DHARMSINH DESAI UNIVERSITY, NADIAD
FACULTY OF TECHNOLOGY
B.TECH. SEMESTER VI [I.T.]
SUBJECT: (CT616) SOFTWARE ENGINEERING

Examination	**: FIRST SESSIONAL**	**Seat No.**	**:**
Date	**: 07/01/2014**	**Day**	**:**
Time	**: 12:45 to 2:00**	**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 Do as directed.

(a) Define a program and a product. State the difference. **[2]**

(b) What is system testing? Define the various types. **[2]**

(c) Why is the spiral model known as the meta model? Explain with example. **[2]**

(d) State whether the following statements are true or false. **[2]**
"It is possible to do the configuration management of a software project without using an automated tool.".

(e) Using a schematic diagram show the order in which the following are estimated in the COCOMO estimation technique: cost, effort, duration, size. **[2]**

(f) Assume that the size of one organic type software product has been estimated to be 42,000 line of source code. Determine the required effort and nominal development time to develop this product. Assume that average salary of software engineers is 12,000 per month. **[2]**

Q.2 Attempt ***Any TWO*** of the following questions. **[12]**

(a) Compare the different life cycle model from the view point of the customer. **[6]**

(b) Write a short note on the SPMP document. **[6]**

(c) For the following C program the Halstead's length the volume measures. **[6]**

```
/*Program to calculate GCD of two numers*/
Int compute_gcd(x,y)
Int x,y;
{
   While(x!=y)
      if(x>y) then x=x-y;
      else y=y-x;
   return x;
}
```

Q.3 (a) List the important shortcomings of LOC for use as a software size metric. **[6]**

(b) Write the SRS for the following system: **[6]**
Restaurant automation system (RAS).

OR

Q.3 (a) Discuss the risk management in brief. Give appropriate example. **[6]**

(b) Write the SRS for the following system: **[6]**
Supermarket automation software (SAS).