

Please check the examination details below before entering your candidate information

Candidate Name

Class

Section

**BLOOM Reasoning
Olympiad (BRO)**
Question Paper 2023-24

Class
7

Total Questions **50 + 5** (Tie-Breaking Section)


Total Time Allotted :
60 minutes

Total Marks
60

Instructions

1. There are **50 Multiple Choice Questions** in this booklet having 4 options out of which **ONLY ONE** is correct.
2. There are two sections in the Question Paper; Section 1 having 40 Questions carrying 1 Mark each & Section 2 having 10 Higher Difficulty Order Questions carrying 2 Marks each.
3. All questions are compulsory. There is **NO negative** marking for incorrect answers.
4. Total time allotted to complete the paper is 60 minutes.
5. Please fill in your details in the space provided on this page before attempting the paper.

OMR Sheet Instructions

1. Before starting the paper, fill in all the details in the OMR Sheet.
2. Additional 10 minutes will be provided to fill up the OMR sheet, before the start of the exam.
3. Use HB Pencil to darken the circle of the correct Option in OMR sheet. The correct way to darken the circle in OMR sheet is shown below.

4. Use black or blue ball point pen/HB pencil to fill the information in the OMR sheet. Partially filled OMR sheet will not be checked.
5. Return the OMR sheet to the invigilator after the exam.

CODE #1

R7



Bloom Reasoning Olympiad Class 7

Section 1 (1 Mark)

1. Find the missing number, if a certain rule is followed either row-wise or column-wise.

1	3	6
0	5	2
2	2	?
9	100	169

- (a) 4 (b) 5
(c) 3 (d) 2
2. A man runs 20 m towards East and turns to right, then runs 10 m and turns to right, then runs 9 m and now turns to left again runs 5 m and turns left and runs 12 m and finally turns left and runs 6 m. Now, which direction is the man facing?
- (a) North (b) South
(c) East (d) West
3. In the given words, arrange the words in a meaningful sequence. (Increasing order of size)
1. Whale 2. Cat
3. Mosquito 4. Tiger 5. Elephant
- (a) 3, 2, 4, 5, 1 (b) 3, 2, 5, 1, 4
(c) 2, 3, 4, 5, 1 (d) 3, 2, 1, 4, 5
4. As 'Badminton' is related to 'Court' in the same way 'Cricket' is related to ?
- (a) Ring (b) Arena
(c) Stadium (d) Pool
5. In a code language, if 'NOTEBOOK' is coded as 'REGOLEEN' and 'SHIRT' is coded as 'XYZBG', then how will be 'TORN' coded in that language?
- (a) GEBR (b) GZBR
(c) GEBN (d) GOBR

6. Choose the word which is different from the others?

(a) Curd (b) Oil
(c) Butter (d) Cheese

7. There are six persons sitting in a row facing North. A is sitting left to B, but right to C. D is sitting left to F, but right to E. C does not sit at corners. Who is sitting between A and F?

(a) A (b) C
(c) D (d) B

Directions (Q. Nos. 8 and 9) *Study the set of numbers given below and answer the questions given below.*

247, 831, 389, 725, 598

8. If in each number, first and last digits are interchanged, which of the following will be the highest number ?
- (a) 247 (b) 831
(c) 389 (d) 598
9. If in each number the second and third digits are interchanged, which will be the second lowest number?
- (a) 247 (b) 598
(c) 851 (d) 389
10. Select the option in which the words share the same relationship as that shared by the given pair of words.
- Helmet : Head :: ?
- (a) Shirt : Hanger (b) Gloves : Hand
(c) Shoes : Shoe rack (d) Water : Bottle
11. Choose the word which is odd-one out of the following options.
- (a) Mumbai (b) Mysore
(c) Vishakhapatnam (d) Cochin

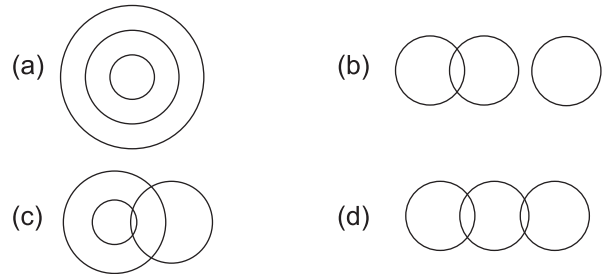
12. Find the missing alphabet/letter in the given matrix.

