



Unified International Cyber Olympiad

UNIFIED INTERNATIONAL CYBER OLYMPIAD

CLASS - 06

Question Paper Code : 3P124

KEY

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

SOLUTIONS

MENTAL ABILITY

01. (C) $3 + 4 + 5 + \dots + 99 + 100 + 99 + \dots + 5 + 4 + 3 = (1 + 2 + 3 + \dots + 99 + 100 + \dots + 3 + 2 + 1) - (1 + 2 + 2 + 1)$
 $= 100^2 - 6 = 9994$

02. (A) The sum of three angles of a triangle = straight angle = 180°

03. (B) 100th term in the series = $2n - 1 = 2 \times 100 - 1 = 200 - 1 = 199$

04. (D) $2027 \frac{1}{8} + 2027 \frac{2}{8} + \dots + 2027 \frac{7}{8}$
 $= 2027 + \frac{1}{8} + 2027 + \frac{2}{8} + 2027$

$$+ \frac{1}{8} + \dots + 2027 + \frac{7}{8}$$

$$= \underbrace{2027 + 2027 + \dots + 2027}_{7 \text{ times}}$$

$$+ \frac{1}{8} + \frac{2}{8} + \frac{3}{8} + \frac{4}{8} + \frac{5}{8} + \frac{6}{8} + \frac{7}{8}$$

$$= 14189 + \frac{1 + 2 + 3 + 4 + 5 + 6 + 7}{8}$$

$$= 14189 + 3 \frac{1}{2} = 14192 \frac{1}{2}$$

05. (D) 178° is obtuse angle

06. (C) Given scale $\times 5 \text{ cm} = 15$

$$1 \text{ cm} = \frac{15}{5} = 3$$

$$\therefore 6 \text{ cm} = 6 \times 3 = 18 \text{ cell phones}$$

07. (B) 50605, 56065, 65056, 60506 are the four different possible palindrome numbers.

08. (A) (3, 2)

$$09. (B) 2027 - 100 + 1 = 1927 + 1 = 1928$$

10. (B) Perimeter of square

$$= 4 \times 600 = 2400 \text{ m}$$

$$\text{Number of rounds} = \frac{7200}{2400} = 3$$

$$\begin{array}{r} 11. (C) \quad 8 \overline{) 789} \quad (98 \\ \underline{72} \\ 69 \\ \underline{64} \\ 5 \end{array}$$

$\therefore$ 123456789 is divided by 8 then the remainder = 5

12. (A) Option 'A' is the required number.

13. (B) Area of the room = lb

$$= 12 \text{ m} \times 8 \text{ m}$$

$$= 96 \text{ m}^2$$

$$\text{Area of the carpet} = 8 \text{ m} \times 8 \text{ m}$$

$$= 64 \text{ m}^2$$

$$\text{Remaining area} = 96 \text{ m}^2 - 64 \text{ m}^2$$

$$= 32 \text{ m}^2$$

$$14. (C) 6:45 - 3 \text{ hr} = 3:45$$

$$3:45 - 25 \text{ min} = 3:20 \text{ PM}$$

15. (B) LCM of 4, 5, 6, 7, 8 = 840 seconds = 14 minutes

REASONING

16. (B) The code is formed by identifying three features of the figure. The first letter represents the type of diagonal line, where A indicates a broken (interrupted) diagonal and B indicates a continuous diagonal. The second letter represents the shape, where Z stands for a pentagon. The third letter represents the direction of the diagonal line, where H indicates a diagonal from the top-left to the bottom-right. Since the given figure has a broken diagonal, a pentagon, and a top-left to bottom-right diagonal, its correct code is AZH.

17. (A) Shoal

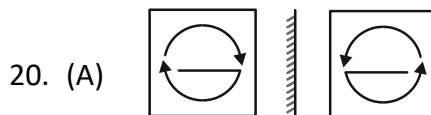
A group of lions is called a pride; a group of fish is called a shoal — collective noun relationship.

18. (C) Option (C) is the odd one out because it divides the circle into 7 regions, whereas the remaining three figures each divide the circle into 6 regions.

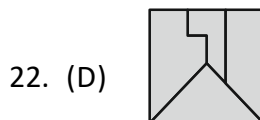
19. (B) C is given as a girl.

F is a boy and sits only with B, so B must be a girl.

