{4}{3}$  is the increasing order

11. (D) Multiples of 9 are

**9, 18, 27, 36, 45, 54, 63**

The circled ones are odd. They are 4 in number

12. (B)  $\frac{1}{4}$  of water becomes  $\frac{1}{2}$  filled after adding 24 l

Hence, capacity of  $\frac{1}{4}$  tank is 24 l and capacity of the tank =  $24 \times 4 = 96$  l.

13. (D) A turtle has 4 legs and a duck has 2 legs.

By trial and error,

we can find that  $8 \text{ ducks} \times 2 = 16 \text{ legs}$

$10 \text{ turtles} \times 4 = 40 \text{ legs}$

Total = 56 legs

Hence, there are 8 ducks.

14. (B) On rotating a right angled triangle about its shortest side is a cone.

15. (A) Diameter =  $2r$

Diameter after increasing its radius by 2 cm =  $2(r + 2) = 2r + 4$  cm

Diameter increases by 4 cm

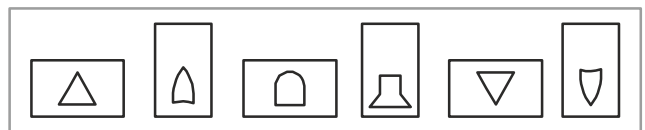
**REASONING**



16. (C)

17. (C) The alphabetical order of "COURAGE" is "A, C, E, G, O, R, U." The middle letter in this sequence is 'G'.

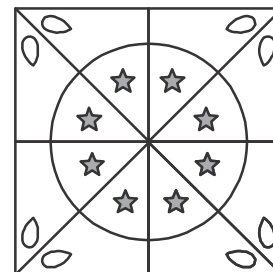
18. (D) The image in the sequence are reversed.



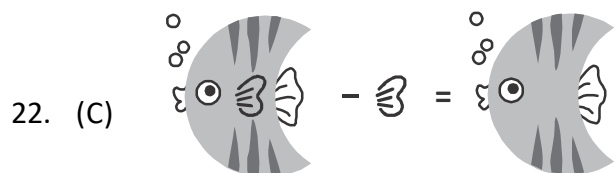
19. (B) Each letter in "STAR" is shifted one position forward in the alphabet to form "TUBS" ( $S \rightarrow T, T \rightarrow U, A \rightarrow B, R \rightarrow S$ ). Applying the same rule to "MOON":

$M \rightarrow N, O \rightarrow P, O \rightarrow P, N \rightarrow O$ . So, "MOON" is written as "NPPO."

20. (D)

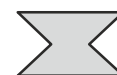


21. (B) Before 'U' when counting from the end is 'V'.

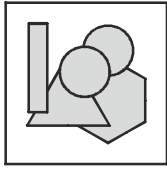


22. (C)

23. (D) In the group the figures are with 6 lines.



24. (A) In option (A) circles are different by comparing other options.



25. (D) Total number of boys = Kunal's position from the left + his position from the right - 1.

$$= 15 + 17 - 1$$

$$= 31$$

26. (A) Total, Almond

27. (D) In figure (i),  $10 + 12 + 14 = 36$

In figure (ii),  $16 + 20 + 22 = 58$

Similarly,

In figure (iii),  $30 + 34 + 39 = 103$

28. (A) Observe the differences between consecutive numbers:

$$11 - 5 = 6$$

$$19 - 11 = 8$$

$$29 - 19 = 10$$

$$41 - 29 = 12$$

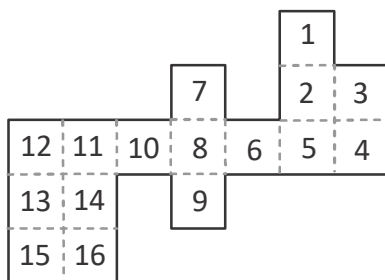
The differences are increasing by 2 each time. The next difference should be

$$12 + 2 = 14$$


Add this difference to the last number in the series:

$$41 + 14 = 55$$

29. (D) A day is a part of a week, just as an hour is a part of a day. The relationship is one of part-to-whole.



