



CREST Reasoning Olympiad (CRO)

Previous Year Paper (2023-24)

Class 7 (Set - A)

Time Allowed: 1 hour

Maximum Marks: 60

- Additional **10 minutes** will be allotted to fill up information on the OMR Sheet, before the start of the exam.
- Fill in all the mandatory fields clearly on the OMR Sheet.
- There are a total of **50 questions** in this booklet comprising **2 sections** namely the **Logical Reasoning & Achievers' Section** consisting of **40 questions (1 mark each) & 10 questions (2 marks each)** respectively.
- There is no negative marking. The use of a calculator is not permitted.
- There is **only ONE correct option** to a given question.
- Use **HB Pencil / Ball point pen (Blue / Black) only** for marking the correct choice of answers on the OMR Sheet.
- Rough work is to be done in the space provided in the test booklet. Extra plain sheet may be provided by the school for the rough work.
- The OMR Sheet is to be handed over to the invigilator at the end of the exam.
- No candidate is allowed to carry any textual material, printed or written, bits of paper, any electronic device, digital watches, etc. inside the examination hall.
- The use of unfair means may result in the cancellation of the exam. Any such instances must be reported at **+91-98182-94134** or **info@crestolympiads.com**

DO NOT OPEN THIS BOOKLET UNTIL ASKED TO DO SO

FILL IN THE DETAILS

Candidate Name: _____

Class: _____ Section: _____

CREST ID: _____

Logical Reasoning (Each Question is 1 Mark)

1. In the following question, determine the missing term:



- a. 11 b. 10
c. 12 d. 9

2. Find the next term in the given series:

A2C	D5F	G8I	J11L	M14O	?
-----	-----	-----	------	------	---

- a. P17R b. Q17S
c. Q18S d. S18Q

3. Find the missing term:

DE9	FG13	HI17	JK21	?
-----	------	------	------	---

- a. LM25 b. KL23
c. LM26 d. MN27

4. If A = 2, D = 8, K = 22 and TEN = 78, then BEL is coded as:

- a. 83 b. 39
c. 38 d. 30

5. Study the following number sequence given below and answer the question:
8 9 7 6 3 4 2 8 9 7 6 4 5 9 2 9 7

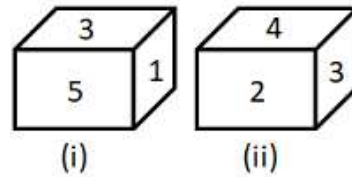
How many 7's are preceded by 9 and followed by 6?

- a. 2 b. 3
c. 4 d. 5

6. Robert obtained more marks than Sam, but less than Kevin. Rachel obtained more than Arthur, but less than Harry. Kevin obtained less than Arthur. Who obtained the highest marks?

- a. Kevin b. Harry
c. Rachel d. Arthur

7. What will be the number at the bottom, if 6 is at the top?



- a. 2 b. 3
c. 5 d. 4

8. Bob is facing towards West and turns through 90° clockwise, again 45° clockwise and then turns through 180° anti-clockwise. In which direction is he facing now?

- a. North-West b. South-West
c. North-East d. South

9. Find the missing entry:

11C	23A	2B
22A	67B	3C
?	34C	1A

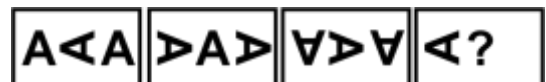
- a. 11B b. 33C
c. 11A d. 33B

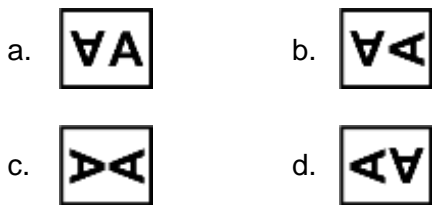
10. Complete the following matrix:

