UIM
Unified International Mathematics Olympiad

UNIFIED INTERNATIONAL MATHEMATICS OLYMPIAD (UPDATED)

CLASS - 2
Question Paper Code : UM9264

KEY

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

EXPLANATIONS

MATHEMATICS

01. (C) Option (A) : 22 − 10 < 15

12 < 15 (✓)

Option (B) : 22 − 9 < 15

11 < 15 (✓)

Option (C) : 22 − 7 < 15

15 < 15 (✗)

Option (D) : 22 − 8 < 15

14 < 15 (✓)

02. (B) Option (A) : 10 + 15 = 15 − 10

25 = 5 (✗)

Option (B) : 10 + 30 = 65 − 25

40 = 40 (✓)

Option (C) : 10 + 25 = 65 − 15

35 = 50 (✗)

Option (D) : 15 + 25 = 65 − 10

40 = 55 (✗)

03.	(C)	$6 \div 3$ _____ $8 \div 4$
		$2 = 2$
04.	(C)	The sum of the top faces is 11
		So $5 + 6 = 11$
		Opposite of 5 in dice = 2
		Opposite of 6 in dice = 1
		Sum of two opposite faces = $2 + 1 = 3$
05.	(B)	Any number divided by 1 is equal to the number itself.
06.	(B)	Denominator = 8
07.	(C)	Number of fish tanks = 4
		Number of fish in each tank = $10 \times 4 = 40$
		More fish tanks bought = 1
		Total tanks = 5
		Number of fish in each tank = $40 \div 5 = 8$

08. (A)

$3 \bigcirc + 2 \triangle + 2 \bigcirc + \heartsuit = 23 + 16$

$5 \bigcirc + 2 \triangle + \heartsuit = 39$

$5 \bigcirc + 14 = 39$

$5 \bigcirc = 39 - 14$

$= 25$

$\bigcirc = 25 \div 5$

$= 5$

09. (B) Shaded fraction of the given figure = $\dfrac{1}{3}$

10. (A) Among all options, option 'A' is heaviest

11. (D) 12 centimeters long

12. (B) $85 + 5 \boxed{} 82 - 3$

$90 \boxed{>} 79$

13. (B) 1 kg = 100 g

$1000 + 500 + 500 = 2000$ g

$= 2$ kg

14. (D) Both (B) and (C) cannot be used to buy a bicycle priced rupees 1000

15. (D) 15 minutes after 5 O'clock is 5:15

16. (D) ₹ $100 \div 5 = $ ₹ 20

17. (B)

26 + 4	5 × 6	29 – 1
2 × 10	3 × 10	32 – 2

=

18. (C) 3 groups of 3 is 9

19. (D) Option (A) : $8 \times 5 = 5 \times 8$

$40 = 40$

Option (C) : $8 \times 6 = 6 \times 8$

$48 = 48$

Both (A) and (C)

20. (A) Three times ten = $10 \times 10 \times 10 = 1000$

Zero is the same digit in ones, tens and hundreds place

21. (C) Option (A) : $3 + 6 = 9$

Option (B) : $4 + 3 = 7$

Option (C) : $5 + 5 = 10$ (Even number)

Option (D) : $7 + 2 = 9$

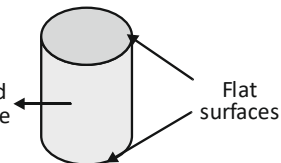22. (C) $5 - 2 = 3$ m

23. (B) Smallest 3 digit even number = 248

24. (C) $30 >$ number < 60

from the given options

option (C) 47

7 is in ones place and 4 is in tens place

$4 + 3 = 7$

25. (A)

Curved surface — Flat surfaces

26. (B) $6 - 4 = 2$

27. (C) It has 6 square shaped faces.

28. (A) T is lighter than B. R is lighter than T. Hence, R is the lightest and B is the heaviest.

29. (D) Counting pattern for the minute hand is
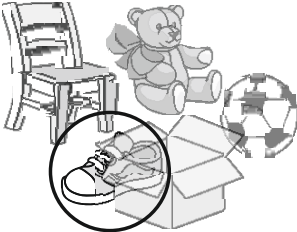
5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60

30. (B) = 1 group of 5

 = 3 groups of 5

= 3 × 5

= 15

REASONING

31. (A) Every time '1' is added to the previous number.

32. (B)

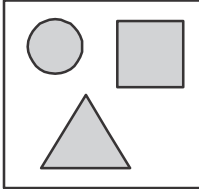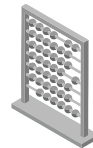33. (B) Except cucumber remaining vegetables are grown underground.

34. (C)

35. (A)

36. (A) There are 5 lines with 4 owls each.

5 × 4 = 20 owls

There are 5 empty squares

= 20 − 5 = 15 more owls than squares

37. (B) Every time pentagon shape one step clockwise direction.

38. (D)

39. (C) Given items in the question are instruments.

40. (D)

| S | ▢ | 4 | T | △ | 3 | R | ▭ | 4 |

The End