Please check the examination details below before entering your candidate information

Candidate Name	Class	Section

BLOOM Reasoning Olympiad (BRO)

Question Paper 2023-24

Class 10

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

R10

BLOOM CAP
Founded by | arihant

Bloom Reasoning Olympiad Class 10

Section 1 (1 Mark)

1. In the following question, the letters are jumbled up. Reconstruct the letters and form the meaningful word and identify the one which is the answer to the given clue?

A capital city of an Indian state.

(a) PAJIUR (b) TRUEME
(c) DOIAN (d) GANANDLA

2. Which pair of numbers is different from the others

(a) 19-363 (b) 21-443
(c) 20-397 (d) 40-1602

3. Identify the correct set of numbers from among the given set of alternatives that exhibits a behaviour similar to that of the given set.
Given set (13, 15, 17)

(a) (4, 6, 8) (b) (15, 16, 18)
(c) (1, 4, 9) (d) (9, 16, 25)

4. In a certain code language, if MANNER is written as AMNNRE, then how will CAMERA be written in that code language?

(a) MEARAC
(b) ACEMAR
(c) AREMAC
(d) None of these

5. Pointing to a lady in the picture, Sonia said "Her husband is the son-in-law of my mother". How is Sonia related to that lady?

(a) Sister (b) Mother
(c) Cousin (d) Aunt

6. In a row of students, Kartik's position is 5th from the left end and 7th from the left of the person standing in the middle. What is the total number of students standing in the row?

(a) 23 (b) 25
(c) 19 (d) None of these

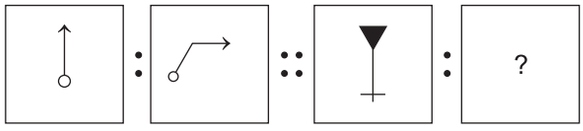
7. 1331 is related to 11 in the same way as ..... related to 13.

(a) 2971 (b) 2197
(c) 7192 (d) None of these

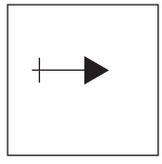
8. Insert the missing letters in the word written in capital letters, so as to complete the below sentence in a meaningful way.
Ravi loves to eat JAPAN food.

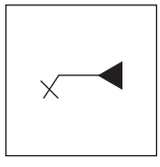
(a) ESE (b) ERM
(c) RIM (d) BIN

9. Choose the figure which is related to the third figure in the same way as the first figure is related to the second figure.



(a)

(b) 

(c) 

(d) None of these

10. Identify the odd letter from the given letters.

X Y Z D
(a) (b) (c) (d)

11. One day in early morning Raj started walking with his back towards the sun. After sometime, he turned left, then turned right and towards left again. In which direction is he going now?

(a) South (b) North
(c) East (d) West

12. Complete the given series.

Jan , Feb , April , July , ?

(a) December
(b) November
(c) January
(d) August

13. What comes next in the given series
0, 7, 26, ?

(a) 62 (b) 63 (c) 57 (d) 31

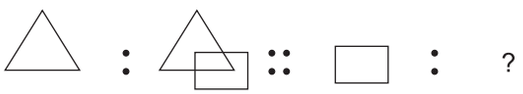
14. Choose the term which is different from the others.

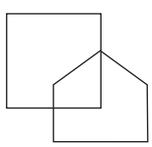
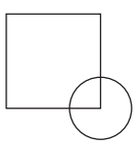
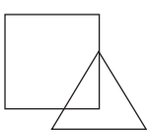
(a) 4 (12) 2 (b) 5 (20) 3
(c) 6 (30) 4 (d) 7 (40) 5

15. In a row of boys, if Aman is 15th from the left and Bimal who is 10th from the right interchange their position. Aman becomes 20th from the right. How many boys are there in the row?