Z ₂	X ₁₉	V ₆₆
A ₃	C ₁₈	?
T ₄	R ₁₇	P ₆₈

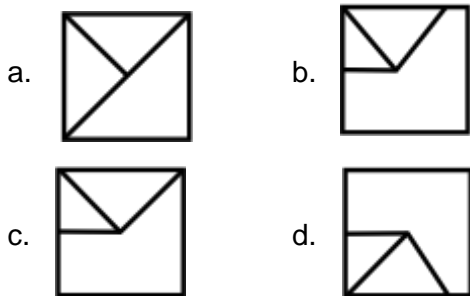
- a. E₆ b. F₆₉
c. E₆₇ d. E₅₆

11. Find the next figure in the series given below:

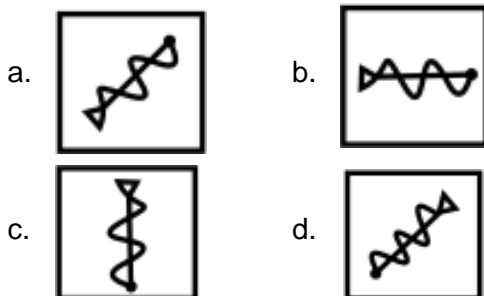




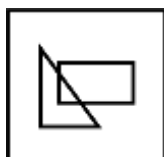
12. Identify and choose the correct pattern or figure that will complete the question figure:



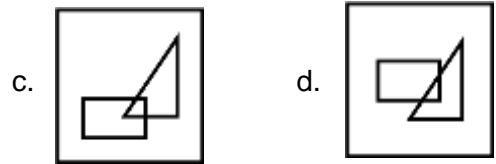
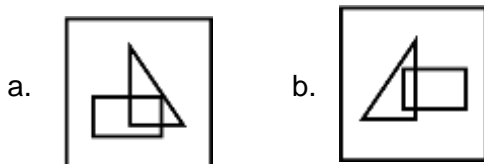
13. From the following figures, choose the odd one out:



14. In the following question, choose the correct mirror image of the given figure (x) (if mirror is placed vertically left side of the figure):



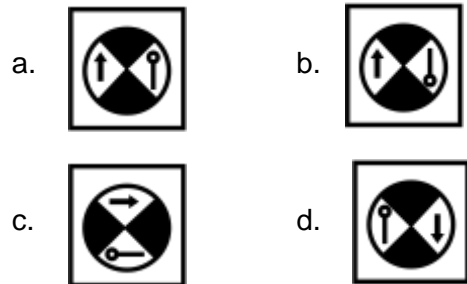
(x)



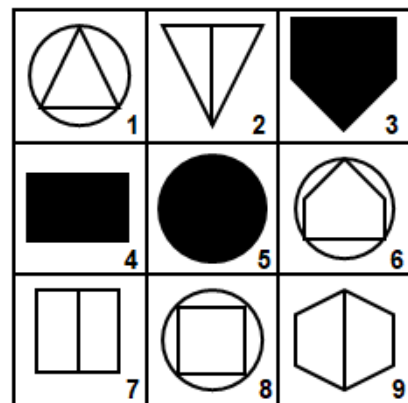
15. Choose the correct water image of the given object:



(x)

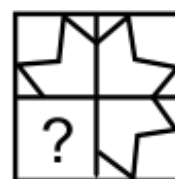


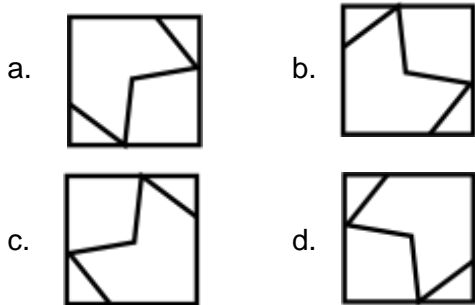
16. In the following question, group the given figures into three classes using each figure only once:



