

**B.E. (CST) 4<sup>m</sup> Semester Examination** *M o*  
**Department of Computer Science and Technology**  
**, Bengal Engineering and Science University, Shibpur**  
**Sub: Electronic Design Automation**  
**(CS-404)**

Time: 2 hour

FM: 35

**Answer any two from each group**  
**One mark is reserved for neatness**  
**Group-A**

1. (a) Discuss overloaded subprogram and overloaded enumeration with example,  
(b) What is the function of package declaration and package body?  
5+3.5
2. (a) What is function attribute?  
(b) type STATUS is (SILENT,SEND,RECEIVE);  
subtype DELAY-TIME is TIME range 50 ns downto 10 ns;  
Write down the output of the following function attribute:  
(i) DELAY-TIME'PRED( 10 ns)  
(ii) DELAY-TIME'SUCC(29 ns)  
(iii) STATUS'SUCC(RECEIVE)  
(iv) STATUS TRED(RECEIVE)  
0.5+2x4
3. Write a VHDL code of modulo 5 up synchronous counter. 8.5

**Group-B**

4. (a) Discuss procedural continuous assignment with example,  
(b) How it differ from regular procedural assignment?  
8+0.5
5. (a) What is the function of zero delay control type of delay based timing control?  
(b) How level sensitive timing control differs from event based timing control?  
3+5.5
6. Write a verilog code of modulo 5 down synchronous counter. 8.5