30. (A)

Hence, the number of  shapes is 16.

## COMPUTERS

31. (B) Digital cameras commonly utilize SD (Secure Digital) cards for storing data such as photos and videos. SD cards are small, portable and offer sufficient storage capacity for the needs of most photographers. They provide a convenient and removable storage solution that can be easily transferred to other devices for viewing and sharing images. Therefore, option (B) SD Card, is the correct answer.

32. (D) The correct answer is iCloud Drive.

33. (B) Artificial intelligence

34. (B) ENIAC was the first programmable, electronic, general purpose digital computer.

35. (C) Microphones are used to input sound into a computer and it is a hardware component.

36. (C) Among the options, option (C) is a software.

37. (C) The "Resize" command allows users to adjust the dimensions of an image, including making it narrower, wider, shorter, or longer. This command is commonly used to change the size and aspect ratio of images in various image editing software, including MS Paint. Options such as "Flip/Rotate" and "Skew" perform different transformations on the image and do not specifically resize it. Therefore, the correct choice is "Resize"

38. (B) The G-mail platform is owned by Google. G-mail, also known as Google Mail, is an email service provided by Google. It offers features such as a large storage capacity, efficient spam filtering, and integration with other Google services.

39. (C) The given famous personality is Bill Gates

40. (D) All options (A) Video conferencing, (B) Cloud storage and (C) Online banking can be provided by computer networks.

- Video conferencing allows users to conduct virtual meetings and conferences over computer networks.
- Cloud storage enables users to store and access data on remote servers over the internet, providing data storage and backup services.
- Online banking allows users to perform financial transactions, manage accounts, and access banking services via the internet through secure network connections.

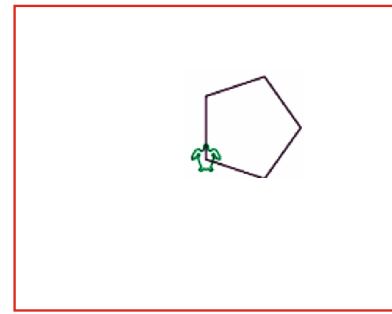
Therefore, option (D) All of the above is correct as all options represent services provided by computer networks.

41. (C) A folder is a collection of files and subfolders.

42. (A) In MS Word, the Animation Tool is not present. MS Word primarily focuses on word processing and document formatting, so features like animations are not included in the software. The Spelling and Grammar Checker (A), Thesaurus (B), and Equation Editor (C) are all tools available in MS Word for various purposes such as proofreading, finding synonyms, and inserting mathematical equations, respectively.

43. (B) Siri, Alexa and speech-to-text apps primarily utilize Speech Recognition as a component of artificial intelligence. While Natural Language Processing (NLP) is involved in understanding and interpreting human language, Speech Recognition specifically focuses on converting spoken words into text. These systems use algorithms to analyze audio input, identify speech patterns, and transcribe spoken words into written text. Speech Recognition technology enables devices like Siri and Alexa to understand voice commands, transcribe spoken messages, and perform actions based on the recognized speech.

44. (C) REPEAT 5[FORWARD 80 RIGHT 72]



REPEAT 5[FORWARD 80 RIGHT 72]

45. (D) Handheld Input Device: Handheld input devices are portable devices that users can hold in their hands to input data into a computer, such as scanners, barcode readers, or digital cameras. OMR and OCR are not typically considered handheld input devices.

Audio Input Device: Audio input devices are used to input sound or audio data into a computer, such as microphones or voice recognition systems. OMR and OCR do not involve audio input.

Pointing Input Device: Pointing input devices are used to control the movement of the cursor on the screen, such as mice, touchpads, or trackballs. OMR and OCR are not pointing input devices.

Optical Input Device: Optical input devices use optical technology to input data into a computer. OMR (Optical Mark Recognition) and OCR (Optical Character Recognition) are both optical input devices. OMR detects and interprets human-marked data on documents, while OCR recognizes text characters in scanned documents or images.

### ENGLISH

46. (D)

47. (B)

48. (D)

49. (A)

50. (C)