E	J	O
A	C	B
D	G	?

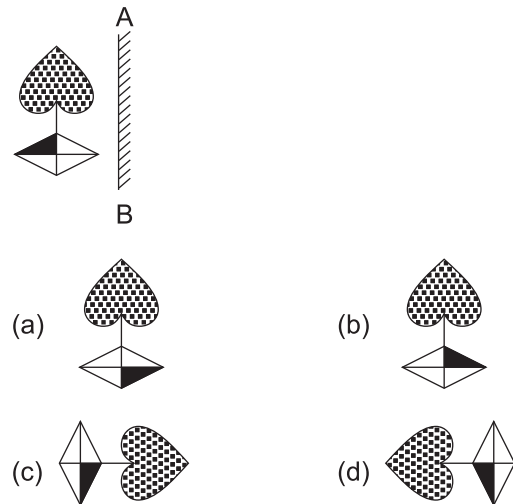
- (a) M (b) N
(c) O (d) T
13. In the given question, arrange the words in a meaning order.
- Poverty
 - Population
 - Death
 - Unemployment
 - Less food
- (a) 2, 3, 4, 5, 1
(b) 3, 4, 2, 5, 1
(c) 2, 4, 1, 5, 3
(d) 4, 1, 2, 5, 3
14. In the given sequence how many 4's are there which are preceded by 5 but not followed by 7?
- 2 3 4 2 1 3 4 2 5 4 7 3 2 4 3 1 9 2 5 4 7 5 4 7 2
3 4 5 2 9 5 4 6
- (a) 1 (b) 2
(c) 3 (d) 4
15. Arrange the given words as they occurs in English dictionary.
- Honour
 - Honest
 - Humour
 - Hungry
 - Huge
- (a) 2, 1, 3, 4, 5
(b) 3, 1, 2, 5, 4
(c) 2, 1, 5, 3, 4
(d) 1, 2, 3, 4, 5
16. Raja, walks 20 m towards South. Then, turning to his right he walks 20 m. Again turning to his left, he walks 10 m. Finally he turns to his left and walks 20 m.
How far is he from starting point?
- (a) 20 m (b) 30 m
(c) 5 m (d) 15 m

17. Which of the following diagrams indicates the best relation amongst the following?

Doctors, Women, Teachers

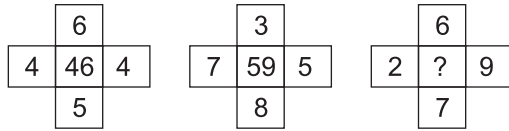


18. Pointing to a photograph 'A' said to his friend 'B'. 'She is the only daughter of the father of my mother'. How 'A' is related to the person of photograph?
- (a) Sister (b) Son
(c) Nephew (d) Niece
19. Select the correct mirror image of the given figure when the mirror is placed at 'AB' as shown.



20. In a particular language 'SAB GAB MAB' means 'ANNUAL SCHOOL FUNCTION' and 'MAB TAB HAB' means 'FUNCTION AT HOME'.
In the same language how is 'FUNCTION' coded as?
- (a) SAB (b) MAB
(c) HAB (d) TAB

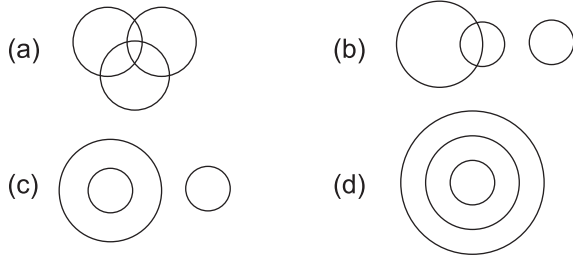
21. Find the number which will replace the question mark (?).



- (a) 59 (b) 80
(c) 60 (d) 65

22. Which of the following diagrams indicates the best relation amongst the following?

Patna, Bihar, Nepal



23. If '+' stands for '÷', '÷' stands for '×', '×' stands for '-' and '-' stands for '+', then which one of the following equation is correct?

