

DATA STRUCTURES

BATCH – A

[TUESDAY JANUARY 10, 2017: 2:00 PM – 3:00 PM]

ASSIGNMENTS – 1

CODE: assign01

NOTES:

- i) Please carefully read all assignments and there is no choice.
- ii) Each problem in this assignment has to be answered in the same c file.
- iii) Create a .c file following the file name convention:

If your roll number is abc and assignment code is: assign01
Then use the following file name convention as follows:
Abc-assign01.c

For example, if the roll number is 143 and assignment code is assign01,
then the file name should be 143-assign01.c

- iv) Strictly follow the file name convention.

PROBLEMS [Total Marks: 20]:

- 1) **[Marks: 3]**
Compute the sum of first 20 prime numbers in [1... 500]
Print the sum as the output.
- 2) **[Marks: 3]**
Identify all integers that are divisible by 3 but not 2 in [1, 50].
Print all integers.
- 3) **[Marks: 4]**
Identify all nonzero factors of any positive integer in [60, 200]
Print all nonzero factors in a row with a space
- 4) **[Marks: 5]**
Write a program to count the number of odd digits in a given number
Print the count as the output.
- 5) **[Marks: 5]**
Write a program to generate Fibonacci sequence up to 80.
Compute their sum of the Fibonacci Sequence as well

Print the Fibonacci Sequence and the sum in a separate line.
