

SARASWATI EDUCATION SOCIETY'S
SARASWATI COLLEGE OF ENGINEERING, NAVI MUMBAI, KHARGHAR
DEPARTMENT OF ENGINEERING SCIENCES & HUMANITIES
FIRST UNIT TEST SEM- II (2014-2015)

Structured Programming Approach

Total Marks: 20

SET A

Time: 1 hour

Date:- / /2/15

Note: - Q. 1 is compulsory. Solve any 2 from remaining.

Q1. Write the output of following program [10M]

```
i) void main()          2M
{
  int i=64, j=2, k;
  k = i >> j;
  printf("i=%d", k);
}
```

32 16 8 4 2 0
2² 2¹ 2⁰

```
ii) void main()        2M
{
  int a=20, i;
  i = ! (a > 10);
  printf("i=%d", i);
}
```

i = 20
i = ! (20 > 10);
= ! (1)
= 0

```
iii) void main()      4M
{
  int a=10, b, c;
  c = b = a;
  b = a--;
  c = --a;
  a = --a - a--;
  printf("a=%d b=%d c=%d", a, b, c);
}
```

a - [- - a - a - -]
10 - 10 9 - [7 - 7]
b = b - (a - -) 10 - 10 9 - [7 - 7]
c = c - (- - a)
= 10 - 8 = 2

```
iv) void main()       2M
{
  int a=50, b=52, c;
  c = (a < b) ? a : b;
  printf("%d", c);
}
```

50
a - [- - a - a - -]
7 - 7
(50 < 52) ? a : 50 : 52 ;

Q2. Write a program to calculate Simple Interest. Accept principal Amount, Rate, Year from user. (5M)

Q3. Draw a flowchart to find the roots of quadratic equation? (5M)

Q4. Write about standard input/output functions. (5M)

(= (50 < 52) ? 50 : 52 ;

a = c
a
10 20