

SECTION B - Aptitude

10 questions / 35 minutes

- Q1. 4 mat-weavers can weave 4 mats in 4 days. At the same rate
how many mats would be woven by 8 mat-weavers in 8 days?
- Q2. How many seconds will a 500-meter-long train take to cross a man walking at a speed of 3 km/hr in the direction of the moving train if the speed of the train is 63 km/hr.
- Q3. Look at this series: 14, 28, 20, 40, 32, 64, ... What number should come next?
- Q4. How many times do the hands of a clock coincide in a day?
- Q5. Today is Thursday. After 132 days, it will be
- Q6. Two dice are tossed. The probability that the total score is a prime number is:
- Q7. In how many ways can a committee, consisting of 5 men and 6 women can be formed from 8 men and 10 women
- Q8. Mahendra Rajapaksa bought a total of 15 Aircraft, BMW and Audi for ₹68 million. He bought more BMW than Audi. The cost of each Aircraft was ₹8 million, each BMW was ₹3 million and each Audi was ₹4 million. How many Aircraft did he buy?
- Q9. The shopkeeper sold article A at a 20% loss and the cost price of article A was ₹4500. With that amount, he bought article B and sold it at a profit of 30%. What is the overall profit or loss in the whole transaction?

Q10. Excluding stoppages, the speed of a bus is 54 kmph, and including stoppages, it is 45 kmph. For how many minutes does the bus stop per hour?

Section - A - Programming 10 questions / 40 marks

Q1. What is the output for the provided input in the program below?

Input : arr = [-4, -3, -2, -1, 4, 3, 2]

Class Solution {

public int zoho(int[] arr) {

int cur = 0;

int h = cur;

for (int i : arr) {

cur += i;

h = Math.max(h, cur);

return h;

}

}

Q2. What is the output for the provided input in the program below?

Input : nums = [1, 2, 3, 1, 1, 3]

Class Solution {

public int zoho(int[] nums) {

int ans = 0;

for (int i = 0; i < nums.length; i++) {

for (int j = i + 1; j < nums.length; j++) {

if (nums[i] == nums[j])

ans++;

return ans;

}

Q3. What is the output for the provided input in the program below?

Input: nums = [1, 2, 1]

class Solution {

public int[] zoho (int[] nums) {

int[] ans = new int [2 * nums.length];

for (int i = 0; i < nums.length; i++)

ans[i] = ans[i + nums.length] = nums[i];

return ans;

}

}

Q4. What is the output for the provided input in the program below?

Input: Str s = ["flower", "flow", "flight"]

public String zoho (String[] str) {

if (str.length == 0) return "";

String temp = str[0];

for (int i = 1; i < str.length; i++)

while (str[i].indexOf(temp) != 0) {

temp = temp.substring(0, temp.length() - 1);

if (temp.isEmpty()) return "";

}

return temp;

}

Q5. Before model Array

Q6. What is the output for the provided input in the program below?

Input: nums = [0, 2, 1, 5, 3, 4]

```
public int[] buildArray (int[] nums) {  
    int[] ans = new int[nums.length];  
    for (int i = 0; i < nums.length; i++)  
        ans[i] = nums[nums[i]];  
    return ans;  
}
```

Q7. Array model

Q8. Binary search model

Q9. Binary search model

Q10. String model