BLOOM Reasoning
Olympiad (BRO)
Question Paper 2023-24

Class 8

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.

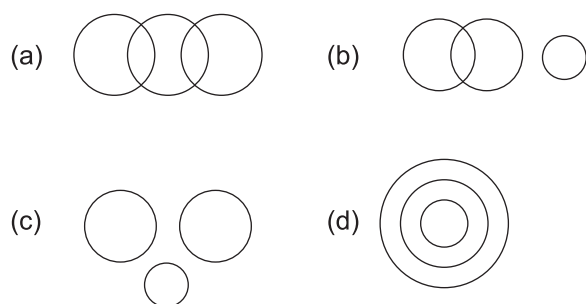5. Return the OMR sheet to the invigilator after the exam.

CODE #1

R8

BLOOM CAP
Founded by | arihant

Section 1 (1 Mark)

1. Select the correct combination of mathematical signs to replace 'A' sequentially from left to right and balance the following equation.
26A 2A 3A 3A13

(a) ×, =, −, ÷   (b) ÷, ×, =, −
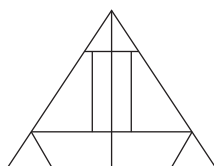(c) ×, ÷, +, =   (d) ÷, ×, =, ×

2. Select the venn-diagram that best represents the relationship between the following classes.
Bicycles, Computer, Rain

3. Pratik, Esha, Rashmi, Sakshi and Trisha are sitting on a bench facing North. Trisha and Esha are sitting together. Trisha and Rashmi sitting together, Pratik is on the extreme left, Esha is second from extreme right. Who is sitting between Pratik and Esha?

(a) Rashmi
(b) Trisha and Rashmi
(c) Rashmi and Sakshi
(d) Trisha and Sakshi

4. How many triangles are there in the figure given below?

(a) 11   (b) 12
(c) 13   (d) 15

5. How many 7's in the following sequence of numbers are immediately preceded by '6' but not immediately followed by '8'?
3 4 8 7 6 1 5 6 7 8 4 9 6 7 5

(a) 0   (b) 1   (c) 2   (d) 4

6. Suresh went 20 m to the East, then he turned left and walks 15m, then he turned right and walks 25 m, again he turned right and walks 15 m. How far was Suresh from the starting point?

(a) 45 m   (b) 60 m
(c) 50 m   (d) 35 m

7. Select the option in which the words share the same relationship as that shared by the given pair of words.
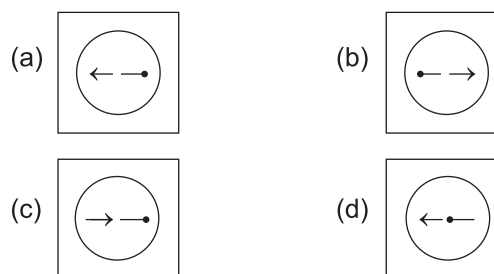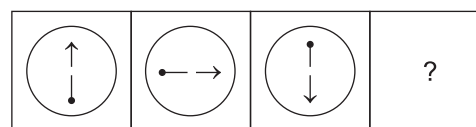Ammeter : Electric Current

(a) Density : Lactometer
(b) Pressure : Barometer
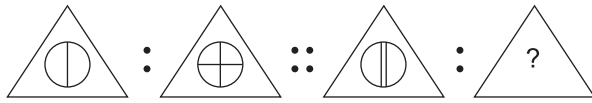(c) Hygrometer : Humidity
(d) Polarimeter : Steps

8. Choose the word which is different from others in the group.

(a) Television   (b) Geyser
(c) Computer   (d) Machine

9. Select the figure from options that can replace question mark (?) in the given series.

10. Select the appropriate/related figure.

(a)

(b)

(c)

(d)

11. In a certain code language, 'SOLID' is coded as '64' and 'POUR' is coded as '74'. How will 'TON' be coded as in that code language?

(a) 51   (b) 52
(c) 55   (d) 60

12. X is 7th from the top while Y is 16th from the bottom in the class. If they interchange their positions, then X becomes 21st from the top. What will be the position of Y from the bottom?

(a) 30th   (b) 15th
(c) 23rd   (d) 21st

13. A + B means, 'A is mother of B'.
A – B means, 'A is husband of B'.
A × B means, 'A is son of B'.
A ÷ B means, 'A is brother of B'.
If Q ÷ U × K × H – D + J, then how K is related to J?

(a) Brother   (b) Father
(c) Uncle   (d) Mother

14. In a group of five districts, Akbarpur is smaller than Fatehpur, Dhanbad is bigger than Palamu and Barabanki is bigger than Fatehpur but not as big as Palamu. Which district is the biggest?

