

# REASONING QUIZ

## Important Machine Input Output Reasoning Questions:

**Direction (1-5):** Study the following information carefully to answer the given questions. Number arrangement machine when given an input line of numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

**Input: 91 53 72 14 39 24 85 76 61 67**

Step I: 13 91 53 72 39 85 76 61 67 23

Step II: 40 13 91 72 85 76 61 67 23 54

Step III: 62 40 13 91 72 85 76 23 54 68

Step IV: 71 62 40 13 91 85 23 54 68 75

Step V: 86 71 62 40 13 23 54 68 75 92

**Input: - 56 40 100 28 63 84 16 34 71 88**

**Q.1. How many numbers are there between 33 and the one which is 4th from the left end in step IV?**

- (A) One
- (B) More than three
- (C) Three
- (D) None
- (E) Two

**Q.2. How many numbers are there between the one which is 2nd from the left end and 100 in step III?**

- (A) One
- (B) More than three
- (C) Three
- (D) None
- (E) Two

**Q.3. What is the position of 88 from the right end in penultimate step?**

- (A) First
- (B) Fifth
- (C) Second
- (D) Third
- (E) Sixth

**Q.4. Which of the following number is 4th to the left of 88 in the III step?**

- (A) 100
- (B) 15
- (C) 84
- (D) 33
- (E) None of these

**Q.5. How many steps will be required to complete the given arrangement?**

- (A) five
- (B) four
- (C) seven
- (D) eight

(E) None of these

**Direction (6 to 9) : Study the given information and answer the following question: A word and number arrangement machine is given an input line of words and numbers, it arranges them following a particular rule. The following is an illustration of input and rearrangement: (All the numbers are two-digit numbers)**

**Input: tall 48 13 rise alt 99 76 32 wise jar high 28 56 barn.**

Step 1: 13 tall 48 rise 99 76 32 wise jar high 28 56 barn alt.

Step 2: 28 13 tall 48 rise 99 76 32 wise jar high 56 alt barn.

Step 3: 32 28 13 tall 48 rise 99 76 wise jar 56 alt barn high.

Step 4: 48 32 28 13 tall rise 99 76 wise 56 alt barn high jar rise.

Step 5: 56 48 32 28 13 tall 99 76 wise alt barn high jar rise.

Step 6: 76 56 48 32 28 13 99 wise alt barn high jar rise tall.

Step 7: 99 76 56 48 32 28 13 alt barn high jar rise tall wise.

And Step VII is the last step of the above arrangement as the intended arrangement is obtained. As per the rules followed in the given steps, find out the appropriate steps for the given input.

**Input: 84 why sit 14 32 not best ink feet 51 27 vain 68 92.**

**Q.6. Which step number is the following output?**

**32 27 14 84 why sit not 51 vain 92 68 feet best ink**

(A) Step V

(B) Step VI

(C) Step IV

(D) Step III

(E) There is no such step.

**Q.7. Which word/number would be at 5th position from the right in Step V?**

(A) 14

(B) 92

(C) feet

(D) best

(E) why

**Q.8. How many elements (words or numbers) are there between 'feet' and '32' as they appear in the last step of the output?**

(A) One

(B) Three

(C) Four

(D) Five

(E) Seven

**Q.9. Which of the following represents the position of 'why' in the fourth step?**

(A) Eighth from the left

(B) Fifth from the right

(C) Sixth from the left

(D) Fifth from the left

(E) Seventh from the left

**Instructions (10 - 14): A word and number arrangement machine when given an input line of words**

**and numbers rearranges them following a particular rule. The following is an illustration of input**

**and rearrangement. (All the numbers are two-digit numbers.)**

Input: sine 88 71 cos theta 14 56 gamma delta 26

Step I. cos sine 71 theta 14 56 gamma delta 26 88

Step II. delta cos sine theta 14 56 gamma 26 88 71

Step III. gamma delta cos sine theta 14 26 88 71 56

Step IV. sine gamma delta cos theta 14 88 71 56 26

Step V. theta sine gamma delta cos 88 71 56 26 14

Step V is the last step of the rearrangement.

As per the rules followed in the above steps, find out in each of the following questions the appropriate steps for the given input.

**Input: for 52 all 96 25 jam road 15 hut 73 bus stop 38 46 (All the numbers given in the arrangement are two-digit numbers.)**

**Q.10. Which word/number would be at 8th position from the right in step IV?**

- (A) 15
- (B) road
- (C) hut
- (D) jam
- (E) stop

**Q.11. Which step number would be the following output?**

**bus all for 52 25 jam road 15 hut stop 38 46 96 73**

- (A) There will be no such step.
- (B) III
- (C) II
- (D) V
- (E) VI

**Q.12. Which of the following would be step VII?**

- (A) stop road jam hut for bus all 15 96 73 5246 38 25
- (B) road jam hut for bus all stop 15 25 38 46 52 73 96
- (C) stop road jam hut for bus all 96 73 5246 38 25 15
- (D) jam hut for bus all 25 road stop 15 96 73 52 46 38
- (E) There will be no such step.

**Q.13. Which word/number would be at 6th position from the left in step V?**

- (A) 25
- (B) stop
- (C) jam
- (D) all
- (E) road

**Q.14. Which of the following would be step III?**

- (A) hut for bus all 25 jam road 15 stop 38 96 73 52 46
- (B) for bus all 25 jam road 15 hut 38 stop 96 46 73 52



(C) hut for bus all jam road 15 stop 38 96 73 52 46 25

(D) for bus all 25 jam road 15 hut stop 38 46 96 73 52

(E) None of these

**Direction (15 to 20): Study the given information and answer the following question. A word and number arrangement machine are given an input line of words and numbers, it arranges them following a particular rule. The following is an illustration of input and rearrangement. (All the numbers are two-digit numbers)**

**Input : 61 person train 69 city 75 long 64 kind 73.**

Step 1: 75 61 person 69 city long 64 kind 73 train.

Step 2: 73 75 61 69 city long 64 kind train person.

Step 3: 69 73 75 61 city 64 kind train person long.

Step 4: 64 69 73 75 61 city train person long kind.

Step 5: 61 64 69 73 75 train person long kind city.

And Step V is the last step of the above arrangement as the intended arrangement is obtained. As per the rules followed in the given steps, find out the appropriate steps for the given input.

**Input: 38 expert 33 done insect 42 45 32 given find 47 again.**

**Q.15. Which of the following represents seconds from the left and third from the right in the fourth steps?**

(A) 42, given

(B) 38, find

(C) 42, insect

(D) 33, find

**Q.16. Which of the following elements appear (s) between '33' and 'insect' in step III?**

- (A) both done and again
- (B) only again
- (C) done, 32 and again
- (D) only done

**Q.17. How many elements are there between '47' and 'done' in the second last step?**

- (A) both done and again
- (B) only again
- (C) done, 32 and again
- (D) only done

**Q.18. Which step number is the following output? 42 45 47 38 expert 33 done again insect given find**

- (A) 2
- (B) 5
- (C) 4
- (D) 3

**Q.19. What is the position of '38' with respect to 'expert' in step 4?**

- (A) second to the left
- (B) eleventh to the left
- (C) second to the right



(D) immediate left

**Q.20. How many steps will be required to complete the arrangement?**

(A) five

(B) six

(C) seven

(D) eight

**ANSWERS**

**1.D**

**2.A**

**3.B**

**4.B**

**5.A**

**6.E**

**7.D**

**8.B**

**9.C**

**10.B**

**11.C**

**12.C**

**13.A**

**14.D**

**15.A**

**16.C**

**17.D**

**18.D**

**19.D**

**20.B**