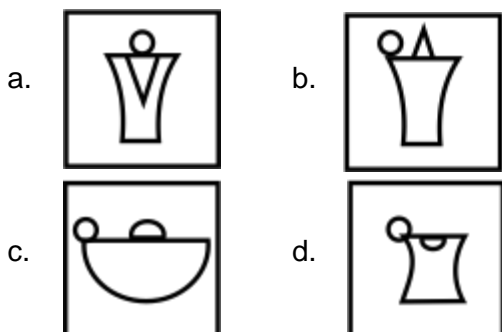
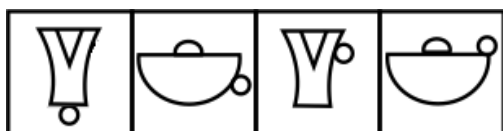
- a. 9, 4, 8; 3, 6, 7; 1, 2, 5
 b. 1, 2, 4; 7, 9, 5; 8, 6, 3
 c. 1, 8, 6; 2, 7, 9; 3, 5, 4
 d. 5, 3, 2; 4, 6, 9; 1, 7, 8

17. Identify and choose the correct figure that will complete the pattern:





18. Select the appropriate figure to continue the series given in problem figures:



19. If CLOUD can be coded as 59432 and RAIN as 1678. How can AROUND be coded?

- a. 614832 b. 614382
c. 641382 d. 461382

20. In a certain code language, '3a, 2b, 7c' means 'Truth is Eternal', '7c, 9a, 8b, 3a' means 'Enmity is not Eternal' and '5d, 4d, 2b, 8b' means 'Truth does not perish'. Which of the following means 'Enmity' in that language?

- a. 3a b. 7c
c. 8b d. 9a

21. X and Y are the children of A. A is the father of X but Y is not his son. How is Y related to A?

- a. Sister b. Brother
c. Son d. Daughter

22. K says 'O' and 'M' are 'my brothers', K says 'Q is the father of M'. K says 'T is the brother of my father'. How is T related to M's mother?

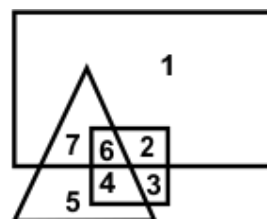
- a. Brother b. Father
c. Brother-in-law d. Husband

23. Put the correct mathematical signs in the following equation from the given alternatives:

$$33?11?3?6 = 115$$

- a. -, x, + b. +, -, x
c. x, ÷, - d. ÷, x, x

24. Triangle represents people in the first age group i.e., 40-50 years. Square represents the second age group i.e., 60-70 years and rectangle represent the third age group i.e., 30-40 years. The portion which represents all the three age groups is:



- a. 2 b. 7
c. 4 d. 6

25. Of the five cities, A, C, D and G situated close to each other, A is to the west of C. B is to the south of A, G is the north of C and D to the east of G. Then B is in which direction with respect to D?

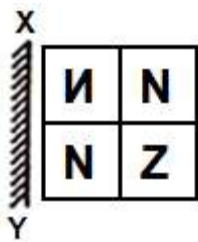
- a. South-East b. South-West
c. North-West d. North-east

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



- a. b.
- c. d.

27. In the following question, if a mirror is placed on the line XY, then which of the answer figures is the correct image of the given question figure?



- a.

N	N
Z	H

 b.

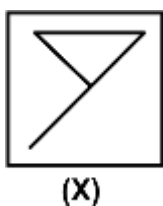
H	H
Z	H
- c.

N	N
H	Z

 d.

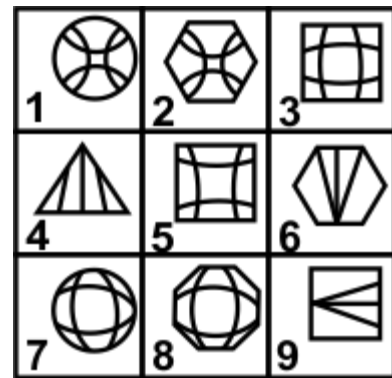
H	N
Z	H

28. Study the given figure properly. Figure (X) is followed by four alternative figures a, b, c and d such that figure (X) is embedded in one of them. Trace out the alternative figure which contains figure (X) as its part:



- a. b.
- c. d.

