UCO
Unified
Cyber
Olympiad

UNIFIED CYBER OLYMPIAD **(UPDATED)**

CLASS - 5
Question Paper Code : 3O119

KEY

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

SOLUTIONS

MENTAL ABILITY

01. (A) Step 1: Units column

? + 7 = 2(with carry),

So, ? = 5 and carry = 1

Step 2 : Tens column

9 + 8 + 1 = 18,

So, tens digit = 8, carry = 1

Step 3 : Hundreds column

? + ? + 1 = 10 (since the hundreds digit is 0)

So, the two missing digits here add up to 9, and carry = 1.

Step 4 : Thousands column

Carry gives the leftmost digit = 1

Now list all missing digits

Units digit = 5, Tens digit = 8, Thousands digit = 1, Two hundreds digits sum to 9

So, sum of all missing digits : (9) + 5 + 8 + 1 = 23

02. (B) Let the original 2-digit number be x.

Placing the digit 1 at the end means:

"New number"=$10x + 1$

So, the new number is ten times the original number plus 1.

03. (D) Convert all fractions to decimals:

One-half = $\dfrac{1}{2}$ = 0.5

One-quarter = $\dfrac{1}{4}$ = 0.25

Six-tenths = $\dfrac{6}{10}$ = 0.6

Three-quarters = $\dfrac{3}{4}$ = 0.75

The largest value is 0.75.

04. (C) Treat the dates as 3 September to 5 September of the same year; then find the time gap.

From 3:00 a.m. on 3-9-2025 to 3:00 a.m. on 4-9-2025 = 24 hours.

From 3:00 a.m. on 4-9-2025 to 3:00 a.m. on 5-9-2025 = 24 hours.

From 3:00 a.m. to 4:25 a.m. on 5-9-2025 = 1 hour 25 minutes.

Total time = 24 + 24 + 1 h 25 m = 49 hours 25 minutes.

05. (D) Let the number of pencils = number of erasers = n.

Cost of 1 pencil = Rs. 6.75

Cost of 1 eraser = Rs. 3.50

Total cost for n of each: n(6.75 + 3.50) = n(10.25)

Now test the options so the total is ≤ Rs. 100 and as large as possible:

n = 7 : 7 × 10.25 = 71.75

n = 8 : 8 × 10.25 = 82.00

n = 9 : 9 × 10.25 = 92.25

n = 10 : 10 × 10.25 = 102.50 (exceeds 100)

So the maximum possible without exceeding Rs. 100 is with 9 of each.

06. (D) 52.75 × 23.98 = 1264.945

07. (B) Initial water in the tank = 7.5 L

Leak rate :

250 mL every 5 minutes = 0.25 L per 5 minutes

In 1 hour = 60 minutes

Number of 5-minute intervals = 60 ÷ 5 = 12

Total water leaked = 12 × 0.25 = 3.0L

Water remaining = 7.5 − 3.0 = 4.5L

08. (B) Total balls = 25

Red balls = 9

Yellow balls = 25 − 9 = 16

Balls picked :

One third of red balls = $\dfrac{1}{3}$ × 9 = 3

Half of yellow balls = $\dfrac{1}{2}$ × 16 = 8

Total balls picked = 3 + 8 = 11

Balls left in the box = 25 − 11 = 14

Required fraction of balls left : $\dfrac{14}{25}$

09. (B) Required cloth = 8.75 m

Length of each piece = 145 cm = 1.45 m

Number of pieces = 6

Total cloth available : 6 × 1.45 = 8.70 m

Comparison :

Required = 8.75 m

Available = 8.70 m

He is short by 0.05 m (5 cm)

10. (B) Mass of truck alone = 14,500 kg

Mass of truck + 1 barrel = 16,789 kg

Mass of 1 barrel = 16,789-14,500=2,289 kg

Mass of 2 such barrels = 2×2,289=4,578 kg

So the combined mass of 2 barrels is 4,578 kg, option (B).

11. (B) From 6:00 a.m. to 12:00 noon = 6 hours (actual time)

The clock gains 5 minutes every hour.

Total gain in 6 hours:

6 × 5 = 30 minutes

So, at actual 12:00 noon, the clock will show:

12:00 + 30 = 12:30 p.m.

12. (D) Each part is 8 cm wide.

The figure consists of:

1 square part

8 rectangular parts

From the arrangement (spiral-like), each rectangular part has length equal to 3 widths = 3 × 8 = 24 cm.

Area method (most reliable):

Area of 1 rectangle = 24×8=192cm²

Area of 8 rectangles = 8×192=1536cm²

Area of square (side = 8 cm) = 8×8=64cm²

Total area = 1536+64=1600cm²

All parts form a rectangle of width 8 cm.