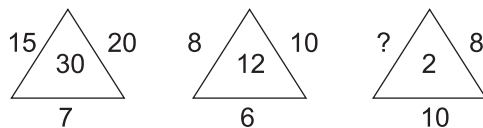
- (a) $18 \div 6 - 7 \times 5 \times 2 = 20$
(b) $18 + 6 \div 7 \times 5 - 2 = 18$
(c) $18 \div 6 \times 7 + 5 - 2 = 22$
(d) $18 \div 6 + 7 - 5 - 2 = 16$

24. If Q means add to, J means multiplied by, T means subtract from and K means divide by, then

$$26 \text{ K } 2 \text{ Q } 3 \text{ J } 6 \text{ T } 4 = ?$$

- (a) 27 (b) 28 (c) 29 (d) 30

25. Find the missing number.



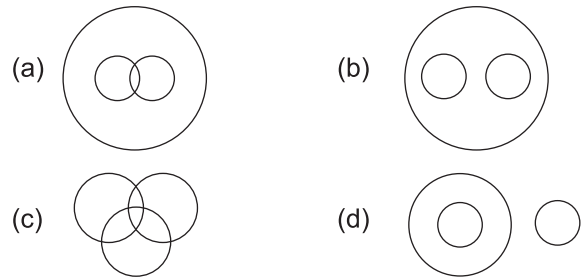
- (a) 4 (b) 8
(c) 10 (d) 5

26. In a code language, if 'CLOUD' is called 'WHITE', 'WHITE' is called 'RAIN', 'RAIN' is called 'GREEN', 'GREEN' is called 'SKY', 'SKY' is called 'BLUE' and 'BLUE' is called 'WATER', then where will the birds fly?

- (a) AIR (b) CLOUD
(c) BLUE (d) RAIN

27. Which of the following diagrams indicates the best relation amongst the following?

Mother, Father and Parents



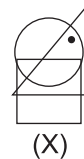
28. If '+' stands for '-', '×' stands for '+', '-' stands for '÷' and '÷' stands for '×', then what is the value of $2 + 14 - 4 \div 11 \times 5$?

- (a) 4 (b) 5
(c) 1 (d) 8

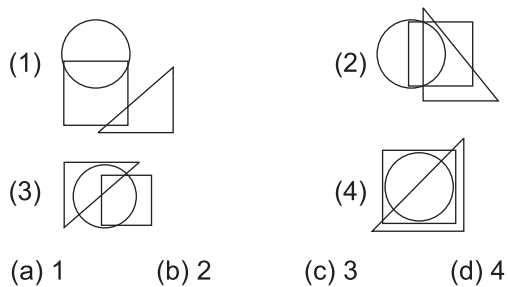
29. Pankaj walks 10 km towards North. From there, he walks 6 km towards South. Then, he walks 3 km towards East. How far and in which direction is he now with respect to his starting point?

- (a) 5 km/ North-East
(b) 5 km/ North-West
(c) 7 km/ West
(d) 7 km/ South-West

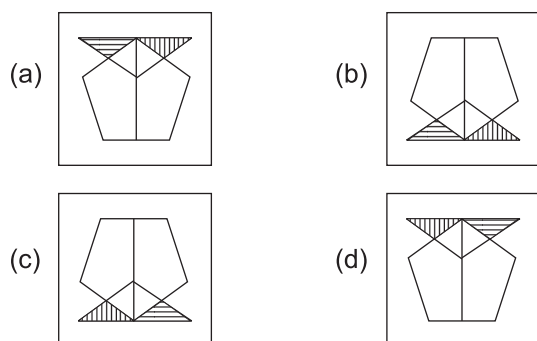
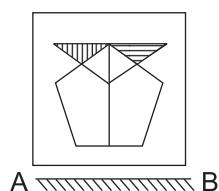
30. Select the figure which satisfies the same conditions of placement of the dots as in figure-X.



(X)



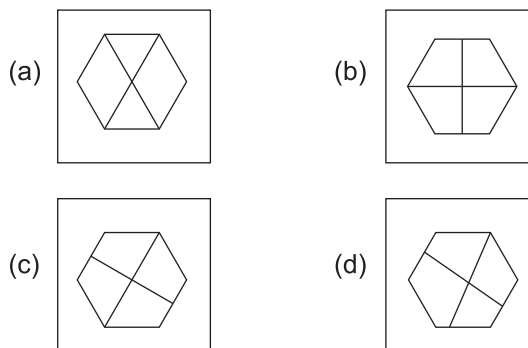
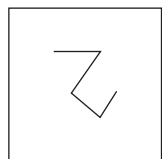
31. If a mirror is placed on the line AB, then which of the answer figures is the right image of the given figure?