(a) Akbarpur   (b) Fatehpur
(c) Dhanbad   (d) Palamu

15. In the following letter series, how many M's are following by N, but not preceded by 'N'?
N M W V M N M V W N M N M M N W V M N

(a) 0   (b) 2
(c) 4   (d) 3

16. Pratap starts from school and walks 7 km towards East. He takes a left turn and walks 4 km, then takes a right turn and walks 2 km, again takes a right turn and walks 3 km. In which direction is he facing now?

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

17. If in a certain code language 'DONE' is coded as 16, then how will 'CANDLE' be coded in that code language?

(a) 36   (b) 49
(c) 64   (d) 89

18. How many T's are there in the following letter series which are preceded by 'P' but not followed by 'S'?
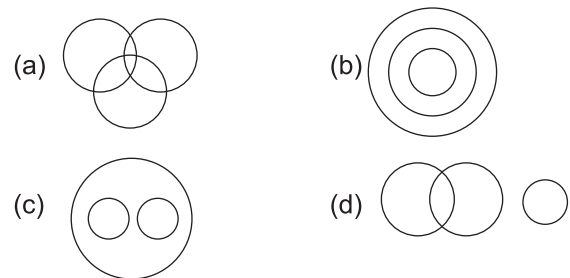S T P Q T S P T R P T Q R P S T Q R T R P T M P T S

(a) 2   (b) 3
(c) 1   (d) 5

19. If 'a' represents '÷', 'b' represents '+', 'c' represents '–', and 'd' represents '×', then 24a 6d 4b 9c 8 is equal to?

(a) 6   (b) 8
(c) 10   (d) 17

20. Select the venn-diagram which represents the best relationship between the following classes.
Library, Racks, Books

(a)

(b)

(c)

(d)

21. Select the option in which the numbers share the same relationship as that shared by the given number-pair.
34 : 210

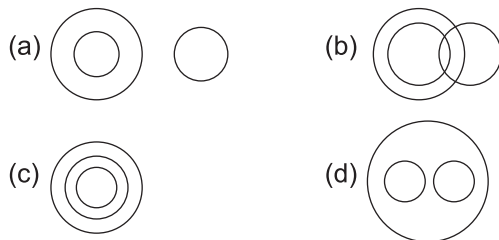(a) 47 : 282   (b) 66 : 402
(c) 54 : 100   (d) 38 : 236

22. In a certain code BECAUSE is written as 'BFCBVSF'. How would DOORSTEP be written in that code?

(a) DOROPEST   (b) DPPRSTFP

(c) PETSRDOP   (d) ROODPEST

23. Vinod introduces Vishal as the son of the only brother of his father's wife. How is Vinod related to Vishal?

(a) Cousin   (b) Brother

(c) Son   (d) Uncle

24. Which one of the following figures represents the relationship among males, fathers and advocates?

(a)   (b)

(c)   (d)

25. In the following question below some statements followed by some conclusions based on those statements. Taking the given statements to be true, even if they seem to be at variance from commonly known facts. Read all the conclusion and then decide which of the given conclusion logically follows the given statements.

Statements

All trees are rocks.

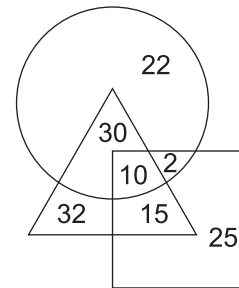All rocks are cups.

Conclusions

  I. All trees are cups.

  II. Some cups are trees.

(a) Only Conclusion I follows

(b) Neither Conclusion I nor II follows

(c) Both Conclusions I and II follow

(d) Only Conclusion II follows

26. X is the mother of A. Y is the sister of B's father. R is the father of B. A an Z are sisters. B is the brother of Z. How is R related to 'X'?
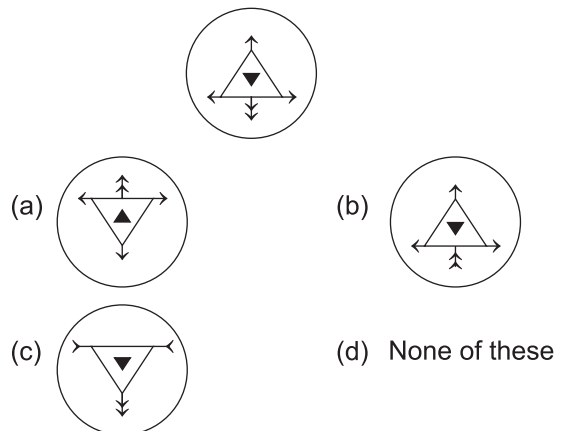
(a) Father

(b) Son

(c) Husband

(d) Daughter

27. In the following venn-diagram, the rectangle stands for 'students', the triangle stands for 'sports persons' and the circle stands for 'hostellers'. The given numbers represent the number of persons in that particular category.
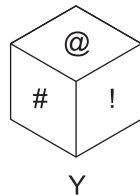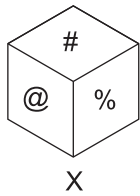

How many students are both hostellers and sports persons?

