UNIFIED COUNCIL

An ISO 9001:2008 Certified Organisation

UCO Unified Cyber Olympiad

UNIFIED CYBER OLYMPIAD - UC305 (LEVEL - 1)

Solutions for class: 3

Mental Ability

1. **(C)** F, A and N are made of three lines. So, required fraction is $\frac{3}{8}$.

2. **(A)** Given, difference = 2230

   Smaller number = 890

   Greater number = Difference + Smaller number = 2230 + 890 = **3120**

3. **(B)** Capacity of the jug = 3 / 250 m/ = 3250 m/

   Capacity of each glass = 950 m/

   Number of glasses = 3

   Capacity of 3 glasses = (950 × 3) m/ = 2850 m/

   Amount of water left in the jug after filling 3 glasses = (3250 – 2850) m/ = **400 m/**

4. **(B)** $\frac{2}{3}=\frac{6}{9}$; $\frac{4}{10}=\frac{2}{5}$; $\frac{9}{12}=\frac{3}{4}$; $\frac{3}{6}=\frac{1}{2}$

5. **(C)** The possible values of A and B are 6 and 4 respectively.

   $A\times\boxed{B}=2\boxed{B}$

   $6\times\boxed{4}=2\boxed{4}$

   A = 6 and B = 4

   ∴ Sum of A and B = 6 + 4 = **10**

6. **(D)** Time taken by the fastest athlete = 2 h 14 min

   Time taken by the slowest athlete = 3 h 27 min

   Difference in their time = 3 h 27 min – 2 h 14 min = 1 h 13 min

   ∴ The fastest athlete is **1 h 13 min** faster than the slowest athlete.

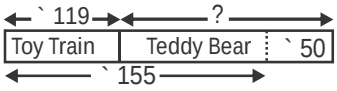
7. **(B)** Since, three is a 'Buy 1 Get 1 Free' promotion

   $\frac{12}{2}$ = 6 sets

   Amount Royal has to pay = ₹ 48 × 6

   = ₹ **288**

8. **(D)**



   Total cost of toy train and Teddy bear = ₹ 155 + ₹ 50 = ₹ 205

   Cost of teddy bear = ₹ (205 – 119) = ₹ **86**

9. **(A)** Given, Mass of basket and fruits = 6 kg = 6000 g

   Since, 1 kg = 1000 g.

   Mass of basket = 1725 g

   ∴ The mass of the fruits = (6000 – 1725) g

   = 4275 g

   = **4 kg 275 g**

10. **(C)** The smallest 4-digit number = 1234

    The largest 3-digit number = 987

    Their sum = 1234 + 987 = **2221**

11. **(B)** In the given figure, only **rectangle** is a complete figure.

12. **(C)** 5 + 8 = 13 (pink and purple roses)

    31 – 13 = 18 (**yellow roses**)

    Hence, she bought pink, purple and **yellow** roses.

13. **(A)** 1st pattern : 3 circles → 1 × 3 circles

    2nd pattern : 6 circles → 2 × 3 circles

    3rd pattern: 9 circles → 3 × 3 circles

    4th pattern: 12 circles → 4 × 3 circles

    The pattern shows the 3 times table.

    So, 36 ÷ 3 = **12th pattern**.

14. **(D)** 6 ten rupee notes = 6 × ₹ 10 = ₹ 60

    = **12** × ₹ 5

15. **(D)** → 23 – 17 = 6

= → 6

→ 17 – 6 = **11**

Reasoning

16. **(B)** The pattern is repeating ❄ → ▲ → ☾ → ☺. So the two **?**'s should be replaced by ☾ and ☺.

17. **(D)** Except in **option (D)**, in all the others, the triangle is in the largest rectangle, the shield is in the smaller rectangle and the other figure is in the second largest rectangle.

18. **(B)** The correct figure must be the same as the missing piece in the jigsaw puzzle.

By looking at the shape of the figures and then comparing their size, we see that figure in **option (B)** will complete the puzzle.

19. **(A)**

T	R	I	F	U
1	2	3	4	5

Meaningful word : FRUIT

∴ Combination : **4, 2, 5, 3, 1**

20. **(D)** All the flags are turned right and each have one line in it.

21. **(C)** In each figure,

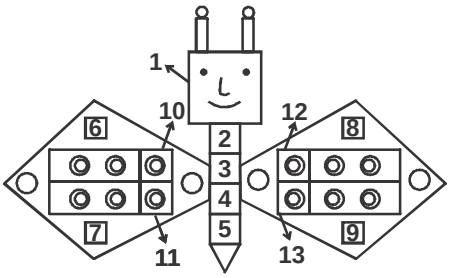
Number on the 'head' = Sum of the numbers on the 'feet' ÷ 2

Hence, the missing number is **5**.

22. **(B)** Of the given options, **option (B)** fits in the shaded part.

23. **(D)** Newspaper and book are to read, trumpet and **Veena** are musical instruments.

24. **(B)**

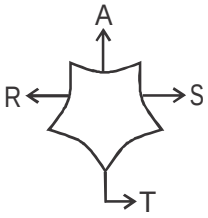


Hence, there are 13 squares.

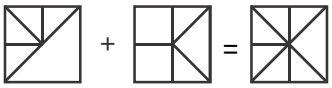
25. **(B)** In each stage the top left-hand line is moving through half the length of one side clockwise.

26. **(D)** Except **11 (eleven)** all the other numbers end with 'teen' i.e., sixteen, thirteen and fourteen.

27. **(D)**



Therefore, the required code is **TSAR**.

28. **(D)** 

29. **(D)** Triangles turn to circles and vice versa, and white figures turn to black and vice versa.

30. **(A)** $\frac{3+13}{2} = 8$; $\frac{6+18}{2} = \frac{24}{2} = \mathbf{12} = A$;

$\frac{9+B}{2} = 16$

$\Rightarrow$ B = 32 – 9 = **23**

Computers

31. **(C)** **Operating system** is an interface between the software and hardware.

32. **(A)** **Caps lock key** is considered as a toggle key.

33. **(B)** **Pick color tool** is used to select the same color.

34. **(B)** Winzip is a **software** which is used to compress a file.

35. **(B)** **Internet** is required to connect different computers for communicating each other.

36. **(C)** There is **no effect on the size of the disk when you send files into recycle bin**.

37. **(A)** **Backspace** key erases the text that is on the left side of cursor.

38. **(B)** Start → turn off computer → turn off → switch off UPS → switch off power supply

39. **(A)** The **taskbar moves to the top of the screen** on executing the given steps.

40. **(C)** There are a total of **16 tools** in the tool box of Ms-paint.

41. **(A)** is the combination key to type punctuation mark ':'.

42. **(D)** ALU performs **arithmetic operations and comparisons.**

43. **(C)** PC's at home uses single - user OS whereas in hospitals and railway stations uses multi-user OS.

44. **(C)** **Ms-paint** is a software application used for editing digital pictures.

45. **(D)** **Christopher Latham Sholes** developed QWERTY keyboard.

English

46. **(D)** The word having a different sound of 'ch' is **ache**.

47. **(B)** The lady **talked** very **quietly** in the library.

48. **(A)** **Sensible**

49. **(B)** **Calendar**

50. **(C)** The meaningful word formed is **Giraffe**.