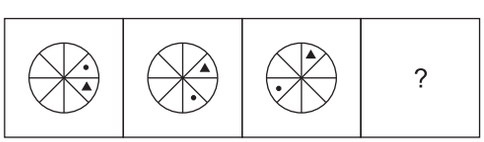
(a) 31 (b) 34
(c) 38 (d) 43

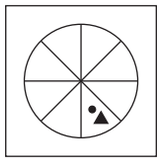
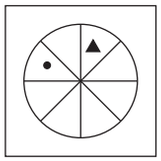
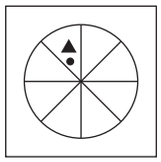
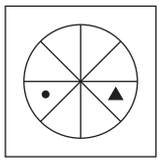
16. Find which figure will come at the place of '?'.



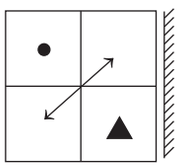
(a) 
(b) 
(c) 
(d) None of these

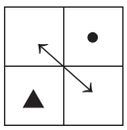
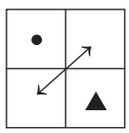
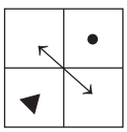
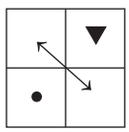
17. Choose the figure which completes the following series.



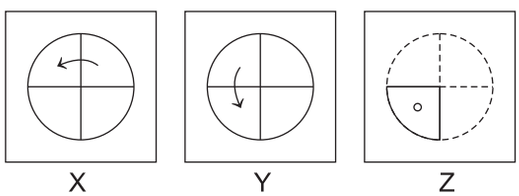
(a) 
(b) 
(c) 
(d) 

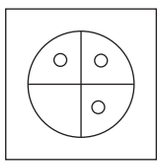
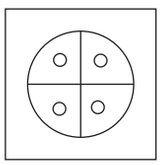
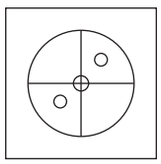
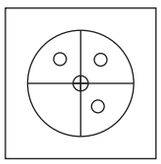
18. Choose the correct mirror image of the following figure.



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

19. The three figures X, Y and Z shows a sequence of folding a sheet of paper. Figure (Z) shows the manner in which the folded sheet has been cut out. If the sheet is then unfolded, which of the option figures (a), (b), (c) and (d) would show the unfolded form?



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

Directions (Q. Nos. 20-22) *Study the following information carefully and answer the given questions.*

(i) B and E are good in Basketball and Hockey.
(ii) A and B are good in Hockey and Polo.
(iii) A, D and C are good in Polo and Cricket.
(iv) C and A are good in Polo and Kho-Kho.
(v) D and E are good in Cricket and Basketball.

20. Who is good in Cricket, Polo, Hockey and Kho-Kho?

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

21. Who is good in Polo, Cricket and Basketball?

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

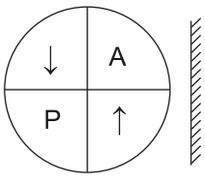
22. Who is good in Polo, Cricket and Kho-Kho, but not in Hockey ?

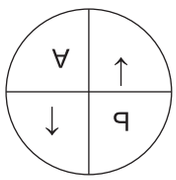
(a) A (b) B (c) C (d) E

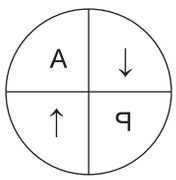
23. If 'TEETH' is coded as 'VGHVJ', then how will MEETS be coded in same language?

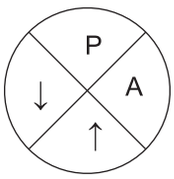
(a) OGHVU (b) OHIVU
(c) PGHVU (d) None of these

24. What will be the mirror image of the given figure.



(a) 

(b) 

(c) 

(d) None of these

25. In a certain code 'Pin and Can' is written as 'ko ho po' and 'Pin Cup and Can' is written as 'to ho ko po'. How 'Cup' is written in that code?

(a) ko (b) po (c) to (d) ho

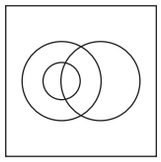
26. Find the next group of letters in the given series
PQ, RS, UV, ?

