

SATHYABAMA UNIVERSITY

(Established under section 3 of UGC Act,1956)

Course & Branch :B.E - EEE

Title of the Paper :Computer Aided Design

Max. Marks :80

Sub. Code :414507

Time : 3 Hours

Date :16/11/2009

Session :FN

PART - A

(10 x 2 = 20)

Answer ALL the Questions

1. What are the various plotting commands in Mat lab?
2. List the salient features of Simulink.
3. State the differences between loop analysis and nodal analysis.
4. Draw the transient analysis of RLC circuit.
5. Define operating point.
6. What are the characteristics of an ideal op-amp?
7. Write a simple program using entity in VHDL.
8. What are the differences between transport delay and inertial delay?
9. Write the need for generics.
10. What is meant by operator argument type overloading?

PART – B

(5 x 12 = 60)

Answer ALL the Questions

11. With a neat sketch explain the instruction control flow in Matlab.
(or)
12. Explain the relational and logical operators used in Matlab.
13. For a two port network explain the impedance and admittance analysis using Matlab.
(or)
14. Explain the procedures involved in extracting DFT and FFT sequences using Matlab for a simple AC circuit.
15. How can the characteristics of BJT and MOSFET be realized using Matlab?
(or)
16. With the discrete components used in simulink block set draw the circuit diagram and waveform of I, V of a Full wave rectifier.
17. With an example program explain the scalar and composite types in VHDL.
(or)
18. Explain simulation deltas with a neat sketch. Also compare the two evaluating mechanisms.
19. Show that for the two value system, the conversion function is trivial with an example. Also explain the composite type resolution.
(or)
20. Explain the types of value kind attributes in detail.