



# UNIFIED COUNCIL

An ISO 9001:2015 Certified Organisation



## UNIFIED CYBER OLYMPIAD (UPDATED)

CLASS - 7

Question Paper Code : UC359

### KEY

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

### SOLUTIONS

#### MENTAL ABILITY

1. (A) Given  $3.718 = \frac{1}{0.2689}$  then

$$\therefore 3.718 \times \frac{1}{10000} = \frac{1}{0.2689} \times \frac{1}{10000}$$

$$0.0003718 = \frac{1}{2689}$$

$$\therefore \frac{1}{0.0003718} = 2689$$

2. (D)  $\frac{20}{100} \times \frac{25}{100} \times 300 = 15$

3. (C)  $\frac{50}{100} \times P = \frac{25}{100} Q$

$$\therefore P = \frac{25}{100} \times \frac{100}{50} Q = \frac{50}{100} Q = 50\% \text{ of } Q$$

4. (B) sp of each metre = ₹  $\frac{12,325}{145} = ₹ 85$

profit per metre = ₹ 10

$$\text{cp} = ₹ 85 - ₹ 10 = ₹ 75$$

5. (D) Let value of the article be ₹ x.

$$\therefore \text{cp of the article} = 75\% x = \frac{75}{100} x = \frac{3x}{4}$$

$$\text{sp of the article} = \left( \frac{100 + 20}{100} \right) x = \frac{120}{100} = \frac{6x}{5}$$

$$\text{profit} = \text{sp} - \text{cp} = \frac{6x}{5} - \frac{3x}{4} = \frac{9x}{20}$$

$$\text{profit percentage} = \left( \frac{\frac{9x}{20}}{\frac{3x}{4}} \right) \times 100 = 60\%$$

6. (D)  $I = \frac{\text{PTR}}{100}$

$$\text{₹ } 1344 = \text{₹ } \frac{8,960 \times 3 \times R}{100}$$

$$R = 5\%$$

7. (B) Let the number be 'x'

$$\text{Given } \frac{3x}{2} - \frac{x}{\left(\frac{3}{2}\right)} = 10$$

$$\frac{3x}{2} - \frac{2x}{3} = 10$$

$$\frac{9x - 4x}{6} = 10$$

$$5x = 60$$

$$x = 12$$

8. (C)  $B = 4A$  &  $C = 2B$

$$\therefore A : B : C = A : 4A : 2(4A) = A : 4A : 8A \\ = 1 : 4 : 8$$

9. (B) Given  $\left( \frac{100 - 20}{100} \right) \times \text{mp} = \text{₹ } 20,000$

$$\text{mp} = \text{₹ } 20,000 \times \frac{100}{80}$$

$$\text{mp} = \text{₹ } 20,000 \times \frac{5}{4} = \text{₹ } 25,000$$

10. (C) Option 'C' the correct explanation of construction of  $15^\circ$

11. (D) **Const:-** Draw  $PQ \parallel AB$

$$\therefore \angle BPQ = \angle B = 30^\circ$$

$$PQ \parallel CD \Rightarrow 65^\circ + \angle CPQ = 180^\circ$$

$$\angle CPQ = 180^\circ - 65^\circ = 115^\circ$$

$$\therefore x = \angle BPQ + \angle CPQ = 115^\circ + 30^\circ = 145^\circ$$

12. (D) square has both line symmetry and rotational symmetry.

13. (B) A square pyramid has 8 edges

14. (D) Let my present age be 'x'

$$\text{Given } x + 7 = 3(x - 1)$$

$$x + 7 = 3x - 3$$

$$7 + 3 = 2x$$

$$x = 5 \text{ years}$$

15. (B) Given 25, x, x, 4 are in proportion

$$\therefore x^2 = 25 \times 4 = 100$$

$$x = 10$$

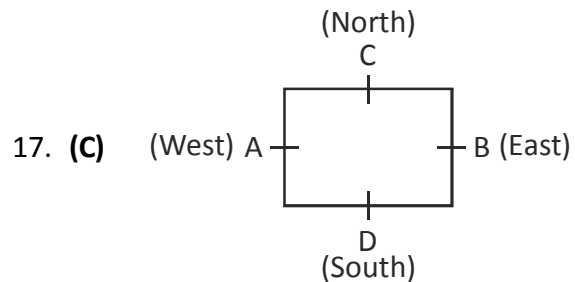
### REASONING

16. (C) 1, 4, 27, 16, ?, 36, 343

$$1, 2^2, 3^3, 4^2, 5^3, 6^2, 7^3$$

The series is  $1^3, 2^2, 3^3, 4^2, 5^3, 6^2, 7^3$

$5^3 = 125$  is the missing number.



D is facing north.