29. Study the given figures carefully and group the given figures into three classes using each figure only once:



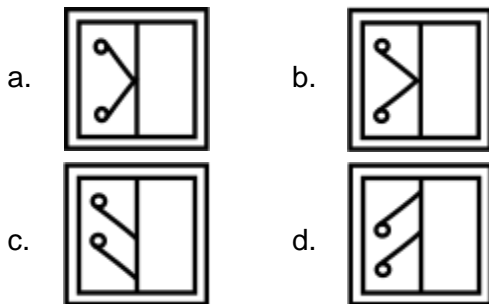
- a. 2, 4, 7; 1, 8, 9; 3, 5, 6
 b. 1, 2, 5; 4, 6, 9; 3, 7, 8
 c. 2, 6, 7; 1, 5, 8; 3, 4, 9
 d. 2, 8, 7; 1, 5, 9; 3, 5, 6

30. Find out the particular figure in which given one dot is placed in the same manner as in the question figure:



- a. b.
- c. d.

31. A square transparent sheet with a pattern is given. Figure out from the four alternatives as to how the pattern would appear when the transparent sheet is folded at the middle line shown:



32. The following question consists of pair of words bearing a relationship among these, from amongst the given alternatives, pick up the pair that best illustrates a similar relationship.
Rectangle : Pentagon

- a. Side : Angle
b. Diagonal : Perimeter
c. Triangle : Rectangle
d. Circle : Square

33. Three words are given in the following question, which have something in common among themselves. Choose the one with the quality common to the given three words:
Snake : Crocodile : Lizard

- a. Animals b. Insects
c. Reptiles d. Domestic

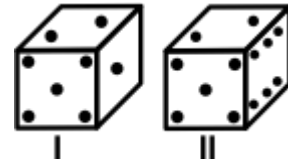
34. What should come in the place of question mark (?) in the following alphanumeric series?
2B, 4C, 8E, 14H, ?

- a. 22L b. 16K
c. 20L d. 24L

35. In the following question, arrange the jumbled words and find the correct antonym of CONCEAL:

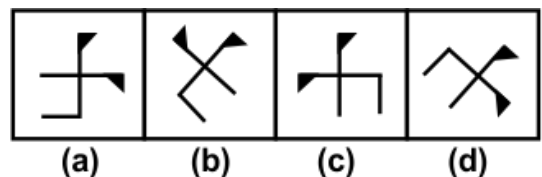
- a. VEREAL b. ICTUNERAN
c. SSGDEIIU d. RVCOE

36. From the given two positions of a single dice, find the number of dots at the face opposite to the face having 1 dot:



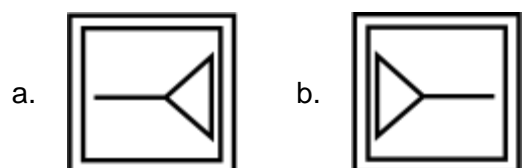
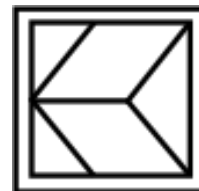
- a. 1 b. 2
c. 3 d. 6

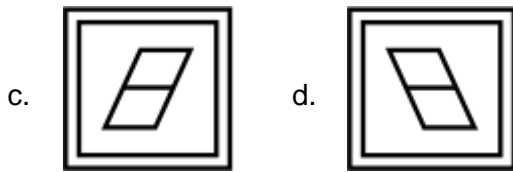
37. In the following question, four figures are given. Three are similar in a certain way and so form a group. Find out which one of the figures does not belong to that group:



- a. a b. b
c. c d. d

38. In the following question, out of the 4 given answer options, one option image is embedded in the question figure. Find the correct option:





39. In the following question, some groups of letters are given, all of which except one, share a common similarity while one is different. Select the odd ones:

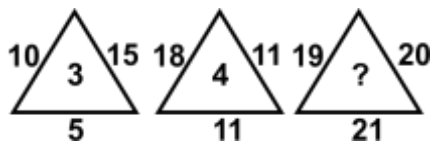
- a. dcba b. zyxw
c. srpqr d. hgfe

40. If day before yesterday was Saturday, then what day of the week will it be after tomorrow?

- a. Friday b. Thursday
c. Wednesday d. Tuesday

Achievers' Section (Each Question is 2 Marks)

41. Find the missing number:







- a. 5 b. 6
c. 7 d. 8

42. Choose the correct water image of the given object:



(X)

- a.  b. 
- c.  d. 

