NAME..... ROLLNO.....

2005 JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY

IV B.TECH I SEMESTER INFORMATION TECHNOLOGY

SOFTWARE TESTING METHODOLOGY

JUNE 2005

TIME 3 HOUR
MARK 100

ANSWER ALL QUESTIONS ALL QUESTIONS CARRY EQUAL MARKS

1. Define testing and explain the purpose of testing.

2. Categorize different kinds of loops and explain

3. (a) Define a transaction. Give an example.

(b) How does Transaction flows occur , illustrate with help of examples.

4. (a) Discuss about Random Testing?

(b) Explain about Linearizing Transformation?

5. Write short notes on

(a) Path Products

(b) Path Expressions.

(c) Path Sums

(d) Loops

6. (a) Minimize the function using Karnaugh Map method F(A,B,C,D)= P(1,2,3,8,9,10,11,14)+ Pd(7,15)

(b) Demonstrate by means of truth tables the validity of the following theorems of Boolean algebra

i. Associative laws

ii. Demorgans theorems for three variables

iii. Distributive law of + over.

7. Explain state testing and testability tips.

8. (a) Write an algorithm for Node Reduction (General).

(b) Illustrate the applications of Node Reduction algorithm.