



## CREST Reasoning Olympiad (CRO)

# Sample Paper

## Pattern and Marking Scheme

| Grade              | Topic/Section      | No. of Questions | Marks per Question | Total Marks |
|--------------------|--------------------|------------------|--------------------|-------------|
| Grade 5            | Logical Reasoning  | 40               | 1                  | 40          |
|                    | Achiever's Section | 10               | 2                  | 20          |
| <b>Grand Total</b> |                    | <b>50</b>        |                    | <b>60</b>   |

The total duration of the exam is 60 minutes.

## Syllabus

**Section 1:** Patterns, Analogy and Classification, Geometrical Shapes and Solids, Embedded Figures, Mirror Images and Water Images, Direction Sense Test, Possible Combinations, Ranking Test, Alphabet Test and Logical Sequence of Words, Puzzle Test, Coding - Decoding.

**Achievers Section:** Higher Order Thinking Questions - Syllabus as per Section 1

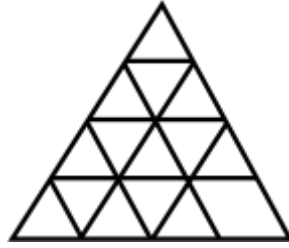
For more details, visit <https://www.crestolympiads.com/reasoning-olympiad-cro>

## Logical Reasoning (Each Question is 1 Mark)

- In the question, some groups of letters are given. All of which except one, share a common similarity. Select the odd one.  
a. BCDE  
b. JKLM  
c. STVU  
d. WXYZ
- There is a certain relationship between the pair of words given on either side of (::); identify the relationship of the given pair and find the matching term:  
REASON : SFBTPO :: THINK : ?  
a. SGHMJ  
b. UIJOL  
c. UHNKI  
d. UJKPM
- Here two words are given which are related to each other in a particular manner and you have to find the word from the given alternatives which has the exact same relationship to the third word, as the first two.  
'Cup' is related to 'Crockery' in the same way as 'Pen' is related to  
a. Paper  
b. Books  
c. Stationary  
d. Ink
- Select the letter pair that has the same relationship as the original pair of words.  
Apostate : Religion  
a. Teacher : Education  
b. Traitor : Country  
c. Potentate : Kingdom  
d. Jailer : Law
- Three words are given in the following question, which have something in common among themselves. Choose the one common to the given three words.  
Pluto : Mercury : Saturn  
a. Mars  
b. Earth  
c. Jupiter  
d. Planets
- Find out the correct pair of words which will make an appropriate analogical relationship between the two words to the left of the sign of double colon and the same relationship between, the two words to the right of the sign of double colon (::).  
acme : mace :: face : ?  
a. cefa  
b. cfae  
c. cfea  
d. afce
- Find the odd word that does not belong to the group.  
a. Mile  
b. Centimetre  
c. Litre  
d. Yard

8. In the 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. 18  
b. 24  
c. 26  
d. 30
9. Find the middle letter between K and V in the English alphabet.
- a. N  
b. O  
c. Q  
d. No letter possible
10. Richard arranged his toys in a row. A train toy ranks sixteenth from the left and forty-ninth from the right. How many toys did Richard have?
- a. 63  
b. 64  
c. 65  
d. 66
11. If 836542 is coded for Garden, then what does 5436 stands for?
- a. RAGE  
b. DEAR  
c. GEAR  
d. NEAR
12. If in a certain code, 'DAUGHTER' is written as TERDAUGH', how will 'APTITUDE' be written in that code?
- a. DEUAPTIT  
b. UDEAPTIT  
c. DUEAPTIT  
d. DAUEPTIT
13. Ana remembers that Pam's birthday is certainly after January 12 but not later than the 16<sup>th</sup> of January. If Mike remembers that Pam's birthday is before the 17<sup>th</sup> of January but not before the 13<sup>th</sup> of January. On which of the following days was Pam's birthday?  
'Neck' is related to 'Tie' in the same way as 'Waist' is related to
- a. 14<sup>th</sup>  
b. 15<sup>th</sup>  
c. 16<sup>th</sup>  
d. Either 14<sup>th</sup> or 15<sup>th</sup>
14. If the day after tomorrow is Sunday, then what day of the week was it on the day before yesterday?
- a. Wednesday  
b. Friday  
c. Saturday  
d. Monday
15. Justin is moving towards the North. He takes the right turn. After this, he takes another right turn. In which direction, he is moving now?
- a. West  
b. East  
c. South  
d. North

