



**UNIFIED CYBER OLYMPIAD (UPDATED)**

**CLASS - 04**  
**Question Paper Code : 3B107**

**KEY**

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

**SOLUTIONS**

**MENTAL ABILITY**

01. (A) Since Giri parks the cars in 7 equal rows without any cars left over, it means that the number of cars must be divisible evenly by 7. Therefore, the correct answer is (A) The number of cars must be a multiple of 7.
02. (A)  $0.12 = \frac{12}{100}$
03. (B) Total marbles with Arjun =  $20 + 25 = 45$   
Fraction of marbles he lost =  $\frac{20}{45} = \frac{4}{9}$
04. (B) Option (A) :  $95499 \approx 95500$   
Option (B) :  $95950 \approx 96000$   
Option (C) :  $96439 \approx 96400$   
Option (D) :  $96581 \approx 96600$

05. (A) Amount given to cashier  
=  $2 \times ₹ 5 + 4 \times ₹ 10 + 3 \times ₹ 50 + 2 \times ₹ 500$   
=  $₹ 10 + ₹ 40 + ₹ 150 + ₹ 1000$   
=  $₹ 1200$   
Amount Suresh got back is  
 $₹ 1200 - ₹ 1165 = ₹ 35$
06. (C) The number of dogs = 11  
The number of cats = 7  
The number of rabbits = 10  
The number of cows = 13  
The number of horse = 3  
Since the number of cows is more than dogs. Thus option (C) is incorrect

07. (B) This problem illustrates the distributive property of multiplication over addition. The factor being distributed may not change.

08. (B)  $\frac{3}{5} \times 60 = 36$  min

$12:25 + 00:36 = 12:61 = 13:01$

09. (A)  $18000 + 888 = 18888$

Successor of  $18888 + 1 = 18889$

10. (B)  $31 = 3 + 1 = 4$

$13 = 1 + 3 = 4$

11. (D) In 567863, the 6 in the thousands place has a place value of 6,000, and the 6 in the units place has a place value of 6. 6,000 is exactly 1,000 times 6.

12. (C)  $19990 + 100 + 10$  is smaller than 20000  
 $21000 > 20000$

13. (D)  $7406 - 668 = 6738$

$6738 \div 6 = 1123$

14. (D)  $241556 < 2$  **6**  $2141 < 291841$

15. (B)

$$\begin{array}{r} 56809 \\ -48X45 \\ \hline 13264 \end{array}$$

$9 - 5 = 4$  ;  $10 - 4 = 6$  ;  $8 - 1 = 7$  ;  $7 - X = 2$   
 $X = 5$

$$\begin{array}{r} 13264 \\ -89Y8 \\ \hline 4286 \end{array}$$

$14 - 8 = 6$  ;  $15 - Y = 8$  ;  $Y = 15 - 8 = 7$

**REASONING**

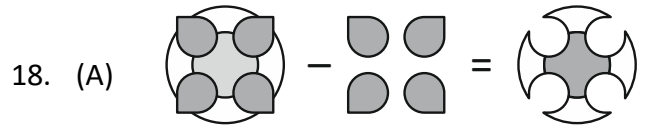
16. (C) A and Z are first letters from beginning & end, H and S are 8th and K and P are 11th. But E is 5th letter from beginning and U is 6th letter from end. Hence EU is odd one out.

17. (D) Number in the small center triangle is product of numbers in the outer triangles  
 $5 \times 2 \times 4 = 40$

$7 \times 3 \times 2 = 42$

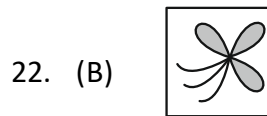
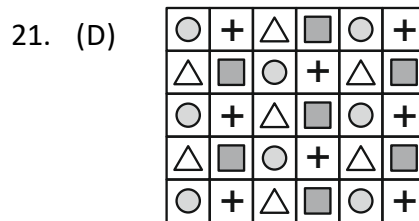
Therefore in third triangle,  $4 \times 3 \times ? = 60$

Therefore  $? = 5$



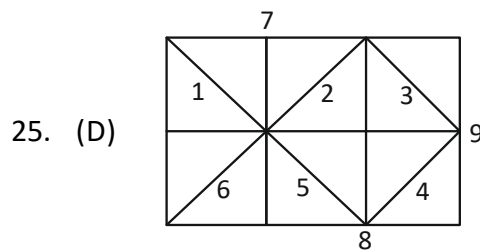
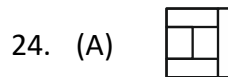
19. (C) Cuboid means cylinder. Cuboid is made using squares, so answer is cylinder.

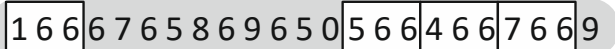
20. (C) The correct answer is 10 because the numbers are being divided by 3 each time. So we are looking for 30 divided by 3 = 10.



23. (C) As shown below the word "BULGE" is embedded in the given grid.

