SNS COLLEGE OF TECHNOLOGY

An Autonomous Institution

Coimbatore-35

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A++' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

23GET276 – VQAR II

II YEAR/ IV SEMESTER

UNIT 3 – VERBAL REASONING II

TOPIC – **Machine Input and Output and Coded Inequalities**

Machine Input and Output

•The machine input questions in the reasoning section may be asked in various forms. This includes:

•Rearranging the data based on Order

•Rearranging the data based on Interchanging the position of word and numbers

•Rearranging the data based on mathematical calculations

Machine Input and Output

What is Input-Output?

•Similar to the computer concept of Input-Output, the reasoning questions based on this topic involves an Input which is given in the form of numbers and words and then gives out an Output following a certain format.

In the questions asked in exams, one Input is given, followed by the steps used to get an Output and then the final Output.

MACHINE INPUT AND OUTPUT

Tips & Tricks to Solve the Input-Output Reasoning Questions

Given below are a few tips and tricks that may help you solve the input-output based questions faster, saving you some time in the final examination:

1. The first and the most important thing is to read the question carefully and analyse the steps based on which the Output is given. Once you carefully see the steps. You shall be able to apprehend the pattern that is being followed to get the Output.
2. At times, just looking at Step 1 and step 2 only candidates shall be able to understand the pattern followed.
3. Use tabular form while solving the question as the length of the Input may be longer and may make the solution even more confusing.
4. Do not try solving this type of question verbally as you may miss a few terms and steps and end up answering the questions wrongly.

MACHINE INPUT AND OUTPUT

Example 1:

INPUT: Train Car Airplane Ship Bus Cycle Autorickshaw

Step 1: Train Ship Car Airplane Bus Cycle Autorickshaw

Step 2: Train Ship Cycle Car Airplane Bus Autorickshaw

Step 3: Train Ship Cycle Car Bus Airplane Autorickshaw

Step 4: Train Ship Cycle Car Bus Autorickshaw Airplane

Based on the above-mentioned Input, Find what should be the Output of the following Input?

Solution: If we carefully examine the Input "Train Car Airplane Ship Bus Cycle Autorickshaw", Step 4 is the final step and the Output clearly shows that all the words have been arranged in descending order of their appearance in the Alphabetic Series.

MACHINE INPUT AND OUTPUT

INPUT: Driver Actor Astronaut Engineer Therapist Sportsperson Doctor

Thus, the Output for "**Diver Actor Astronaut Engineer Therapist Sportsperson Doctor**" shall be:

Step 1: Therapist Driver Actor Astronaut Engineer Sportsperson Doctor

Step 2: Therapist Sportsperson Driver Actor Astronaut Engineer Doctor

Step 3: Therapist Sportsperson Engineer Driver Actor Astronaut Doctor

Step 4: Therapist Sportsperson Engineer Doctor Driver Actor Astronaut

Step 5: Therapist Sportsperson Engineer Doctor Driver Astronaut Actor

Step 5, is the final step.

Now, based on the above example, given below are a few sample questions:

MACHINE INPUT AND OUTPUT

Q 1. How many steps does it take to get the final output?
Answer: 5 steps
Q 2. What is the 3rd word from the left in Step 4?
Answer: Engineer
Q 3. What will be Step 2?
Answer: Therapist Sportsperson Diver Actor Astronaut Engineer Doctor
Q 4. What is the position of the word “Astronaut” from left in Step 3?
Answer: 2nd from left

MACHINE INPUT AND OUTPUT

A machine input rearrangement is given below. Study and analyse the input and its steps and answer the following questions:

Input: 32 55 65 78 90 34 21 44 61 91 77

Step I: 12 32 55 65 78 90 34 44 61 77 19

Step II: 23 12 55 65 78 34 44 61 77 19 09

Step III: 43 23 12 55 65 44 61 77 19 09 87

Step IV: 44 43 23 12 55 65 61 19 09 87 77

Step V: 55 44 43 23 12 61 19 09 87 77 56

Step V: is the final step for the above input. Now, following a similar pattern, find output for the given input.

Input: 76 67 84 70 33 32 21 12 34 97 28

MACHINE INPUT AND OUTPUT

Q 6. Which will be the second number from the right end of the line in Step III?

1. 23
2. 43
3. 79
4. 48
5. 07

Q 7. How many steps shall be required to find the final answer?

Three

Four

Six

Seven

Five

MACHINE INPUT AND OUTPUT

Q 8. Which of these is Step V?

a. 33 23 82 12 21 34 79 48 67 07 76

b. 82 12 21 67 70 33 32 34 79 48 67

c. 33 32 28 12 21 34 97 84 76 70 67

d. 97 84 76 70 67 33 32 82 12 21

e. None of the above

MACHINE INPUT AND OUTPUT

Q 9. Which is the 5th number in Step I from the left end of the line?

a. 33

b. 32

c. 21

d. 70

e. 97

MACHINE INPUT AND OUTPUT

Q 10. Which step is “82 12 21 67 70 33 32 34 79 48 67”?

a. Step V

b. Step III

c. Step IV

d. Step I

e. Step II

THANK YOU