16. How many straight lines are there in the following figure?



- a. 9
- b. 11
- c. 15
- d. 48

17. Arrange the following animals accordingly to their size in increasing order.

- 1. Dog
- 2. Horse
- 3. Ant
- 4. Giraffe
- 5. Mouse

- a. 3, 1, 5, 2, 4
- b. 3, 5, 1, 4, 2
- c. 3, 5, 1, 2, 4
- d. 3, 5, 2, 4, 1

18. How many times a solid cube of 4 cm side needs to be cut to obtain smaller cubes of 2 cm side?

- a. 2
- b. 3
- c. 5
- d. 7

19. N is more intelligent than M. M is not as intelligent as Y. X is more intelligent than Y but not as good as N. Who is the most intelligent of all?

- a. N
- b. M
- c. X
- d. Y

20. Select the missing number in the following series:

2, 4, 8, 16, ?

- a. 20
- b. 32
- c. 24
- d. 30

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

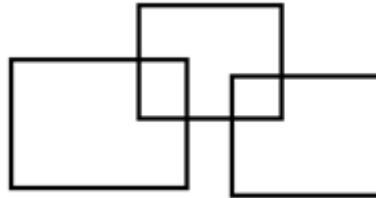
**Paint79**

- a. **97tniaP**
- b. **97tniaP**
- c. **Paint79**
- d. **Paint79**

22. One morning, while going to school, Kevin observed that his shadow fell exactly to his right. In which direction was Kevin moving?

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

23. From the given figures, select the one in which the question figure is present?



- a. 3
- b. 4
- c. 5
- d. 6

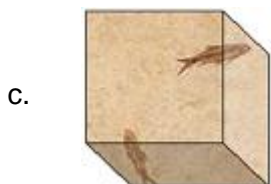
24. One evening, Richard and Tom were facing each other. Richard observed that Tom's shadow fell exactly to Tom's left. In which direction was Richard facing?

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

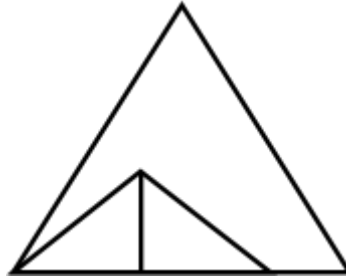
25. How many such pairs of letters are there in the word - "SLAVERY" which has as many letters between them as there are in the English alphabet series?

- a. 1
- b. 2
- c. 3
- d. 4

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



27. How many triangles are there in the given figure?



- a. 4
- b. 3
- c. 5
- d. 6

28. If FINGER is coded as 20-4-8-19-10-22, then how is GINGER coded?

- a. 19-8-4-10-19-22
- b. 22-20-19-10-4-8
- c. 10-19-4-19-8-22
- d. 19-4-8-19-10-22

29. Which of the following words can be formed by using the letters of the word - "CRUSHING"?

- a. Inch
- b. Cure
- c. Hang
- d. Rub

30. If INDIA = 125, ENGLAND = 343, then FRANCE = ?

- a. 57
- b. 125
- c. 216
- d. 512

31. Which of the following will be the correct water image of the given figure?



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

32. In a certain code language, "MOVE" is written as "6735", "PEST" is written as "4509". Then "STOVE" will be written as:

- a. 90765
- b. 09675
- c. 09735
- d. 09465

33. Select the related word pair from the given alternatives.

Husband : Wife

- a. Male : Female
- b. Boy : Girl
- c. Grandfather : Grandmother
- d. Cow : Bull

34. Which of the following will be the correct water image of the given figure?



35. Select the related number from the given alternatives.

32 : 6 :: 24 : ?

