



CREST Reasoning Olympiad (CRO)

Previous Year Paper (2023-24)

Class 8 (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. Find the missing number in the given series:

| | | | | |
|------|------|------|------|---|
| 8192 | 7283 | 6374 | 5465 | ? |
|------|------|------|------|---|

- a. 5557 b. 4556
c. 3364 d. 4535

2. In the following question, the letters of the words (given in the options) have been jumbled up. Reconstruct the words and identify the one which is the answer to the given clue:

Three times

- a. WIECT b. HTIECR
c. SUQAER d. RONAEG

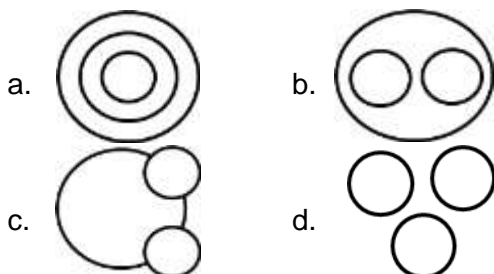
3. In the following question, the letters of the words (given in the options) have been jumbled up. Reconstruct the words and identify the one which is the answer to the given clue:

Opposite of dark

- a. DIHE b. HTIWE
c. RTGHIB d. CKLAB

4. Choose the Venn diagram which best illustrates the three given classes in the question:

Badminton, Carom, Table tennis



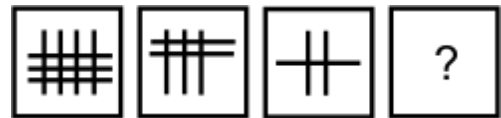
5. If A is the sister of B and B is the brother of C, and C is the father of D, then how is A related to D?

- a. Mother b. Sister
c. Sister-in-law d. Aunt

6. O is in the South of P which is in the East of S. If L is in the West of S, then in which direction of P is L?

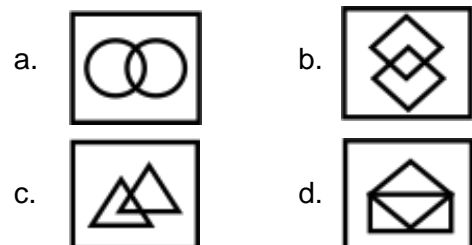
- a. East b. West
c. North d. South

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



- a. b.
c. d.

8. Find the odd one out:



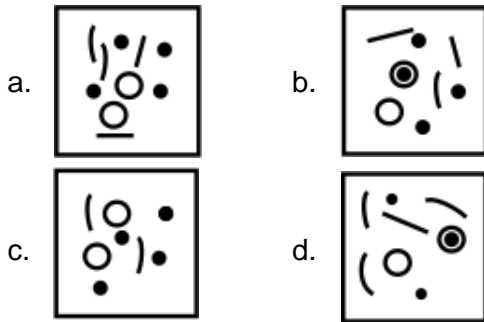
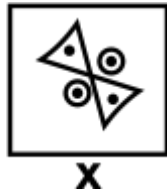
9. In the following question, choose the correct water image of the given letters:

TAMNCZ

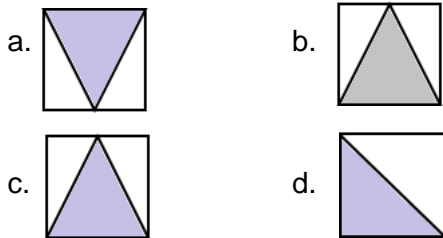
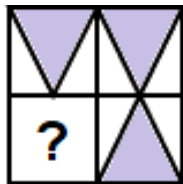
- a. **TAMNCZ**
b. **TAMNCZ**
c. **TAMNCZ**
d. **TAMNCZ**

10. In the following question, select the option in which all the components

(dimensions may be different) of the question figure (X) are available:



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

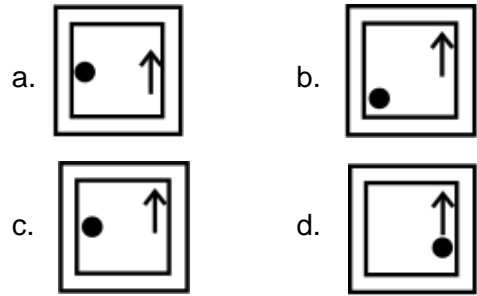
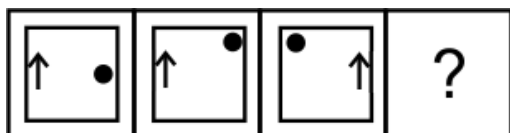