(a) 22   (b) 15

(c) 32   (d) 10

28. Choose the correct water image of the given figure.
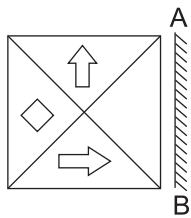

(a)   (b)

(c)   (d) None of these

29. Two different positions (X and Y) of same dice are shown. Which symbol is on the face opposite to the face having the symbol '!'?

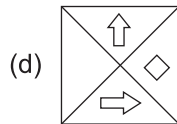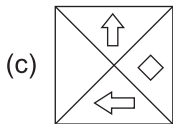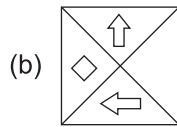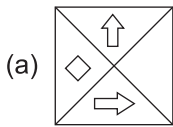X   Y

(a) %   (b) $
(c) @   (d) #

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

Question Figure

Answer Figures

31. Select the option that is related to the third number in the same way, as the second number is related to the first number.
841 : 29 : : 484 : ?
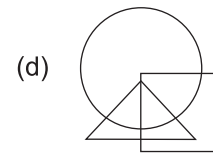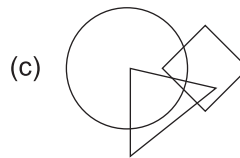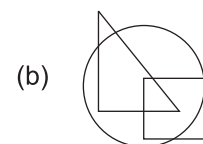
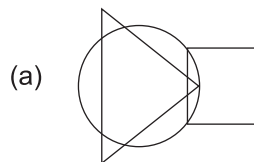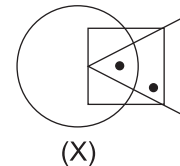(a) 20   (b) 22
(c) 28   (d) 32

32. In a certain code, 'LUTE' is written as 'MUTE', and 'GATE' is written as 'HATE', then how 'BLUE' will be written in that code?

(a) CLUE   (b) GLUE
(c) BLEM   (d) FLUE

33. If every Sunday and every 2nd, 4th Saturday are holidays in a 31 days month beginning with Sunday, then how many working days are there in that month?

(a) 22   (b) 24   (c) 26   (d) 28

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

(X)

(a)   (b)

(c)   (d)

35. Find the odd letter-pair from the given alternatives.

(a) ROL   (b) RUO
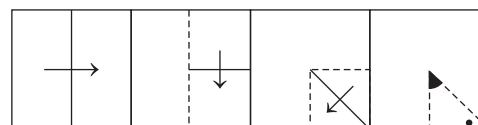(c) VYS   (d) PSM

36. Select the number from among the given options that can replace the question mark (?) in the given series.
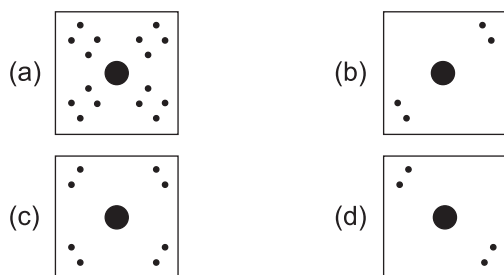3, 7, 16, 32, 57, ?

(a) 85   (b) 93   (c) 95   (d) 89

37. 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?
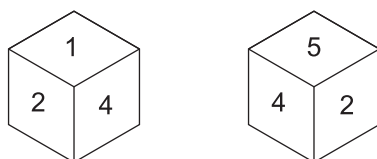
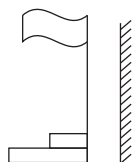**Question Figures**

Answer Figures

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

38. Two different positions of the same dice are shown, the six faces of which are numbered from 1 to 6.

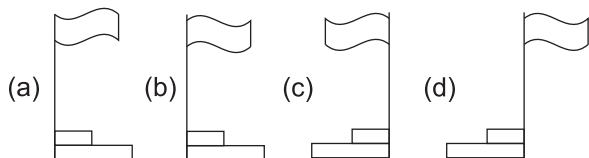Select the number that will be on the face opposite to the face showing '5'?

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

39. Select the correct mirror image of the given figure when the mirror is placed to the right side of the figure.

Question Figure

Answer Figures

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

40. In the following question below some statements followed by some conclusions based on those statements. Taking the given statements to be true, even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements.

Statements

Some teeths are colours.

Some colours are objects.