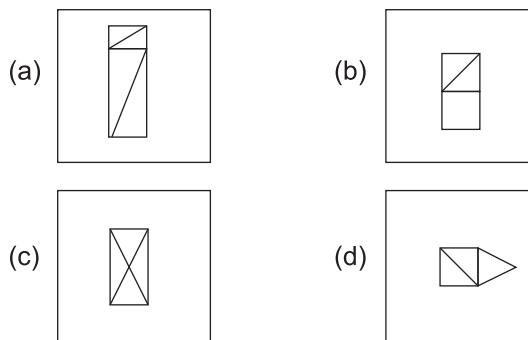
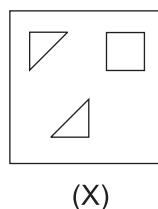
32. If $P \$ Q$ means P is brother of 'Q'. $P \# Q$ means P is the mother of Q. $P * Q$ means P is the daughter of Q, then in expression $A \# B \$ C * D$, who is the father ?

- (a) A (b) C
(c) D (d) B

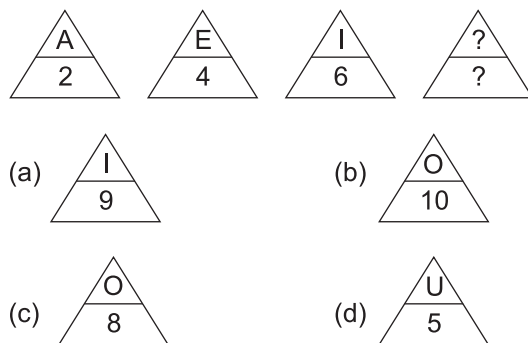
33. In which answer figures question figure is hidden/embedded?



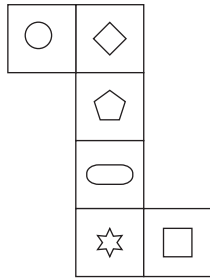
34. In the given question, find out which of the following figure can be formed from the pieces given in figure (X).



35. Find the missing term in the given series.



36. If the given figure is folded to form a cube, which symbol will come opposite \diamond ?



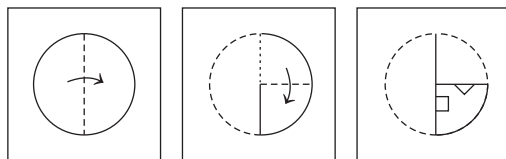
- (a) (b)
 (c) (d)

37. Select the correct mirror image of the given combination when the mirror is placed to the right side of the combination.



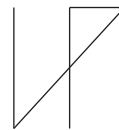
- (a) G L R Q P (b) Q R L G P
 (c) Q R L G P (d) P Q R L G

38. The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figures. How would this paper look when unfolded?



- (a) (b)
 (c) (d)

39. In which figure question figure is embedded?



- (a) (b)
 (c) (d)

40. In the given series, find the next term.

C2, F10, I18, L26, ?

- (a) N32 (b) N34
 (c) O34 (d) O32

Section 2 (2 Marks)

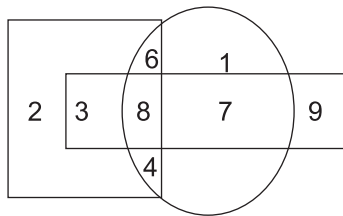
41. There are six children P, Q, R, S, T and U playing Cricket. P and T are brothers. U is the sister of T. R is the only son of P's uncle. Q and S are the daughters of the brother of R's father. How many female players are there?

- (a) 1 (b) 2 (c) 3 (d) 4

42. In this question if the given interchanges are made in signs and numbers, which one of the four equations would be correct?