A and E are boys, so D must be a girl to ensure Bench I has at least one girl.



21. (A) Faithfully $\rightarrow$ Fallible $\rightarrow$ Follow $\rightarrow$ Fourth
Therefore, the fourth word is "Fourth."



23. (B) Add all equations:

$$(A + B) + (B + C) + (A + C) = 12 + 14 + 10 = 36$$

$$2A + 2B + 2C = 36 \rightarrow A + B + C = 18$$

$$\text{Now } A + B = 12 \rightarrow C = 6$$

$$A + C = 10 \rightarrow A + 6 = 10 \rightarrow A = 4$$

24. (C) Differences are consecutive squares:

+4, +9, +16, +25, +36

So, $56 + 36 = 92$

25. (D) The three given figures each have one filled circle, one hollow circle, and two tick marks. Only Option (D) has the same combination of features.

26. (D) In Options (A), (B), and (C), each letter is 5 places ahead of the previous letter in the English alphabet. But Option (D) does not follow the same pattern as the other three, it is the odd one out.

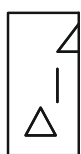
27. (A) Rule: $(2 \times 3) - 1 = 5$

$$(5 \times 3) - 1 = 14$$

$$(14 \times 3) - 1 = 41$$

$$\text{Similarly } 41 \times 3 - 1 = 122$$

28. (A) Using the letters L, A, P, and E exactly once, the meaningful English words are LEAP, PALE, PEAL, and PLEA. Therefore, four meaningful English words can be formed.



29. (B)

30. (A) The word ALERT cannot be formed because the letter R is not present in LEGALIZATION. The words ALEGATION, GALLANT, and NATAL can all be formed using the available letters without using any letter more times than it appears.

COMPUTERS

31. (C) Vacuum Tubes → Transistors → Integrated Circuits → Microprocessors.

32. (A) Line (i) explains the purpose of the variable Marks without affecting program execution.

Both are valid comment syntaxes in QBASIC: REM (traditional)

33. (D) The NOW() function displays the current date and current time in a worksheet. The TODAY() function returns only the current date

34. (D) Communication Services are used to exchange messages and communicate through E-mail, Chat, and Video Calls. World Wide Web (WWW) Service provides access to websites and web pages using web browsers such as Google Chrome, Mozilla Firefox, Microsoft Edge, and Safari

35. (B) Internet Explorer 11 was released before Microsoft Edge. Therefore, the statement that Internet Explorer 11 was released after Microsoft Edge is incorrect. The other statements are factually correct.

36. (D) https is the protocol, which tells the browser how to communicate securely with the website.

37. (C) After Step 1, the first row becomes a single merged cell. After Step 2, the two cells in the first column of the remaining rows are merged into one cell. In Step 3, that merged cell is split into 1 column and 2 rows, creating two stacked cells in the first column. Therefore, Option (c) shows the final table.

38. (C) WhatsApp allows up to 32 people in a group video call.

39. (A)

- P → Microcomputer: Designed for one user.
- Q → Supercomputer: Used for advanced scientific simulations.
- R → Mainframe Computer: Handles massive databases and thousands of users.
- S → Minicomputer: Suitable for medium-sized organizations with multiple users.

40. (A) Handout Master is used to customize the layout of printed pages containing multiple slides. It allows changes to elements such as the header, footer, date, and page number on all printed multi-slide pages.

41. (C) A Blu-ray Disc can store 25 GB, making it suitable for the movie backup. A DVD can store a 4 GB software package, whereas a CD-ROM and a Zip Disk do not have sufficient storage capacity.
42. (B) Renaming the computer does not affect the user account name.
43. (C) A Local Area Network (LAN) connects devices within a small geographical area, such as a classroom, school building, or campus. Options A, B, and D describe connections within the same school, which are suitable for a LAN. Option C involves connecting two schools in different cities, which covers a much larger distance and typically requires a Wide Area Network (WAN).
44. (C) Versatility means the ability of a computer to perform many different types of tasks. Option C directly demonstrates this.
- A → Speed
- B → Storage capacity
- C → Versatility
- D → Consistency/accuracy
45. (B) Bing is Microsoft's search engine and is the default search engine in Microsoft Edge. It is used to search for information, images, videos, and websites on the Internet.
- ENGLISH**
46. (B)
47. (A)
48. (B)
49. (D)
50. (A)

===== *The End* =====