**BLUGELBUGULEBULGEUGELBEUGLEBGULEGLUB**



26. (A) 

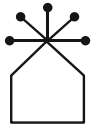
So, there are four such 6's

27. (A) N is not there in the word BEHAVIOUR. So, BEND cannot be formed by using the letters of the word "BEHAVIOUR".

28. (A)



29. (A)



30. (D) Kavya is in the middle hence there are equal number of girls on both sides. Three girls Sanya, Sidhi and Ananya are standing on her right. Hence there will be 3 girls on her left too. Hence there are total  $3 + 3 + 1 = 7$  girls in the row.

### COMPUTERS

31. (B)

(A) Image : The "Image" group typically contains commands related to manipulating the appearance of the image itself, such as adjusting brightness, contrast, and resizing.

(B) Clipboard : The "Clipboard" group contains commands related to copying, cutting, and pasting content. These commands are essential for moving and duplicating content within the document.

(C) Tools : The "Tools" group usually contains various tools for drawing, selecting, and editing images, such as the pencil, brush, eraser, and selection tools.

(D) Colors : The "Colors" group typically contains options for selecting and applying colors to the image, such as choosing a foreground or background color.

32. (C) The given image is of online banking app.

33. (A) A VDU, or Visual Display Unit is a device that shows information from the computer to the user. It displays images, text, and videos so you can see them. Since it shows you things from the computer, it's an output device. It doesn't take information into the computer, so it's not an input device. It's also a type of hardware, which means it's a physical part of the computer. And

because it's not the main part of the computer but an extra part that you can add on, it's called a peripheral. But the most correct statement is that it's an output device because it shows you things from the computer.

34. (B) Keyboard is a hardware component of a computer.

35. (D) During the Fourth Generation of computers, which began in the late 1970s and continued into the 1980s, the concept of the internet was introduced. This period saw the development of microprocessors, integrated circuits, and semiconductor memory, which laid the groundwork for the creation of computer networks and communication protocols that eventually evolved into the internet as we know it today. ARPANET, considered the precursor to the modern internet, was developed in the late 1960s but became operational in the 1970s, coinciding with the early stages of the Fourth Generation of computers. Therefore, the Fourth Generation marks the era when the concept of the internet was introduced and began to take shape.

36. (B) Minecraft is indeed an example of application software.

- Application software refers to programs and tools designed to perform specific tasks or functions for end-users.
- Minecraft is a popular sandbox video game where players can explore, build, and interact within a virtual world.


37. (A) Charles Babbage, a British mathematician, philosopher and inventor, is credited with inventing the Analytical Engine.

38. (D)

- Modems can both receive data (input) and transmit data (output) between devices over a network.
- Headsets can both receive audio (output) and often include a microphone for sending audio (input).

- Touch screens allow users to input commands or data by touching the screen (input) and display visual information or responses (output) based on those inputs.

Therefore, all of the options listed (A) Modems, (B) Headset and (C) Touch screen are both input and output devices.

39. (D)  will be found in MS-Word but not in MS-Paint

40. (A) Instagram is an example of social media. Social media platforms are online services or applications that allow users to create and share content, connect with others, and interact in various ways. Instagram is a popular social networking platform primarily focused on sharing photos and videos. Users can create accounts, upload media content, follow other users, engage with posts through likes and comments, and use features such as stories, direct messaging, and more.

41. (D) Among the options provided, (D) Monitor is not a type of network device.

- A switch is a network device that connects multiple devices within a local area network (LAN) and forwards data packets between them.
- A router is a network device that forwards data packets between computer networks, such as between a local area network (LAN) and the internet.
- A modem is a network device that modulates and demodulates digital signals to allow computers to connect to the internet over telephone lines or cable systems.
- However, a monitor is a display device used to visualize output from computers and other electronic devices, but it is not involved in network communication or data transmission.

42. (A) The Task view button helps you to quickly switch between multiple applications in Windows. It is located on the taskbar, usually next to the Search box or the Cortana icon. When you click on the Task view button, it opens a view that displays all your open windows and virtual desktops, allowing you to easily switch between them. This feature is particularly useful for users who work with multiple applications simultaneously and need to switch between them frequently.

43. (C) The Home ribbon tab in Microsoft Word 2016 is where users can find options for changing font style and sizes. This tab is dedicated to basic text formatting tasks, offering a range of tools to customize the appearance of text within documents.

44. (C) In Logo, the turtle is a cursor that moves on the screen to create drawings based on commands given in the programming language.

45. (C) This command instructs the turtle to repeat the sequence of moving forward and turning right 90 degrees four times, thus drawing a square.

#### **ENGLISH**

46. (C) 'student' can correctly replace the underlined in the given sentence to be the correct answer.

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

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

49. (B) 'Surgen' is an incorrect spelling. The correct spelling is 'Surgeon'.

50. (C) To be happy or sad is a part of one's nature.