18. (B)  $5 + 3 = 8$ ;  $2 + 7 = 9$

$$9 - 8 = 1$$

$$6 + 5 = 11$$
;  $6 + 6 = 12$

$$12 - 11$$

$$7 + 8 = 15$$
;  $8 + 8 = 16$

$$16 - 15 = 1$$

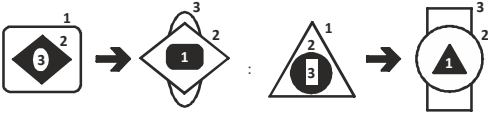
$$5 + 2 = 7$$
;  $4 + 4 = 8$

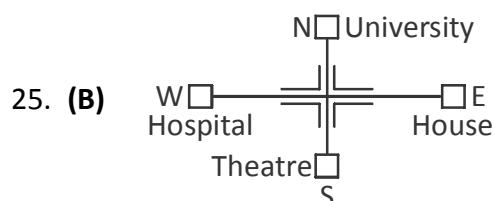
$$8 - 7 = 1$$

19. (D) CAREER

20. (B) The figures 1, 4 and 6 have two triangles, two circles and two hexagons, respectively. Figures 2, 5 and 8 are similar in shape. In figures 3, 7 and 9 there are eight small circles around a big circle. Now let us move on to more solved examples on the Grouping of Figures.

## COMPUTERS

21. (B) 
22. (C) UIAE. All letters in option (C) are vowels.
23. (A) There are 6 circles in the given figure.



Starting from his house in the East, Sathish moves westwards. Then, the theatre, which is to the left, will be in the South. The hospital, which is straight ahead, will be to the West. So, the University will be to the North.

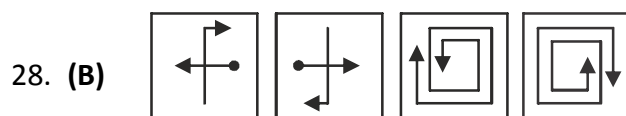
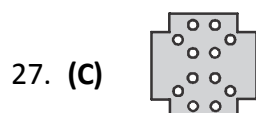
26. (C)  $\underline{D}E\bar{A}R = \underline{N}\underline{M}\underline{K}\underline{O}$ ;  $\underline{L}E\bar{A}K = \underline{K}\underline{X}\underline{Y}\underline{M}$

EA = KM

D = N/O; R = N/O

L = X/Y; K = X/Y

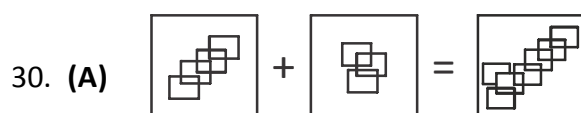
LEADER word must and should KMNO letter. Option (C) is has 'KMNO'. So, answer is XMKOMN.



2<sup>nd</sup> image is reverse the 1<sup>st</sup> image left change right and top change to bottom. Similarly 3<sup>rd</sup> change to 4<sup>th</sup> image.

29. (C) 'T' is removed from MISTER and added to the corresponding place in 2<sup>nd</sup> word.

MISTER      FACE  
MISER      FACT



31. (D) PASCAL, COBOL JAVA and BASIC are all high level languages. Machine & Assembly languages are low level languages.
32. (D) CDC 1604 is second generation computer.
33. (A) To convert any number into its binary form, divide it by 2 and track the remainder.
34. (C) A colon is used to separate the cell addresses in spread sheet.
35. (A) You can use drag-and-drop to embed excel worksheet data in a word document by dragging a range of excel data to the word button on the taskbar while pressing the ctrl key.
36. (C) When we want to refer to a range of cells, we use a colon (:).
37. (A) URL ending with "net" indicates "networking organization".
38. (D) All options are meaningful formula in excel.
39. (D) All the given options are anti virus programs.
40. (A) Hollow is the empty key frame and indicated by a circle.
41. (D) JPEG stands for Joint photographic experts group.
42. (C) The Eyedropper Tool is used for acquiring colors and styles from existing lines, brush strokes, and files and applying the same to other objects.
43. (B) Compiler is the program that converts the program into machine language line by line.
44. (C) Relational operators is used to represent 'less than or equal to' condition
45. (A) An alphanumeric variable starts with a letter of the alphabet. Rest of the characters can be numbers and letters.

## ENGLISH

46. **(A)** Why
47. **(B)** August
48. **(A)** Undeterred
49. **(D)** is the correct option. An article is determined based on the vowel or consonant sound a word produces in its beginning, when pronounced. As 'MBA' and 'M.S.' produce a sound as in 'aim', at the beginning, they each attract 'an' as their article. The word 'Australian' produces a vowel-like sound at the beginning, as in 'ornament' so it attracts 'an' as its article. But the word 'European' produces a consonant-like sound at the beginning as in 'you' and hence attracts 'a' as its article.
50. **(B)** affable

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