12. Identify the pattern and find out the missing digit:

| | | |
|---|---|----|
| 9 | 4 | 20 |
| 8 | 5 | 12 |
| 7 | 6 | ? |

- a. 2 b. 4
c. 6 d. 9

13. Complete the series of figures, by selecting the missing figure from the given options:



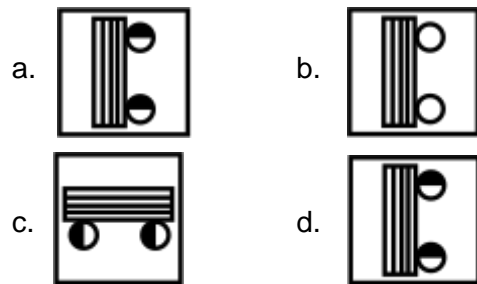
14. If a dog is called a cat, a cat is called rat, a rat is called a mat, the mat is called cow then which of the following is not an animal?

- a. Cow b. Dog
c. Rat d. Mat

15. Leo introduces a man as "He is the son of the woman who is the mother of the husband of my mother". How is Leo related to the man?

- a. Uncle b. Son
c. Cousin d. Grandson

16. Select the related figure from the given alternatives:



17. Three of the following four are alike in a certain way and so form a group. Which of the following does not belong to that group?

- a. ORQP b. OLNM
c. WZYX d. PSRQ

18. In the following list of letters how many X's are followed by Y and preceded by W?

A C E G I W X Y K M O Q S U W Y W
X Y Z X V T R P N W X Y L F D W X Y
B

- a. 4 b. 5
c. 6 d. 7

19. If T means 'x', U means '-', V means '÷' and W means '+', then what will be the value of the following expression?
1000V10T5U250W50

- a. 380 b. 450
c. 300 d. 350

20. Which of the following should be the correct sign to balance the following equation?

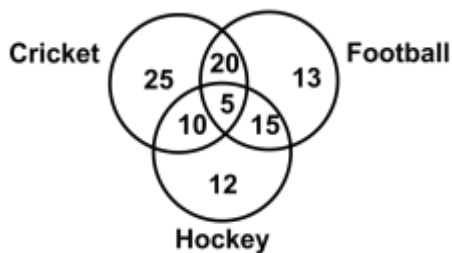
2 4 8 5 = 11

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

21. If J represents +, K represents -, L represents ÷ and M represents x, then what should 18M36L12K6J7 be?

- a. 115 b. 55
c. 648/18 d. 25

22. In this diagram, the total number of 100 players play different games:
How many players play football and hockey but not cricket?

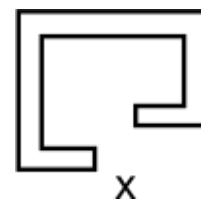


- a. 20 b. 25
c. 15 d. 5

23. Robert wishes to go to the temple. From his home, he goes towards the north then turns left and then turns right and finally, he turns left and reaches the temple. In which direction his temple is situated with respect to her home?

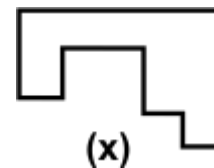
- a. North-East b. North-West
c. South-East d. South-West

24. Select a figure from the given options, which fits exactly into figure (X) to form a complete square:



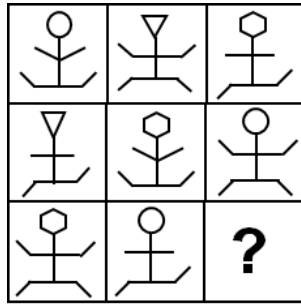
- a. b.
- c. d.

25. Choose one figure from the alternatives, which fits exactly into figure (x) to form a complete square:



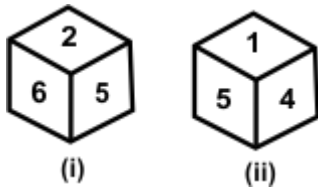
- a. b.
- c. d.

