(Q.01 to Q.05 each carry 6 marks. and Q.06 to Q.012 each carry 10 marks)

Q.01 Write a program for check number is positive or negative.
Q.02 Write a program for find largest number of two numbers.
Q.03 Write a program to check number is even or odd.
Q.04 Write a program for swapping number without using third variable.

Find out the Output of the following programs.

Q.05
```
void main(){
printf("jaish\ree\ram");
printf("Softwaves\bhopal");
printf("jaish/ree/ram");
}
```

Q.06
```
void main(){
int a = 5;
int b = 11;
a = a++ + a++ + a++;
printf("%d\n",a);
a = ++a + a++ + ++a;
printf("%d\n",a);
b = b++ + ++b + a++;
printf("%d\n",b);
}
```

Q.07
```
void main(){
int x = 18;
int y = 22;
printf("%i\n",x&y);
printf("%i\n",x|y);
printf("%i\n",x^y);
printf("%i\n",x<<3);
printf("%i\n",y>>3);
printf("%i\n",~x);
printf("%i\n",~y);
}
```

Q.08
```
void main(){
int x = 15;
int y = 6;
int z;
z = y++ + x++;
printf("%d\n",z);
z = ++x + y++;
printf("%d\n",z);
z = y++ + ++x;
printf("%d\n",z);
}
```

Q.09
```
void main(){
int a =65;
printf("%d\n",a);
printf("%i\n",a);
printf("%o\n",a);
printf("%x\n",a);
}
```

Q.10
```
void main(){
int a = 065;
printf("%d\n",a);
printf("%i\n",a);
printf("%o\n",a);
printf("%x\n",a);
}
```

Q.11
```
void main(){
int a = 0x65;
printf("%d\n",a);
printf("%i\n",a);
printf("%o\n",a);
printf("%x\n",a);
}
```

Q.12
```
void main(){
int a = 0xca;
printf("%d\n",a);
printf("%i\n",a);
printf("%o\n",a);
printf("%x\n",a);
}
```

All the questions are Mandatory

Q.01 write a program to check whether a number is even or odd 5

Q.02 write a program to check whether a number is positive or negative 5

Q.03 Write a program to Check two numbers are equal or not with using arithmetic operator. 5

Q.04 Write a program to Check two numbers are equal or not without using arithmetic and comparison operators 5

Q.05 write a program to find largest number among two numbers 10

Q.06 write a program to find largest number among three numbers 10

Q.07 Write a program to find greatest of three numbers without using if statement 10

Q.08 C program to find Grades of a Student using else if ladder. 20

I. if marks < 50 then Grade is F
II. if marks >= 50 < 60 then Grade is D
III. if marks >= 60 < 70 then Grade is C
IV. if marks >= 70 < 80 then Grade is B
V. if marks >= 80 < 90 then Grade is A
VI. if marks >= 90 then Grade is A+

Q.09 30

A.

```
void main()
{
int i=5;
while(i<=15)
{
printf("%d\n",i++);
printf("%d\n",++i);
++i;
}
}
```

B.

```
void main()
{
int i=3;
while(i<=12)
{
printf("%d\n",i++);
printf("%d\n",--i);
++i;
}
}
```

C.

```
void main()
{
int i;
int s=0;
for(i=3;i<=10;i++)
{
s=s+i;
i++;
}
printf("s=%d\n",s);
}
```

D.

```
void main()
{
int i;
for(i=3;i<=10;i++)
{
i=i*i;
}
printf("i=%d\n",i);
}
```

E.

```
#include<stdio.h>
void main()
{
int i;
for(i=3;i<=13;i++)
{
printf("%o\n",i);
}
}
```

Time: 1:30 Hour

All the questions are Mandatory

Q.01	Write a c program to print all prime numbers from 1 to 50	05
Q.02	Write a program to merge two 1-D array & store it in one array.	05
Q.03	How to declare String in C programming Explain With Example.	05
Q.04	Write two points on "Art of Living" which is taught by Sir in the regular classes with example.	10
Q.05	Write a program to display all the four digit palindrome number.	10
Q.06	Write a program for matrix addition in c.	10
Q.07	Write a program to reverse the rows in a 2d Array.	10
Q.08	Write a program to copy the contents of one array into another in the reverse order.	10
Q.09	Write a program to Find largest and smallest number in an array.	10
Q.10	Write a program to display all prime palindrome numbers between 10 and 1000.	10

Q.11

```
*
**
***
****
*****
****
***
**
*
```

Q.12

```
    *
   **
  ***
 ****
*****
****
***
**
*
```

20

SOFTWAVES

Write the Ans of the following Question.

