Don Bosco Institute of Technology
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Internal Assessment 1

Subject: Structured Programming Approach **Sem**: II Sem

Date: 27/2/2014 **Time**: 9:30 to 10:30 am **Marks**: 20

Q1)	Solve any 5 questions out of 6	

a)	What is the output of following code?
	`#include<stdio.h>`
	`int main()`
	`{`
	`int i=1, j=2, k;`
	`k= i++ + ++j;`
	`printf("\n%d %d %d",k,i,j);`
	`return 0;`
	`}`
		2

b)	Which is the correct with respect to size of datatypes? Give valid reason for your answer. a) char > int > float b) int > char > float c) char < int < double d) double > char > int	2

c)	What is the output of following code?
	`#include<stdio.h>`
	`int main()`
	`{`
	`int i=1, j=2, k=3, l;`
	`l= j>j ?(i<k)? i:k:j<k?j:k;`
	`printf("\n%d",l);`
	`return 0;`
	`}`
		2

d)	Convert the following switch case structure to if construct
	`switch(x)`
	`{`
	`case 3: printf("A\n");`
	`break;`
	`case 7: printf("B\n");`
	`break;`
	`case 8: printf("B\n");`
	`break;`
	`case 12: printf("C\n");`
	`break;`
	`default: printf("D\n");`
	`}`
		2

e)	Rewrite the following for loop as do while loop **for(i=1;i<=10;i=i+3)** **{** **printf("*\n");** **}**	2
f)	What is the output of following code? **#include<stdio.h>** **int main()** **{** **int a = 5;** **switch(a)** **{** **case 1: printf("First");** **case 2: printf("Second");** **case 3 + 2: printf("Third");** **case 5: printf("Final");** **break;** **}** **return 0;** **}**	2
Q2)	Write a program to print following pattern using nested loops. **(Solve any 1)** a) * b) A c) 1 * * A B 0 1 * * * A B C 1 0 1	5
Q3)	Write a program for the following problem definition. Draw a flowchart and also write the algorithm. **(Solve any 1)** a) Check whether a number is prime or not. b) Check whether a number is armstrong or not. c) Generate a fibonacci series.	5