So, length of the rectangle:

1600 / 8 = 200 cm

13. (A) Attendance in December (31 days)

Raghu: multiples of 3 → [31 / 3]=10days

Sonu: multiples of 2 → [31 / 2] = 15days

Both (multiples of 6) : [31 / 6] = 5days

Exactly one attends : 10 + 15 − 2(5) = 15

14. (C) Value of 4000 × 5000

4 × 5 = 20, with six zeros = 20,000,000

= 2 crore

15. (A) If M − N = 450 and N − O = 120, find M−O

M − O = (M − N) + (N − O)

= 450 + 120 = 570

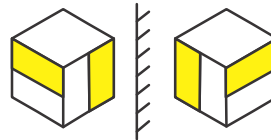## REASONING

16. (B) SOUL – meaningful

Only one meaningful word is possible

17. (C) National flower of India = Lotus

Lotus is called Tulip

Answer = Tulip

18. (C)

19. (B)

20. (B) The figures at the top represent a square piece of paper being folded, and the last of these figures has one hole on it.

One of the lower five figures shows where the perforation will be when the paper is fully unfolded. You have to understand which of these images is the right one.

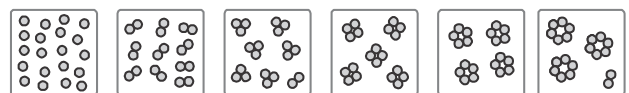First, the paper was folded horizontally, from left to right.

Then, one holes were punched out. Therefore, when the paper is unfolded the holes will mirror on the left and right side of the sheet.

21. (A) An atlas is a book containing maps.

Similarly, Thesaurus : Synonyms

A thesaurus is a book containing synonyms

22. (D)

23. (D) 4280 ÷ 2 = 2140

But 4280 ÷ 4 = 1070

Here, second number is one-fourth of the first.

24. (C) R is missing in KNOWLEDGE

So WONDER cannot be formed using letters in KNOWLEDGE.

25. (A) Sum of first 10 odd numbers = 1 + 3 + ... + 19 = 10^2 = 100

Sum of first 10 even numbers = 2 + 4 + ... + 20 = 10 × 11 = 110

Difference = 100 − 110 = −10 → absolute difference 10.

26. (C) 8, 16, 24, 32, 40, 48, 56, 64 (Multiples of 8)

27. (C) 1A 2E 3U 4 5 8 7 D 9 Q 6 J I 7 K O

Hence, three digits are followed by vowels in the given sequence.

28. (C) **ARM**OUR

29. (B)

30. (B) The pattern is as follows:

Ist letter

$A \xrightarrow{+6} G \xrightarrow{+6} M \xrightarrow{+6} S \xrightarrow{+6} Y$

2nd letter

$Z \xrightarrow{-6} T \xrightarrow{-6} N \xrightarrow{-6} H \xrightarrow{-6} B$

COMPUTERS

31. (C) Pendrive is a flash drive.

32. (C) Windows + D is used to minimize all open windows.

33. (B) Windows XP is an operating system. Whereas Dell, Yahoo and Microsoft are not operating systems.

34. (C) The main disadvantage of vaccum tubes are they produced heat and often burned out.

35. (D) Statement 1: CD-RAM stands for compact Disk-Read only memory

Statement 2 : CD-RAM is a compulsory part of a computer.

Both the statements are false.

36. (C) In 3rd Genertion Computers transistors were replaced by integrated chips. Option (C) is correct.

37. (B) Maximize button → enlarges the window to fill the screen.

38. (C) REPEAT 360 [FD 1 RT 1] → small forward + small turn repeated 360 times → circle

39. (D) In word processing packages we can edit the whole document, count the number of words in a document and you can divide the test into pages.

40. (D) Thinking is not an characteristic of the computer.

41. (C) Hard disk store all the information on your computer.

42. (D) The text will wrap to the next line.

43. (C) Printer, modem, scanner, digital camera are called peripherals.

44. (B) A motherboard is the main printed circuit board (PCB) in a computer.

It houses the CPU, memory slots, chipset, and connectors for input/output devices.

Modem, display card, and sound card are separate peripheral or expansion components, not the main board itself.

45. (C) Binary number system is used to the computer to calculate and to store data.

ENGLISH

46. (C) "Optimistic" means hopeful and expecting good outcomes. Its opposite is "pessimistic," meaning expecting bad outcomes.

47. (C) Reflexive pronouns (himself, herself, myself) are used when the subject performs an action on themselves. "Aslam himself prepared the breakfast" is correct.

48. (C) An adverb modifies a verb, adjective, or another adverb. "Loudly" tells how the dog barked.

49. (B) Verbs are modified by adverbs. "Beautifully" correctly modifies the verb "sings."

50. (C) Some nouns ending in "f" change to "ves" in plural. "Loaf → loaves."