



# CREST Reasoning Olympiad (CRO)

## Previous Year Paper

### Class 6 (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 a certain code language, "School is boring" is written as - "347", "School has teacher" is written as - "385", and "Teacher is good" is written as - "541". Then what will be the code for "boring"?

- a. 4
- b. 7
- c. 3
- d. Cannot be determined

2. How many meaningful words of four letters can be formed by using the first, third, fifth and eighth letter of the English Alphabetical Series using each letter only once?

- a. Two
- b. One
- c. Three
- d. None

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



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

4. Find the next element of the following series:

32, 39, 48, 59, 72, ?

- a. 87
- b. 88
- c. 86
- d. 85

5. If 'A' means '+', 'B' means '÷', 'C' means '-' and 'D' means 'x', then what will be the resultant of 15 B 3 A 18 C 13?

- a. 10
- b. 5
- c. 16
- d. 20

6. Which of the following Venn diagram best represents the relationship between the given classes?

Cat, pet, dog

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

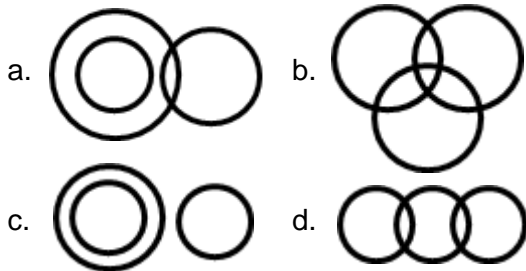
7. Select a suitable figure from the four alternatives that would complete the given figure matrix:

		?

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

8. Which of the following Venn diagram best represents the relationship between the given classes?

Indians, teens, athletes



9. In a certain code language, ORANGE is written as 671385, PEACH is written as 45162, then CHANGE will be written as:

- a. 627583                      b. 726345  
c. 621385                      d. 764532

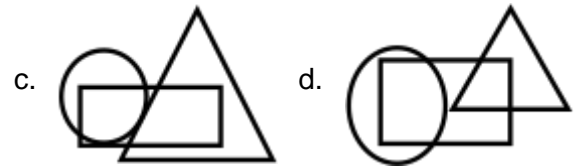
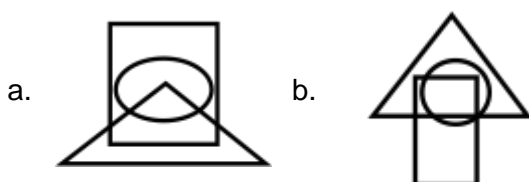
10. If 'Q + R' means 'Q is mother of R', 'Q ÷ R' means 'Q is brother of R', 'Q × R' means 'Q is husband of R', 'Q - R' means 'Q is sister of R', then how is C related to B, if it is given that D + C ÷ E - A × B?

- a. Aunt  
b. Sister-in-law  
c. Brother-in-law  
d. Cannot be determined

11. Select the figure which satisfies the same conditions of placement of the dots as in Fig. (i):



Fig. (i)

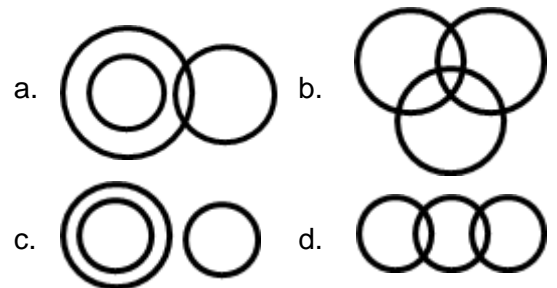


12. In a certain code, PRETEND is written as DNPRT, NEVER is written as NRV, then REVEAL will be written as:

- a. LERV                      b. LRV  
c. VRL                      d. RVL

13. Which of the following Venn diagram best represents the relationship between the given classes?

Farmer, rich, young



14. In the following question, there is a certain relationship between two given words on one side of (::). Find the word on the other side so that the second pair has the similar relationship with the first pair:

XMAE : 16 :: VTNG :: ?

- a. 21                      b. 18  
c. 35                      d. 14

15. 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:

Sin : Crime

- a. Man : Animal  
b. Home : Court  
c. Morality : Legality  
d. Jury : Priest

16. Choose the number which is similar to the number in the following set:

525, 813, 714

- a. 353                      b. 329  
c. 606                      d. 520

17. Three words are given in the following question, which have something in common among themselves. Out of four given alternatives, choose the most appropriate option which has a similar relationship to these three words:

Stump : Cricket : Point

- a. Deuce : Dribble : Racket  
b. Diamond : Pitch : Hit  
c. Dribble : Hockey : Corner  
d. Penalty : Shoot : Boxing

18. In the following question, there is a certain relationship between two given words on one side of (::). Find the word on the other side so that the second pair has the similar relationship with the first pair:

63 : 21 :: 27 : ?