1 Write a Program to check whether the number is palindrome or not. 10
2 Write a Program to check whether the number is perfect or not. 10
3 Write a Program to check whether the number is prime or not. 10
4 Write a Program to print Fibonacci series. 10
5 What is user–defined function and their types explain with example. 20

Write a program for the following output. (Each Question 10 Marks)

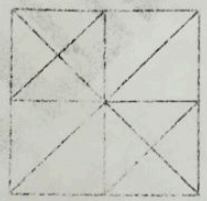
6

```
*
**
***
****
*****
******
*******
********
*********
**********
```

7

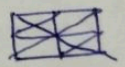
```
6
16
126
1236
12346
123456
```

8



9

```
* * * * * * *
*         *
*       *
*     *
*   *
* *
*
```



SOFTWAVES TECHNOLOGIES
414, 4th floor Shagun Tower, Above Apna Sweets Vijay Nagar Square, Cont.. 97703-97704 Web- www.softwaves.in

```
12345
12345
12345
12345
12345
```

```
12345
1234
123
12
1
```

```
12345
2345
345
45
5
```

```
1
12
123
1234
12345
```

```
1
21
321
4321
54321
```

```
54321
54321
54321
54321
54321
```

```
54321
5432
543
54
5
```

```
5
54
543
5432
54321
```

```
5
45
345
2345
12345
```

```
6
16
126
1236
12346
123456
```

```
23456
34567
45678
56789
678910
```

```
*****
*****
*****
*****
*****
```

```
*
**
***
****
*****
```

```
*****
****
***
**
*
```

```
1****
12***
123**
1234*
12345
```

```
12345
*****
12345
**.***
12345
```

```
12345
22345
33345
44445
55555
```

```
1
10
101
1010
10101
101010
1010101
```

```
1
01
101
0101
10101
010101
1010101
```

```
1010101
101010
10101
1010
101
10
1
```

```
1010101
010101
10101
0101
101
01
1
```

```
11111
22222
33333
44444
55555
```

```
1
22
333
4444
55555
```

```
5
44
333
2222
11111
```

```
1
23
456
78910
```

```
0
11
235
81321 34
```

```
1
23
5711
13 17 19 23
29 31 37 41 43
```

```
4
68
9 10 12
14 15 16 18
20 21 22 24 25
```

```
0
12
340
1234
```

```
0
12
012
0120
```

```
**********
 **********
**********
 **********
**********
 **********
**********
 **********
```

```
**********
 **********
  **********
   **********
    **********
     **********
```

```
1 2 3 4 5
A A A A A
1 2 3 4 5
A A A A A
1 2 3 4 5
```

```
0 2 3 4 5
1 0 3 4 5
1 2 0 4 5
1 2 3 0 5
1 2 3 4 0
```

```
1 * 3 * 5
* 2 * 4 *
1 * 3 * 5
* 2 * 4 *
1 * 3 * 5
```

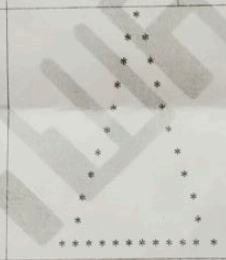
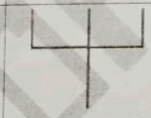
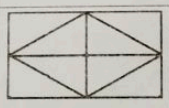
```
12345
54321
12345
54321
12345
```

```
****.*
*234*
*234*
*234*
****.*
```

```
1 2 3 4 5
1 2 3 4 5
3 6 9 12 15
2 4 6 8 10
5 10 15 20 25
```

```
11111
12345
33333
12345
55555
```

```
1
12
123
1234
12345
```

1 123 12345 1234567 123456789	1 222 33333 4444444 555555555	1 232 34543 4567654 567898765	5 545 54345 5432345 543212345	555555555 4444444 33333 222 1
123456789 1234567 13245 123 1	567898765 4567654 34543 232 1	543212345 5432345 54345 545 5		* 2 3 4 * 1 * 3 * 5 1 2 * 4 5 1 * 3 * 5 * 2 3 4 *
* *** ***** ******* ********* ******* ***** *** *	1 222 33333 4444444 555555555 4444444 33333 222 1	1 123 12345 1234567 123456789 1234567 12345 123 1	A BC DEF GHIJ KLMNO	0 010 02340 0567890 0 10 11 12 13 14 15 16 0
				
			1 00 121 0220 12221	55555 54444 54333 54322 5432 1
55555 44445 33345 22345 1 2345	12345 22345 33345 44445 55555	54321 54322 54333 54444 55555	00000 0101 012 01 0	12012 2012 012 12 2
1 2321 22322 33333 22322 1 2321	678910 56789 45678 34567 23456	***** *** ** *** *****	01123 58 13 21 34 55 89 144 233 377	01010 00000 01010 00000 01010