26. Choose which of the following options completes the figure matrix:



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

27. The given two positions are of the same dice whose each surface bears a number among 1, 2, 3, 4, 5 and 6. What number is opposite to 3 in the figure shown below?



- a. 2 b. 4
c. 5 d. 6

28. Find out which of the following figures can be formed from the pieces given in figure (x):



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

29. The following question consists of two words each that have a certain

relationship with each other. Select the pair that has the same relationship as the original words:
Milk : Cream :: ?

- a. College : Students
b. Sugar : Sweet
c. Clay : Pottery
d. Fruit : Glucose

30. If in a certain code language, 'HACB' is written as '8132', then how will 'DEFA' be written in that language?

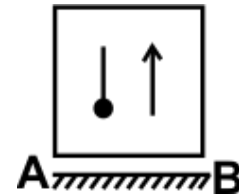
- a. 4651 b. 4561
c. 4156 d. 5641

31. In the following question, one number is wrong in the series. Find out the number:

3, 2, 8, 9, 13, 22, 18, 32, 23, 42

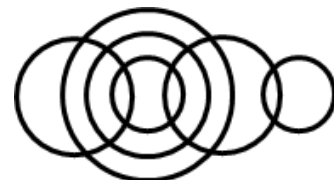
- a. 22 b. 13
c. 9 d. 8

32. In the following question, choose the correct mirror image of the following image:



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

33. How many circles are there in the following figure?



- a. 6 b. 7
c. 10 d. 8

34. In the following question, four options are given. Out of these three are alike in a particular way but remaining one is different. Find the odd one from the given options which is different from others:

- a. 63 b. 140
c. 112 d. 97

35. If in a certain code language, 'PICK' is coded as 'OQHJBDJL', then how will 'FLAT' be written at that language?

- a. EGKMZBSU b. EGKMZBUS
c. EGKMBZSU d. EKGMZBSU

36. In the following question, all the equations except one have been solved according to a certain rule. You are required to solve the unsolved equation following the same rule and to choose the correct answer out of the given options:

$$5 \times 3 \times 9 = 395, 9 \times 7 \times 5 = 759, 7 \times 6 \times 4 = ?$$

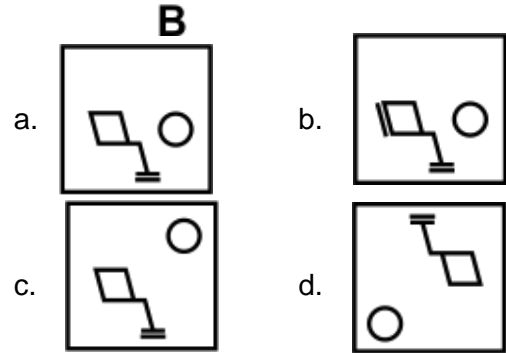
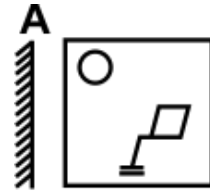
- a. 676 b. 476
c. 647 d. 764

37. In the following letter series, some of the letters are missing which are given in that order as one of the alternatives below it. Select the correct alternatives:

a_c _ba_ca_cb

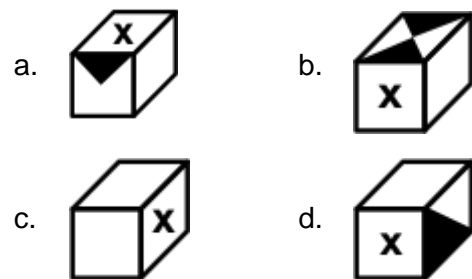
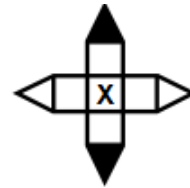
- a. abcc b. acba
c. bcaa d. bcba

38. In the following question, choose the correct mirror image from the alternatives, when mirror is placed on the line AB:



39. In the question given below, an unfolded dice is given. You are required to select the correct answer choice which is formed by folding the unfolded dice:

Unfolded Dice



40. Which of the following will be the correct mirror image of the given figure, when the mirror is placed vertically to the right?

