**ASSIGNMENT NO.-13(LIMITS AND DERIVATIVES)**

**(MATHEMATICS)**

1. Let .Find the value of constant ,given that exists.

2. Let be the function defined by .Find λ,if exists.

3. Show that does not exist.

4. Evaluate :

5. Evaluate :

6. Evaluate:

7. Evaluate:

8. Evaluate :

9. Differentiate w.r.t. x using first principle.

10. Differentiate w.r.t. x using first principle.

11. Differentiate w.r.t. x.

12. Differentiate w.r.t. x.