- a. 6                          b. 9  
c. 1                          d. 3

19. In the following question, three alternatives out of four are the same in a certain way and so form a group. Find the one that does not belong to this group:

- a. Carpenter              b. Goldsmith  
c. Blacksmith              d. Driver

20. If the English alphabet is written in the backward order, then which letter is 7<sup>th</sup> to the right of K?

- a. A                          b. B  
c. C                          d. D

21. How many meaningful four English words can be made with letters TPSI, using each letter only once in each word?

- a. None                      b. One  
c. Two                        d. Three

22. Jimmy is shorter than Kate but taller than Richard, Mike is the tallest. Eva is a little shorter than Kate and little taller than Jimmy. If they stand in the order of increasing heights, who will be the second?

- a. Eva                        b. Jimmy  
c. Richard                  d. Mike

23. Sara is 14<sup>th</sup> from the right end in a row of 40 girls. What is her position from the left end?

- a. 25<sup>th</sup>                        b. 27<sup>th</sup>  
c. 21<sup>st</sup>                        d. 30<sup>th</sup>

24. If '-' stands for 'addition', '÷' for 'multiplication', 'x' for 'subtraction' and '+' for 'division', then which of the following is correct?

- a.  $25 \times 12 - 14 \div 4 + 6 = 16$   
b.  $25 - 12 + 14 \div 2 \times 4 = 15$   
c.  $25 - 15 + 5 \div 4 \times 16 = 21$   
d.  $25 + 11 - 4 + 10 \times 6 = 20$

25. What should come in the place of question mark (?) in the following alphanumeric series?

C-3, E-5, G-7, I-9, ?, ?

- a. X-24, M-21              b. K-11, M-13  
c. O-15, X-24              d. M-18, K-14

26. What should come in the place of question mark (?) in the following alphanumeric series?

C4X, F9U, I16R, ?

- a. L25P                      b. K25P

c. L27P

d. L25O

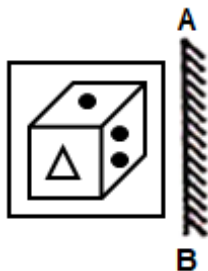
27. In the following letter series, some of the letters are missing which are given in that order as one of the alternatives below it. Select the correct alternative:  
\_bc\_ca\_aba\_c\_ca

- a. bcbba
- b. babac
- c. bbcba
- d. abcbb

28. 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 alternative:  
\_zy\_zxy\_yxzx\_zyx\_xy

- a. yxzyz
- b. zxyzy
- c. yzxyx
- d. xyzyz

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



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

30. Read the following information carefully to answer the question that follows:

- I. 'P x Q' means P is the father of Q.
- II. 'P - Q' means P is the sister of Q.
- III. 'P + Q' means P is the mother of Q.

IV. 'P ÷ Q' means P is the brother of Q.

Which of the following represent 'J is the son of F'?

- a.  $J \div R - T \times F$
- b.  $J + R - T \times F$
- c.  $J \div M - N \times F$
- d. None of these

31. Study the following information carefully to answer the question:

- i. 'A \$ B' means 'A is the mother of B'.
- ii. 'A # B' means 'A is the father of B'.
- iii. 'A @ B' means 'A is the husband of B'.
- iv. 'A % B' means 'A is the daughter of B'.

Which of the following expressions indicates 'H is the brother of N'?

- a.  $N \% F @ D \$ H$
- b.  $N \% F @ D \% H$
- c.  $H \% F @ D \$ N \# R$
- d.  $H \# R \% D \$ N$

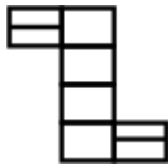
32. If the day before yesterday was Thursday, then when will be the Monday?

- a. Day after tomorrow
- b. Today
- c. Tomorrow
- d. Two days after days

33. A person starts towards South direction. Which of the following orders of directions will lead him to East direction?

- a. Right, Right, Right
- b. Left, Left, Left
- c. Left, Right, Right
- d. Right, Left, Right

34. How many rectangles are there in the figure given below?



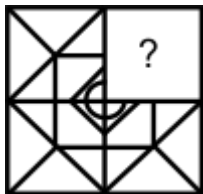
- a. 8                                      b. 18  
c. 17                                      d. 20

35. How many triangles are there in the following figure?



- a. 10                                      b. 8  
c. 12                                      d. 11

36. In the following question, a part of the question figure is missing. Find out from the given options that can replace the '?' to complete the question figure:



- a.      b.   
c.      d.

37. 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 no surface painted?

- a. 0                                      b. 4  
c. 8                                      d. 16

38. In the following question, certain pairs of words are given. Out of which, the words in all pairs, except one, bear a certain common relationship. Choose the odd pair:

- a. Captain : Team  
b. Boss : Gang  
c. Prime Minister : Cabinet  
d. Artist : Troupe

39. In the following question, three words are given which have something in common among themselves. Out of the four alternatives, choose that alternative which is similar to the given words:

Release : Liberate : Emancipate

- a. Pardon                                      b. Ignore  
c. Quit                                      d. Free

