DHARMSINH DESAI UNIVERSITY, NADIAD
FACULTY OF TECHNOLOGY
B.TECH. SEMESTER I [IT/CE/EC]
SUBJECT: (CT116) ELE. OF LINUX OS & C PROG.-I

Examination	**: Third Sessional**	**Seat No.**	**: _____**
Date	**: 03/12/2014**	**Day**	**: Wednesday**
Time	**: 11:00 to 12:15**	**Max. Marks**	**: 36**

INSTRUCTIONS:
1. Figures to the right indicate maximum marks for that question.
2. The symbols used carry their usual meanings.
3. Assume suitable data, if required & mention them clearly.
4. Draw neat sketches wherever necessary.

Q.1 Answer the Following : **[12]**

(A) Find the invalid identifiers from the following:- **[1]**
(i) nA (ii) 2nd (iii) ROLL NO (iv) case

(a) (i), (ii) and (iv)
(b) (i) and (iii)
(c) (ii), (iii) and (iv)
(d) (ii), (i) and (iii)

(B) Give answer with proper reason.

(i) In a for loop, if the condition is missing, then, **[1]**
(a) It is assumed to be present and taken to be false.
(b) It is assumed to be present and taken to be true.
(c) It results in a syntax error.
(d) Execution will be terminated abruptly.

(ii) **[2]**
```
main()
{ int x,y,z;
 scanf("%2d %*d %1d %d", &x, &y, &z);
 printf("x=%d y=%d z=%d",x,y,z);  }
```
Explain the ouput if input is :
(a) 2 3 4 5 (b) 234 56 78

(C) Give the output of the following code: **[4]**

(1)
```
void main()
 { int a=2, b=3, c=0;
  if( a && b)
  { c=10;}
  else
  {c=20;}
  printf("%d %d %d",a, b, c);
  }
```

(2)
```
void main()
 { int a=12, b=25;
   printf("\nOutput1=%d",  a | b);
   printf("\nOutput2=%d",  a & b);
   printf("\nOutput3=%d",  a ^ b);
   printf("\nOutput4=%d",  (a>>1) & b);
 getch();
  }
```

(D) Write the output of the following code. **[4]**

(1)
```
for (i=1; i<4; i++)
printf("%d",  (i%2) ? i : 2*i);
```

(2)
```
char x = 'B';
switch (x) {
case 'A':  printf("a");
case 'B':  printf("b");
case 'C':  printf("c");
default :  printf("d");
           break;  }
```

Q.2 Answer the following. (Any three) **[12]**

(A) Explain Break, exit and continue. **[4]**

(B) WAP to print all Armstrong numbers in given range.(Range i.e lower and upper limit should be entered by user) **[4]**

(C) WAP to read numbers until -1 is encountered. Also calculate the sum and mean of all positive nos entered and sum and mean of all negative numbers entered separately. **[4]**

(D) WAP to display largest of 6 numbers entered by user using ternary operator. **[4]**

Q.3 Answer the following: **[12]**

(A) WAP to calculate parking charges of a vehicle. Enter the type of vehicle as a character (like c for car, b for bus etc) and no. of hours then calculate charges as given below. **[6]**

Truck/ Bus- 20 Rs per hour
Car- 10Rs per hour
Scooter/Cycle/Motor cycle- 5Rs per hour

(B) WAP to print following pattern **[6]**

5
54
543
5432
54321

OR

Q.3 Answer the following: **[12]**

(A) Write a Program to display sum of odd and sum of even no from entered number. **[6]**
EX : no = 12345 then
Sumofodd = 1+3+5 = 9 &
Sumofeven = 2+4 = 6.

(B) .WAP to print following pattern **[6]**

5
45
345
2345
12345