43. James is the father of Rose. Rose is the brother of Kate. Kate is the wife of Jack. How is Jack related to Rose?

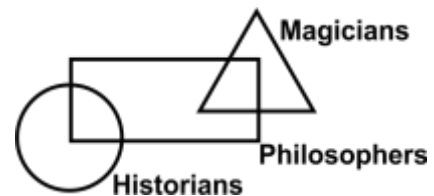
- a. Brother-in-law b. Father-in-law
c. Son d. Uncle

44. Three words are given in the following question, which have something in common among themselves. Out of four given alternatives, choose the most appropriate description about these three words:
Leap : Frisk : Trot

- a. They are young one of animals.
b. They are Indian monuments.
c. They are movement of animals.
d. They are the name of famous zoological parks.

45. Read the following information and then answer the question that follows. In the figure, the rectangle stands for philosophers, circle for historians and triangle for magicians.

According to the below diagram, which one of the following statements is true?



- a. All historians are magicians.
b. Some magicians are philosophers as well as historians.
c. All historians are either philosophers or magicians.
d. Some historians are philosophers.

46. A solid cube is formed with 27 smaller cubes. One pair of opposite faces of this cube is painted red, another pair is painted yellow and the third pair of opposite faces is painted white. How many smaller cubes are painted yellow and white only?

- a. 4 b. 8
c. 12 d. 16

47. In making decisions about important question, it is desirable to be able to distinguish between 'strong' arguments and 'weak' arguments. 'Strong' arguments are those which are both important and directly related to the question. 'Weak' arguments are those which are of minor importance and also may not be directly related to the question or may be related to a trivial aspect of the question. The question below is followed by two arguments numbered I and II. You have to decide which of the arguments is a 'strong' argument and which is a 'weak' argument.

Statement- Should small states be formed out of bigger states in India?

Arguments

- I. Yes, there will be greater administrative convenience.
 - II. No, it will jeopardise the national integration.
- a. Only Argument I is strong
 - b. Only Argument II is strong
 - c. Either I or II is strong
 - d. Both I and II are strong

48. In the question given below, there are four statements followed by two conclusions numbered I and II. You have to take the four given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the four statements disregarding commonly known facts:

Statements

- I. All tablets are packets.
- II. No packet is bag.
- III. Some bags are toys.
- IV. All toys are puppets.

Conclusions

- I. Some puppets are tablets.

II. Some puppets are bags.

- a. Only Conclusion I follows
- b. Only Conclusion II follows
- c. Either Conclusion I and II follows
- d. Neither Conclusion I nor II follows

49. Arthur starts from a point A and walks 5 m towards North-East direction and reaches point B. From here, he travels 8 m in East direction and reaches point C. From C he travels towards South-West direction and reaches point D after travelling a distance equal to AB. At last, he turns towards West direction and reaches point A. How much distance has been covered by Arthur and which geometrical figure has been formed by the path travelled by him?

- a. 26 m, square
- b. 26 m, parallelogram
- c. 26 m, trapezium
- d. 16 m, parallelogram

50. Read the following passage and answer the question that follows:
A tennis coach is trying to put together a team of four players for the forthcoming tournaments. For this, 7 players are available where males are A, B and C and females are W, X, Y and Z. All players have equal capability and at least 2 males will be there in the team. For a team of four, all players must be able to play with each other, but B cannot play with W, C cannot play with Z and W cannot play with Y.

If Y is selected and B is rejected, the team will consist of which one of the following groups?

- a. A, C, W and Y
- b. A, C, X and Y
- c. A, C, Y and Z
- d. A, W, Y and Z

Answer Key

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