- a. 2
- b. 3
- c. 8
- d. 5

36. There are four girls namely Sara, Jack, Rachel and Pam. Each of them has a different height. Only Jack is shorter than Sara. Only Rachel is taller than Pam. Which of the following is the second tallest?

- a. Rachel
- b. Sara
- c. Pam
- d. Jack

37. Select the related word from the given alternatives.

Scooter : Wheels :: Helicopter : ?

- a. Fly
- b. Wings
- c. Eagle
- d. Pilot

38. How many triangles are there in the given figure?



- a. 4  
c. 3
- b. 5  
d. 6

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



40. In a certain language, 'REASON' is coded as 5 and 'BELIEVED' as 7. What is the code number of 'GOVERNMENT'?

- a. 10  
c. 7
- b. 9  
d. 8

## Achiever's Section (Each Question is 2 Marks)

41. In the following question, find out the correct pair of words which will make an appropriate analogical relationship between the two words to the left of the sign of double colon and the same relationship between, the two words to the right of the sign of double colon (::).

I : Bird :: Running : II

I. (A) Calling (B) Flying (C) Talking (D) Standing

II. (P) Kennel (Q) Dog (R) Hay (S) Farm

- a. BP  
c. DP
- b. BR  
d. BQ

42. In the 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. 4867  
c. 6243
- b. 5213  
d. 6469

43. Five girls namely Amy, Barbie, Cathy, Divya and Emma are standing in a row facing towards the north but not necessarily in the same order. Amy sits second to the left of Cathy.



Neither Amy nor Cathy is sitting at the ends of the row.

Barbie sits second to the right of Divya.

Divya and Cathy are not immediate neighbours.

Who among the following is an immediate neighbour of both Amy and Cathy?

- a. Emma
- b. Divya
- c. Barbie
- d. There is no such person

44. There are five friends namely Sam, Ron, Michael, David and Bob. Each of them likes a different food item namely Pizza, Cake, Pasta, Burger and Maggie but not necessarily in the same order.

Either Michael or Ron likes cake.

Bob likes burger.

Neither Sam nor David likes Maggie.

David doesn't like Pizza. Ron doesn't like Maggie.

David likes which of the following food item?

- a. Cake
- b. Pizza
- c. Pasta
- d. Maggie

45. A clock is kept horizontally on a table in such a way that at 4.30 p.m., if hour's hand was pointing towards South-West. At what time will the hour's hand be pointing towards North?

- a. 10.30 p.m.
- b. 3:00 p.m.
- c. 7.30 p.m.
- d. 9:00 p.m.

46. Five people namely Tom, Jerry, Mickey, Daffy and Goofy are living on five different floors of the same building. The bottommost floor is numbered as first, the floor above it as second and so on till the topmost floor which is numbered as fifth. Two persons are living between Tom and Goofy.

Goofy lives below Tom.

Only one person is living between Daffy and Mickey.

Daffy does not live on the third floor.

Jerry does not live on the fourth floor.

Who among the following lives on the topmost floor?

- a. Tom
- b. Mickey
- c. Daffy
- d. Cannot be determined

47. Which one set of letters when sequentially placed at the gaps in the given letter series shall complete it?

B C \_ E \_ C C E B \_ C \_

- a. CCEB
- b. CCBE
- c. CBCE
- d. CEBE

48. Select the missing number in the following series:

1, 1, 2, 6, 24, ?

- a. 36
- b. 64
- c. 120
- d. 240

49. Find the next term of the following series:

L, B, N, C, P, D, ?

- a. Q
- b. R
- c. E
- d. S

50. There are six friends namely Kim, Joy, Ali, Ron, Bill, and Ray. Each of them likes a different colour namely Red, Green, Pink, Blue, Black, and Orange but not necessarily in the same order.

Joy likes blue.

Bill does not like green.

Kim neither likes black nor green.

Ray neither likes pink nor green.

Ray does not like orange.

Bill and Ray do not like red.

Ron likes Orange.

Ray likes which of the following colours?

- a. Pink
- b. Black
- c. Blue
- d. Orange

## Answer Key

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