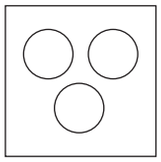
(a) YZ (b) TS
(c) VW (d) None of these

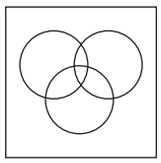
27. Going 50 m to the South of her house, Manya turns left and goes another 40 m. Then, turning to the North, she goes to 30 m and starts walking to her house. In which direction is she walking now?

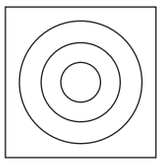
(a) East (b) North
(c) South-West (d) North-West

28. Which of the following diagram best represents the relation between Father, Male and Doctor.

(a) 

(b) 

(c) 

(d) 

29. If 'P∆Q' means 'P is the brother of Q', 'P # Q' means 'P is the father of Q' and 'P * Q' means 'P is the mother of Q'. Which of the following means 'R is the son of M'?

(a) M ∆ R # S (b) M # S * R
(c) M # S ≠ R (d) M * R # S

30. Study the following statements carefully and select the conclusions that follow?

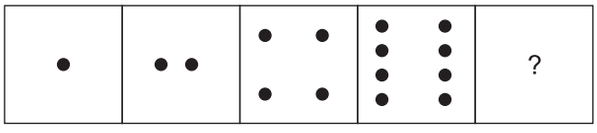
Statements No cup is pin.
No pin is pot.
Some cup are pot.

Conclusions

(i) No pot is cup.
(ii) No pot is pin.
(iii) Some pin are cup.
(iv) All pots are cup.

(a) None conclusion follows
(b) Only Conclusion II follows
(c) Only Conclusions II and III follows
(d) All conclusions follow

31. Find the number of dots in the next figure.



(a) 16 dots
(b) 64 dots
(c) 32 dots
(d) None of the above

32. The average age of 6 members is 25 yr. If the average age of first 4 members is 20 yr and that of last 3 members is 30 yr, then find the average age of first 3 members.

(a) 20 yr (b) 24 yr
(c) 28 yr (d) 29.5 yr

33. Find the word which will come at the place of '?'
Karachi : Pakistan :: Canberra : ?

(a) Norway (b) Australia
(c) Germany (d) USA

34. Choose the missing term in the given series.
1, 5, 25, ?, 625

(a) 125 (b) 115
(c) 120 (d) None of these

35. Bimla is daughter of Indu's brother. Indu has one sister, Charu and one brother, Gaurav. How is Bimla related to Gaurav?

(a) Sister (b) Daughter
(c) Niece (d) Father

36. After dropping all the letter from the given series, which element will be third from the left?
A 1 2 B 3 4 C D 7 8 F G

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

37. Name the element that can be formed by using the letters given in the box.

(a) NITROGEN (b) OZONE
(c) OXYGEN (d) ZONE

38. In the following question, correct the equation by interchanging two numbers?
$18 \div 12 + 3 - 5 = 13$

(a) 3 and 12 (b) 3 and 18
(c) 5 and 3 (d) 12 and 18

39. The group of words which is different from the others is

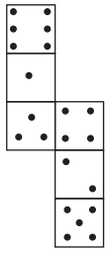
(a) Sun : light (b) Flower : smell
(c) Sofa : chair (d) Chimney : smoke

40. Choose the missing term in the given series.
E-25, D-16, C-9, ?

(a) A-1 (b) F-36
(c) Z-16 (d) None of these

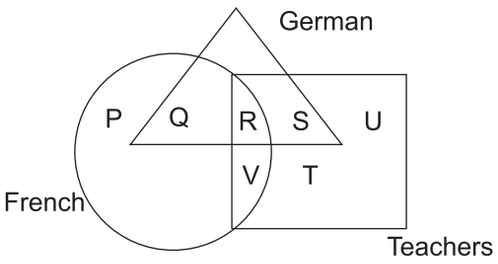
Section 2 (2 Marks)

41. How many dots lie opposite to the face having five dots, when the given figure is folded to form a cube



(a) 6 dots (b) 3 dots (c) 1 dot (d) 4 dots

42.