Conclusions

   I. All objects are teeths.
  II. Some colours are teeths.
 III. Some objects are colours.

(a) Conclusions I and III follow
(b) Either Conclusion I or III follows
(c) Conclusions I and II follow
(d) Conclusions II and III follow

Section 2 (2 Marks)

Directions (Q. Nos. 41 and 42) *Study the given numbers and answer the following questions.*
4 5 3 6 4 6 7 3 6 5 4 2 3 4 5 3 6 4 2 3 5 7 8 3 6 7 3 2 1 2 3 5 3 6 5 6 7 3 6 7 3 6 4 1 2 5 4 3 6

41. How many 3's are followed by '6' but not preceded by '4'?

(a) 5   (b) 6
(c) 7   (d) 4

42. How many 2's are preceded by 4's but not followed by '5'.

(a) 2   (b) 4
(c) 6   (d) 3

Directions (Q. Nos. 43 and 44) *Read the given information carefully and answer the questions that follows.*

   (i) There is a family of six members.
  (ii) Members are A, B, C, D, E, and F.
 (iii) A and B are married couple, B being the female member.
 (iv) B is the daughter-in-law of F.
  (v) D is the only son of C.
 (vi) E is the sister of D.
(vii) F's husband is dead.
(viii) C is A's brother.

43. How F is related to A ?

(a) Mother   (b) Sister

(c) Sister-in-law   (d) Father

44. How E is related to C?

(a) Mother   (b) Daughter

(c) Sister   (d) Cousin

45. Using a particular code of numbers and letters,
134 stands for 'good and tasty'
478 stands for 'see good pictures' and
729 stands for 'pictures are faint'
Which of the following digits are used to code
'see'?

(a) 9   (b) 2   (c) 1   (d) 8

46. If the animals which can walk are called
swimmers, animals who crawl are called flying,
those living in water are called snakes and
those which fly in the sky are called hunters.
Then, what will a lizard be called?

(a) Swimmers   (b) Snakes

(c) Flying   (d) Hunters

47. The Managing Director entered the conference
room ten minutes before 12 : 30 h for
interviewing. He came 20 min before the
chairman who was 30 min late. At what time,
the interviews were scheduled?

(a) 12 : 10   (b) 12 : 20

(c) 12 : 30   (d) 12 : 40

48. Arijit travelled from a point X straight to Y at a
distance of 80 m. He turned right and walked
50 m, then again turned right and walked 70 m.
Finally, he turned right, and walked 50 m. How
far is he from the starting point?

(a) 40 m

(b) 20 m

(c) 30 m

(d) 10 m

49. Which of the conclusions logically follows from
the given statements?

Statements

Some social workers are followers.

Some followers are famous.

Conclusions

I. All social workers are famous.

II. Some followers are social workers.

(a) Only I follows

(b) Only II follows

(c) Both I and II follow

(d) Neither I nor II follows

50. In a certain code language STOCK is written as
'340' and TENT is written as '236'. How will
'DOUBLE' be written in that code language?

(a) 332

(b) 352

(c) 354

(d) 360

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.

Direction (Q. No. 1) *Read the given statement and conclusions carefully and decide which of the conclusions logically follow from the statement?*

1. **Statement** The Prime Minister has made clear that his government will make concerted effort for the upliftment of poor farmers and announced an annual pension for them.

   Conclusions

   I. Government understands that the condition of poor farmers needs immediate attention.
   II. No benefits are announced for other sections of society.
   (a) Neither Conclusions I nor II follow
   (b) Only Conclusion II follows
   (c) Only Conclusion I follows
   (d) Both Conclusions I and II follow

2. In the given question some statements followed by some conclusion.

   Read all the conclusions and then decide which of the given conclusion logically follows the given statements.
   Statements:
   Some pens are keys.
   Some keys are locks.
   All locks are cards.
   No card is a paper.
   Conclusions

   I. No lock is paper.
   II. Some cards are keys.
   III. Some keys are not paper.
   (a) Only Conclusion I is true
   (b) Only Conclusion II is true
   (c) Both Conclusions I and II are true
   (d) All conclusions follow

3. In a certain code language 'dom pul ta' is written as 'bring hot food', 'pul tir sop', is written as 'food is good' and 'tak da sop' is written as 'good bright boy'.

   Which of the following means 'hot' in that code language?
   (a) dom
   (b) ta
   (c) pul
   (d) Cannot determined

4. A + B means 'A' is father of 'B',
   A − B means 'A' is wife of 'B',
   A × B means 'A' is the brother of 'B',
   A ÷ B means 'A' is the daughter of 'B'.
   If P ÷ R + S + Q, which of the following is true?

   (a) P is the aunt of Q.
   (b) Q is the aunt of P.
   (c) P is the mother of Q.
   (d) P is the sister of Q.

5. If Manoj's birthday is on 25th May, which is Monday and his sister's birthday is on 13th July. Which day of the week is his sister's birthday?
   (a) Monday
   (b) Tuesday
   (c) Thursday
   (d) Sunday