Nirdesh Tech Fest 2024

Yukti Kala Prelims Round

Annual Tech Fest of RKMVCC

Organised by Department of Computer Science, RKMVCC

> Tick ✓ the correct answer in given circle. Each question carries 3 marks. There is negative marking of 1 for every wrong answer. No question has multiple correct answer.

1. The digit in the unit position of the integer $1! + 2! + 3! + 4! + \ldots 99! + 100!$ is
   ○ a. 1   ○ b. 2   ○ c. 3   ○ d. 0

2. Alice and Bob speaks truth in 60% and 70% cases respectively. Find the probability that they contradict each other in a statement.
   ○ a. 0.13   ○ b. 0.46   ○ c. 0.7   ○ d. 0.48

3. Consider the following pseudo code:

```
function(n){
 final = 0
 i = 1
 while n > 0:{
  remain = n % 2
  n = n / 2
  final = final + (remain * 10)
 i = i * 10
 }
 return final
}
```

What is the value of function(49)??
○ a. 100011   ○ b. 110010   ○ c. 101010   ○ d. 110001