

Subject: Design and Analysis of Algorithms

Instructor: Mustafa Ali Bamboat

Assignment – 2

Due Date: 24-Mar-2025 (7th Week)

Q1. Write pseudocode of the following:

- i. Bucket Sort
- ii. Counting sort
- iii. Radix sort

[6 marks]

Q2. show what it will print of screen if printfy(30), display only output, don't claim to prove it.

```
printfy(n)
  if(n>0)
    printfy([n/2])
  if n is odd then
    print '0'
  else
    print '1'
```

[2 marks]

Q3. Explain the run time complexity

1. Worst case complexity
2. Average case complexity

[2 marks]