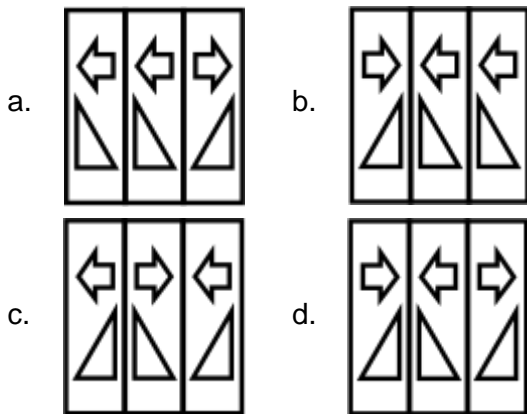
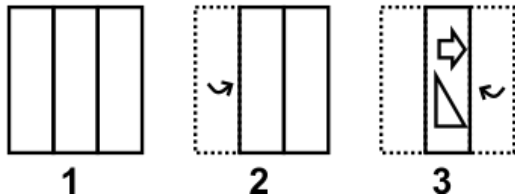
40. Select the related word from the given alternatives:

ACE : BDF :: MOQ : ?

- a. BMW                                      b. NQP  
c. NPR                                      d. BEF

## Achievers' Section (Each Question is 2 Marks)

41. A piece of paper is folded and cut as shown below in the question figures. From the given answer figures, indicate how it will appear when opened:



42. There are six friends namely Rachel, David, Sam, Betty, Kevin and Bob. Each of them has a different weight. David is the third lightest. There are two such persons whose weight lies between David and Kevin. The second heaviest person weighs 48 kg. Bob is heavier than Sam but lighter than Betty. Sam is not the lightest. Rachel weighs 40 kg. How many persons are heavier than Sam?

- a. 4                      b. 3  
c. 2                      d. None

43. Point E is 2.5 m to the south of point D. Point H is 3 m to the east of point E. Point F is 1 m to the east of point G which is 0.5 m to the south of point H. What is the shortest distance between point D and F?

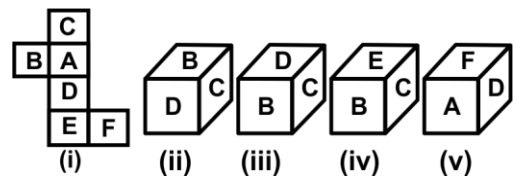
- a. 8 m                    b. 12 m  
c. 10 m                 d. 5 m

44. Seven friends namely, A, B, C, D, E, F and G are sitting in a row facing towards north. E sits fifth to the right of F. One person sits between E and G. C sits to the immediate left of A. More than two persons sits between C and D.

Who sits second to the right of B?

- a. D                      b. A  
c. C                      d. G

45. Choose the box that cannot be formed by folding the sheet of paper given in fig (i):



- a. Only (iv)  
b. Only (iii) and (ii)  
c. Only (v) and (ii)  
d. Only (iii)

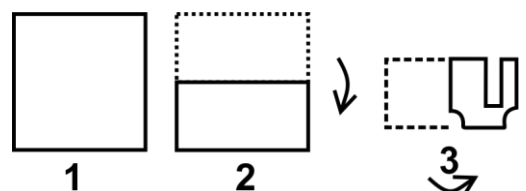
46. If  $20A + 4B + 5 = 10$  and  $21A + 3 = 7$ , then  $6B + 15A + 5 = ?$

- a. 12                      b. 18  
c. 8                        d. 9

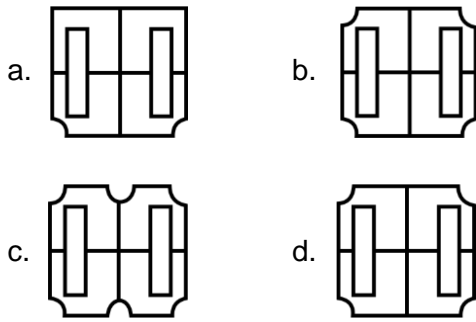
47. In a certain code, DEBATE is written as CFABSF, SISTER is coded as RJRUDS, then BLOWER will be written as:

- a. ANMDXS              b. AMNXDS  
c. ANDMSX              d. CDMWBU

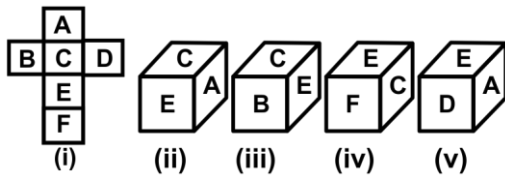
48. A piece of paper is folded and cut as shown below in the question figures. From the given answer figures, indicate how it will appear when opened:







49. Choose the box that will be formed by folding the sheet of paper given in fig (i):



- Only (iv), (ii) and (iii)
- Only (iii) and (ii)
- Only (ii) and (iv)
- Only (iii)

50. Read the following information carefully and then answer the question based on them.

In a cycling race, five participants from various nations- Chinese, Nepalese, Indians, Iraqi and English take part. Track 1 is extreme left and track 5 is extreme right.

- The following condition exists:
- The Nepalese and English are not cycling adjacent to each other.
- The Iraqi is not in any of the extreme tracks.
- The Chinese is to the left of the Indians.

If the Nepalese is in track 3, the Chinese in track 1, then the Indian could be in \_\_\_\_\_.

- track 4
- track 2
- track 2 or 4
- none of the above

## Answer Key

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