



Unified International  
Mathematics Olympiad

**UNIFIED INTERNATIONAL MATHEMATICS OLYMPIAD (UPDATED)**

**CLASS - 3**

**Question Paper Code : UM9267**

**KEY**

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

**EXPLANATIONS**

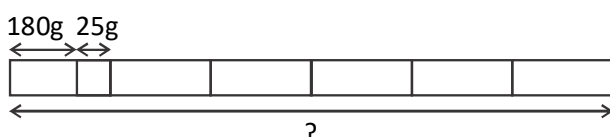
**MATHEMATICS**

01. (C)  $\star = 4521 - 1000 = 3521$

$\bigcirc = 3521 - 1967 = 1554$

$3521 + 1554 = 5075$

02. (B)



$180 \text{ g} + 25 \text{ g} = 205 \text{ g}$

$205 \text{ g} \times 6 = 1230 \text{ g}$

She needs to use 1230 g of flour and sugar altogether.

03. (D)  $12\text{ l} = 12\,000 \text{ ml}$

$12\,000 \text{ ml} - 10\,879 \text{ ml} = 1121 \text{ ml} = 1\text{ l } 121 \text{ ml}$

04. (C) Cost of rocket = ₹71

Cost of ball = ₹(71 - 29) = ₹42

05. (A) Cost of book =  $9 + 14 = ₹ 23$

Cost of post cards = ₹ 9

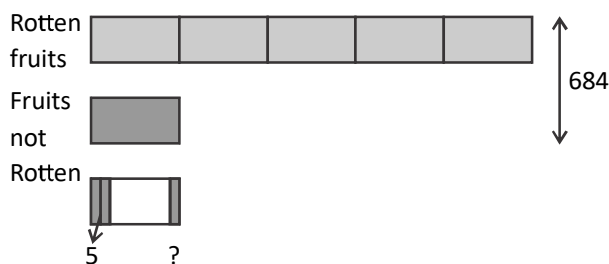
= ₹  $23 \times 2 + ₹ 9 \times 2$

= ₹  $46 + ₹ 18$

It cost ₹64 to buy 2 books and 2 boxes of postcards

06. (B)  $56 > 42$

07. (A)



Number of fruits that were not rotten

=  $684 \div 6 = 114$

Number of bags =  $114 \div 5$

= 22 R 4

Number of fruits unpacked = 4

4 fruits will be left unpacked

08. (C) Capacity of a cup = 200 ml

Capacity of a flask =  $200 \times 4 = 800 \text{ ml}$

Capacity of pail =  $800 \times 5 = 4000 \text{ ml} = 4 \text{ l}$

A pail can hold 4l of water.

09. (B)  $\frac{21}{30} = \frac{7}{10}$

10. (B) No. of blue balloons = 2470

No. of red balloons =  $2470 + 120 = 2590$

Total balloons =  $2590 + 2470 = 5060$

11. (B)  $21 \times 3 = 63$

Sum =  $693 + 63 = 756$

12. (D) Number of parts divided = 14

Number of parts shaded = 8

Fraction of shaded figure =  $\frac{8}{14} = \frac{4}{7}$

13. (C)  $10000 - 999 = 9001$

14. (D) 3 bottles of orange juice = 2 bottles of mango juice

? = 6 bottles of Mango juice

$3 \times 3 = 6$  bottles of Mango juice

9 bottles of Orange juice = 6 bottles of Mango juice

15. (D)  $17 - (16 \div 2) = 9$

16. (C) The 3-digit even number = 246

Sum =  $2 + 4 + 6 = 12$

First digit = 2

Second digit = 4

Third digit = 6

17. (B)  $15 \text{ g} + y = 40 \text{ g}$

$y = 40 \text{ g} - 15 \text{ g} = 25 \text{ g}$

$y + x = 55 \text{ g}$

$25 \text{ g} + x = 55 \text{ g}$

$x = 55 \text{ g} - 25 \text{ g} = 30 \text{ g}$

18. (A) Capacity of the milk jug = 5 l

No. of glasses she used to pour the milk = 3

Quantity of milk left in the jug = 2 l

=  $5 \text{ l} - 2 \text{ l} = 3 \text{ l}$

Capacity of each glass =  $3 \text{ l} \div 3 = 1 \text{ l}$

19. (D)  $4 \times 5 = 2 \times 10$

$20 = 20$

20. (D) No. of cards Ravi had = 576

No. of cards Ravi had at first =  $576 + 88 - 20$

=  $664 - 20 = 644$

21. (D) The minute hand points to the number 10 on the clock

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

The largest 3-digit number = 987

Their sum =  $1234 + 987 = 2221$

23. (B) 1 rupee  $\rightarrow$  100 paise  
 $? \rightarrow$  3700 paise  
 $3700 \div 100 = 37$  rupees

