Instituto Superior Tupy / SOCIESC Educação e Tecnologia	( ) Prova (x) Exercícios ( ) Prova Modular ( ) Prática de Laboratório ( ) Exame Final/Exame de Certificação ( ) Aproveitamento Extraordinário de Estudos	( ) Prova Semestral ( ) Segunda Chamada ( ) Prova de Recuperação	**Nota:**
Disciplina: *Cálculo IV*		Turma:	
Professor: *Milton e Pericles e Rebello*		Data: *set / 2013*	
Aluno (a):			

Gabarito da LISTA 4 de Cálculo IV
Exercícios: EDOs de Ordem Superior (Lineares homogêneas)

1. $y = c_1 + c_2 e^{-\frac{x}{4}}$

2. $y = c_1 e^{-6x} + c_2 e^{6x}$

3. $y = c_1 \cos 3x + c_2 \operatorname{sen} 3x$

4. $y = c_1 e^{3x} + c_2 e^{-2x}$

5. $y = c_1 e^{-4x} + c_2 x e^{-4x}$

6. $y = c_1 e^{2x/3} + c_2 e^{-x/4}$

7. $y = e^{2x}(c_1 \cos x + c_2 \operatorname{sen} x)$

8. $y = e^{-x/3}\left(c_1 \cos \frac{\sqrt{2}}{3}x + c_2 \operatorname{sen} \frac{\sqrt{2}}{3}x\right)$

9. $y = c_1 + c_2 e^{-x} + c_3 e^{5x}$

10. $y = c_1 e^{x} + e^{-x/2}\left(c_2 \cos \frac{\sqrt{3}}{2}x + c_3 \operatorname{sen} \frac{\sqrt{3}}{2}x\right)$

11. $y = c_1 e^{x} + e^{-x}(c_2 \cos x + c_3 \operatorname{sen} x)$

12. $y = c_1 e^{-x} + c_2 x e^{-x} + c_3 x^2 e^{-x}$

13. $y = c_1 + c_2 x + e^{-x/2}\left(c_3 \cos \frac{\sqrt{3}}{2}x + c_4 \operatorname{sen} \frac{\sqrt{3}}{2}x\right)$

14. $y = c_1 \cos \frac{\sqrt{3}}{2}x + c_2 \operatorname{sen} \frac{\sqrt{3}}{2}x + c_3 x \cos \frac{\sqrt{3}}{2}x + c_4 x \operatorname{sen} \frac{\sqrt{3}}{2}x$

15. $y = c_1 + c_2 e^{-2x} + c_3 e^{2x} + c_4 \cos 2x + c_5 \operatorname{sen} 2x$

16. $y = c_1 e^{x} + c_2 x e^{x} + c_3 e^{-x} + c_4 x e^{-x} + c_5 e^{-5x}$

17. $y = 2\cos 4x - \frac{1}{2}\operatorname{sen} 4x$

18. $y = -\frac{3}{4}e^{-5x} + \frac{3}{4}e^{-x}$

19. $y = -e^{x/2}\cos \frac{x}{2} + e^{x/2}\operatorname{sen} \frac{x}{2}$

20. $y = 0$

21. $y = e^{2(x-1)} - e^{x-1}$

22. $y = 3 + \frac{1}{3}e^{x} - \frac{1}{3}e^{-2x}$

23. $y = e^{5x} - xe^{5x}$

24. $y = -2\cos x$