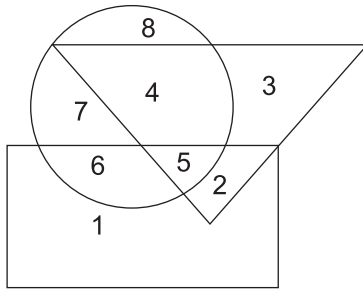
Given interchanges, signs '+' and '-' and number '4' and '8'.

- (a) $4 \div 8 - 12 = 16$
 (b) $4 - 8 + 12 = 0$
 (c) $8 \div 4 - 12 = 24$
 (d) $8 - 4 \div 12 = 8$
43. Which are the numbers that make their presence felt in only one of the geometric figure?



- (a) 4, 6, 7
 (b) 1, 2, 9
 (c) 3, 7, 9
 (d) 2, 8, 3

Directions (Q. Nos. 44-45) *In the following questions, answers are to be based on the diagrams given below, where the triangle represents doctors, the circle represents players and the rectangle represents artists.*



44. Which numbered spaced in the diagram represents doctors, who are also players and artists?
- (a) 2
 (b) 3
 (c) 4
 (d) 5

45. Which number represents artists who are neither player nor doctors?

- (a) 1
 (b) 2
 (c) 3
 (d) 4

46. Select the option that is related to the 5th number is the same way as the 2nd number is related to the 1st number and the 4th number is related to the 3rd number.

4 : 61 :: 9 : 726 :: 6 : ?

- (a) 356
 (b) 242
 (c) 316
 (d) 213

47. In a certain code language, if 'ACTOR' is coded as 'ZXGLI' and 'BOOK' is coded as 'YLLP' then what is the code for 'PENCIL'?

- (a) KUMRXO
 (b) KVMXRO
 (c) KZIXDG
 (d) KVMXOR

48. 'A + B' means, 'A is mother of B'.

'A - B' means, 'A is husband of B'.

'A × B' means, 'A is the son of B'.

'A ÷ B' means, 'A is the brother of B'.

If $Q \div U \times K \times H - D + J$, then how is K related to J?

- (a) Sister
 (b) Father
 (c) Brother
 (d) Mother

49. Five persons A, B, C, D and E are sitting in a row facing North such that D is on the left of C and B is on the right of E. A is on the right of C and B is on the left of D.

If E occupies a corner position, then who is sitting in the centre?

- (a) A
 (b) B
 (c) C
 (d) D

50. Five students are standing in a circle. Abhinav is between Alok and Ankur. Apurva is on the left of Abhishek. Alok is on the left of Apurva. Who is sitting next to Abhinav on his right?

- (a) Apurva
 (b) Ankur
 (c) Abhishek
 (d) Alok

Tie-Breaking Section

Instructions

1. This section consists of 5 Questions.
2. The score achieved in this section will not be included in the total marks.
3. If overall marks of two or more students are same, winner will be decided based on the score in this section.
4. Participation in this section is optional, and students may choose to attempt it or not.

1. Kiran walks 20 m North, she turns right and walks 30 m, then she turns right and walks 35 m, then she turns left and walks 15 m, then she turns left and walks 15 m. She again turns left and walks 15 m.

How far Kiran is from her starting point?

- (a) 25 m
(b) 15 m
(c) 45 m
(d) 30 m

2. Pethalal's family consists of his wife Radha, 3 sons and 2 daughters. One daughter is get to be married and the other daughter has a son. Two sons have two children each and the third son has three children. An old aunt and son-in-law also stay with them. How many members are there in Pethalal's family?

- (a) 17
(b) 18
(c) 19
(d) 20

3. In a line of boys Aman is 12th from top and Baman is 18th from bottom. If there are 6 boys between Aman and Baman, then how many maximum boys in the row?

- (a) 35
(b) 36
(c) 37
(d) 34

4. A, B, C, D and E are five schools facing towards North. A is in the middle of B and E. E is to the right of D. If C and D are at two corners, which school is on the left of C.

- (a) B
(b) C
(c) A
(d) E

5. If '+' stands for '÷', '×' stands for '+', '-' stands for '×', '÷' stands for '-', which of the following is correct?

- (a) $15 \div 5 \times 2 - 6 + 3 = 28$
(b) $15 \times 5 + 2 - 6 \div 3 = 56$
(c) $15 + 5 - 2 \div 6 \times 3 = 3$
(d) $15 - 5 + 2 \times 6 \div 3 = 41$