@#&*965

- a. 569*8#@
b. 20e*8#@
c. 596*8#@
d. @#&*e09

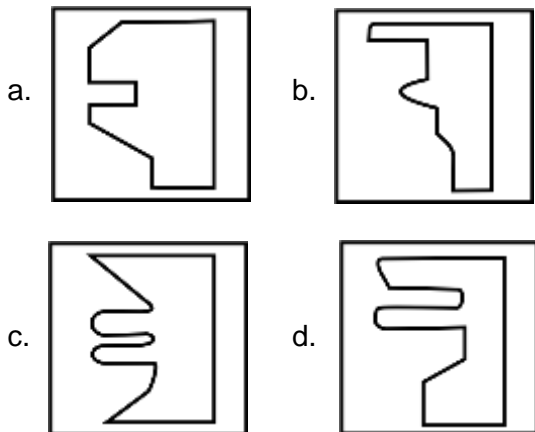
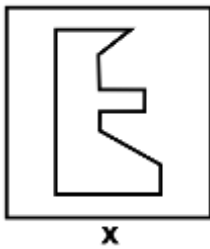
Achievers' Section (Each Question is 2 Marks)

41. In the following question, the letters of the words (given in the options) have been jumbled up. Reconstruct the words and identify the one which is the answer to the given clue:

A name of country

- a. UMBIAM b. NRAFEC
c. NDLOON d. ARPIS

42. In the following question, question figure (x) is given followed by the other four alternatives figures. It is required to select one figure from the alternatives, which exactly fits into figure (x), to form a perfect square:



43. In the question given below, there is a statement followed by two conclusions numbered I and II. You have to assume everything in the statement to be true, then consider the two conclusions together and decide which of them logically follows beyond a reasonable doubt from the information given in the statement.

Statement- Prostitution is also one of the main reason of AIDS.

Conclusions

- I. AIDS is an incurable disease.
- II. AIDS cannot be completely controlled by banning prostitution only.

- a. Only conclusion I follows
- b. Only conclusion II follows
- c. Either I or II follows
- d. Neither I nor II follows

44. Read the following information carefully and answer the question given below. A cube is painted red on two adjacent surfaces and black on the surfaces opposite to red surfaces and green on the remaining faces. Now, the cube is cut into 64 smaller cubes of equal size.

How many smaller cubes will have atleast two surfaces painted with red colour?

- a. 4
- b. 8
- c. 32
- d. 24

45. In the following question, there is certain relationship between the two given numbers on one side of (::) and one number is given on another side of (::) where another number is to be found from the given alternatives, having the same relationship with this number as the numbers of the given pair bear. Choose the best alternatives:

$$85 : 40 :: 77 : ?$$

- a. 14
- b. 48
- c. 49
- d. 50

46. In the question given below, there are two statements A and B. These statements may be either independent causes or may be effects of independent causes or of a common cause. One of these statements may be the effect of the other statement. Read both the statements and decide which of the following answer choices

correctly depicts the relationship between these two statements.

- A. Government has decided to distribute part of the food grain stock through Public Distribution System to people below poverty line.
- B. There has been bumper kharif crop for the last two seasons.

- a. Statement A is the cause and Statement B is its effect
- b. Statement B is the cause and Statement A is its effect
- c. Both statements are independent causes
- d. Both statements are the effects of independent causes

47. 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 pictures are paintings.
- II. All paintings are photographs.
- III. Some photographs are designs.
- IV. Some designs are movies.

Conclusions

- I. Some paintings are designs.
- II. Some photographs are movies.

- a. Only conclusion I follows
- b. Only conclusion II follows
- c. Either I or II follows
- d. Neither I nor II follows

48. Read the following information carefully and answer the question given below: Arthur, Kate, Sam, George and Mike are friends and good players. Arthur and Kate are good at hockey and

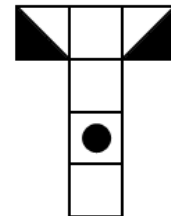
volleyball. Sam and Arthur are good at hockey and tennis. George and Kate are good at cricket and volleyball. Sam, George, and Mike are good at football and tennis.

Who is good at tennis, volleyball, and hockey?

- a. George
- b. Kate
- c. Sam
- d. Arthur

49. In the question given below, an unfolded dice is given. You are required to select the correct answer choice which is formed by folding the unfolded dice:

Unfolded dice



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

50. Sania started walking towards the South. She took a right turn after walking 5 m. She again took a left turn after walking 2 m. In which direction is she facing now?

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

Answer Key

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