24. (B)  $458 \div 7$

$$\begin{array}{r} 7 \overline{) 458} \quad (65 \\ - 42 \phantom{0} \\ \hline 38 \phantom{0} \\ - 35 \phantom{0} \\ \hline 3 \phantom{0} \end{array}$$

$$Q = 65, R = 3$$

$$\text{Difference} = 65 - 3 = 62$$

25. (D) Given digits = 8, 3, 1 and 6

$$\text{Smallest odd number} = 1683$$

26. (B) 8 out of 20 squares are shaded

$$\therefore \text{The required fraction is } \frac{8}{20} = \frac{2}{5}$$

27. (C) Smallest 3-digit number = 100

$$\text{Largest 1-digit number} = 9$$

$$\begin{array}{r} 9 \overline{) 100} \quad (11 \\ - 9 \phantom{0} \\ \hline 10 \phantom{0} \\ - 9 \phantom{0} \\ \hline 1 \phantom{0} \end{array}$$

$$Q = 11, R = 1$$

28. (A) Length of building A =  $324 - 134 = 190$  m

$$\text{Length of building B} = 324 \text{ m}$$

$$\text{Length of building C} = 303 \text{ m}$$

$$\begin{aligned} \text{Total length} &= 190 \text{ m} + 324 \text{ m} + 303 \text{ m} \\ &= 817 \text{ m} \end{aligned}$$

29. (A) Cost of 1 plain balloon = ₹12

$$\text{Cost of 1 fancy balloon} = ₹16$$

$$\text{Cost of 5 plain balloons} = ₹12 \times 5 = ₹60$$

$$\begin{aligned} \text{Cost of 5 fancy balloons} &= ₹16 \times 5 = ₹80 \\ &= ₹80 + ₹60 = ₹140 \end{aligned}$$

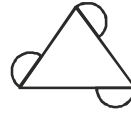
30. (C) 3718, 3871, 7183, 8173

31. (B) 1 hr = 60 min

$$5 \text{ hrs} = 60 \times 5 = 300 \text{ min}$$

$$300 + 55 = 355 \text{ min}$$

32. (B)



33. (D) If the boy chooses the digit 2, he should occupy the 20<sup>th</sup> place

34. (A) 1 bucket = 3 cups

$$1 \text{ pot} = 1 \text{ cup} + 3 \text{ cups} + 3 \text{ cups}$$

$$1 \text{ pot} = 7 \text{ cups}$$

$$1 \text{ basin} = 3 \text{ cups} + 7 \text{ cups} + 7 \text{ cups} + 7 \text{ cups}$$

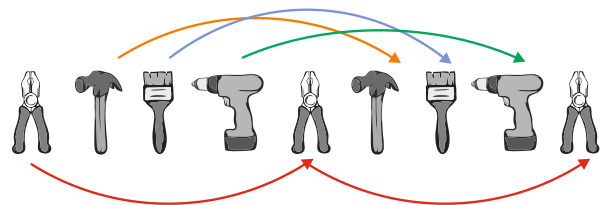
$$1 \text{ basin} = 3 \text{ cups} + 3 \text{ cups} + 3 \text{ cups} + 3 \text{ cups} + 3 \text{ cups} + 3 \text{ cups} + 3 \text{ cups}$$

$$1 \text{ basin} = 8 \text{ buckets}$$

35. (A) Option (A) has 10 quarter circles

### REASONING

36. (A)



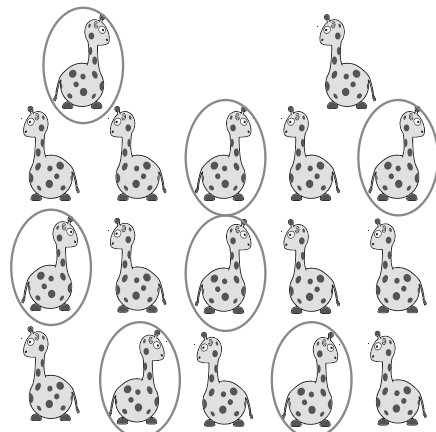
37. (B) In option (B) last two letters positions are different.

**5L2**

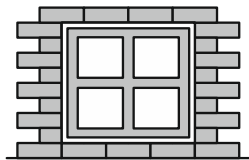
38. (C) :

39. (B)

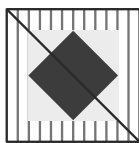
40. (C)



41. (A)



42. (B)

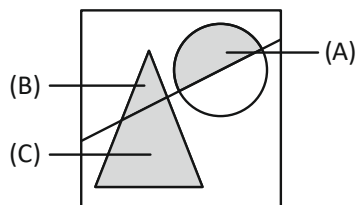


43. (D) Both q & w

44. (D)



45. (D)



### CRITICAL THINKING

46. (B) I will give the wallet to my teacher.

47. (C) Four circles are shown in a row. The first two are black, and the last two are white.

48. (B)  $Z : 4 - 1 = 3$

$$\Rightarrow Z = 3$$

$$Y : 4 + 1 = 5$$

$$Y : 5 - 3 = 2 \Rightarrow Y = 2$$

$$X : 4 + 3 = 7$$

Y has minimum number of chocolates.

49. (C) Number '6' will not be overlapped on square.

50. (A) Option (A) : 15 paths

Option (B) : 13 paths

Option (C) : 12 paths

Option (D) : 12 paths

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*The End*  
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