Study the given diagram and identify the letter which represent teachers who are German as well as French.

(a) T + U
(b) R
(c) S + V
(d) P

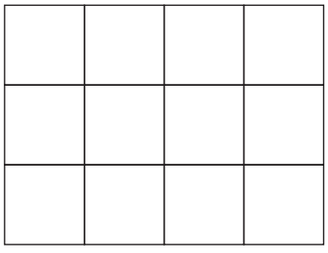
43. An assertion (A) and reason (R) are given below.

A : Mangoes are sour when unripe.

R : Mangoes are available in Northern parts of the country.

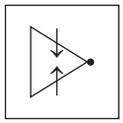
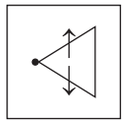
(a) Both A and R are true and R is correct explanation of A
(b) Both A and R are true, but R is not the correct explanation of A
(c) A is true, but R is false
(d) A is false, but R is true

44. Count the number of squares in the given figure.



(a) 29 (b) 30
(c) 35 (d) 28

45. Identify the odd figure :

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

Directions (Q. Nos. 46-48) *Study the information given below and answer the questions that follow.*

Seven persons A, B, C, D, E, F and G are sitting around a circular table facing the center. F sits second to the right of G. A sits second to the right of B. C is not an immediate neighbour of A and G. D sits second to the right of F. B is an immediate neighbour of F. A is an immediate neighbour of F.

46. Who among the following is an immediate neighbour of B?

(a) C (b) E (c) A (d) G

47. Who among the following sits third to the left of F?

(a) E (b) A (c) G (d) D

48. Who among the following are immediate neighbours of F?

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

49. The average weight of 8 boxes is recorded as 50 kg. If the weight of the new box is added, then the average increases by 2 kg. Then, the weight of new box is

(a) 68 kg (b) 65 kg (c) 72 kg (d) 76 kg

50. A cube is painted black on all its faces and then cut into 729 pieces. How many cubes will have two faces painted black?

(a) 72 (b) 81 (c) 100 (d) 84

Tie-Breaking Section

Instructions

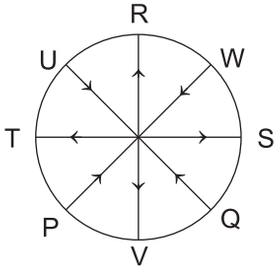
1. This section consists of 5 Questions.
2. The score achieved in this section will not be included in the total marks.
3. If overall marks of two or more students are same, winner will be decided based on the score in this section.
4. Participation in this section is optional, and students may choose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

1. Find the next term in the following series.

B	D	G	K	?
8	27	64	125	?
A	E	I	M	?
1	4	9	16	?

(a) P 216 Q 25 (b) P 216 U 36
(c) Q 216 U 49 (d) None of these

Directions (Q. Nos. 2 and 3) *Read the given information carefully and answer the questions.*
Eight people P, Q, R, S, T, U, V and W are seated around the circular table. Some are facing inside and some are facing outside the table.



2. Which of the following statement is not true?

(a) W and P are sitting opposite to each other
(b) S is sitting to the immediate right of Q
(c) S is sitting third to the left of P
(d) All are true

3. If U and Q interchanges their places, then who is second to the right of W?

(a) Q (b) W
(c) S (d) P

4. Study the following statement carefully and answer the questions.

Statement Luck has a peculiar property, that it always favours the hard working.

Conclusions

I. Luck does not favour lazy people.
II. To be lucky, you have to be hard working.

(a) Only Conclusion I follows
(b) Only Conclusion II follows
(c) Either Conclusion I or II follows
(d) None conclusions follows

5. Vimal is standing at point 'A' and walks North-East for 4 km. He stops and faces South and walks 2 km till he can see point 'A' exactly to his West. How far is he now from point 'A'?

(a) 2 km
(b) $2\sqrt{2}$ km
(c) $2\sqrt{3}$ km
(d) $2\sqrt{5}$ km