KFUPM – Department of Mathematics and Statistics – Term 112

MATH 102

QUIZ6 # Code 1 (Duration = 20 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (**5 points**)

The interval of convergence of the power series $\sum_{n=1}^{n=\infty} \frac{(2x+1)^n}{n}$ is

[-1, 0)	
(-1, 0)	
[-1, 0]	
(-1, 0]	
[-1, 1)	

Exercise 2 (**5 points**). The value of the integral $\int xe^x dx$ is

$\sum_{n=1}^{\infty} \frac{x^n}{(n-2)!n} + c$	
$\sum_{n=2}^{\infty} \frac{x^n}{(n-2)!n} + c$	
$\sum_{n=2}^{\infty} \frac{x^{n+2}}{(n)!(n+2)} + c$	
$\sum_{n=0}^{\infty} \frac{x^n}{(n)!(n+2)} + c$	
$\sum_{n=1}^{\infty} \frac{x^n}{(n)!(n+2)} + c$	

KFUPM – Department of Mathematics and Statistics – Term 112

MATH 102

QUIZ # 6 Code 2 (Duration = 20 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (5 points)

The interval of convergence of the power series $\sum_{n=1}^{n=\infty} \frac{(3x+1)^n}{n}$ is

$[\frac{-2}{3},0)$	
$[\frac{-2}{3},0]$	
$(\frac{-2}{3},0)$	
$(\frac{-2}{3},0]$	
$[\frac{-2}{3},1)$	

Exercise 2 (**5 points**). The value of the integral $\int xe^x dx$ is

$\sum_{n=1}^{\infty} \frac{x^n}{(n-2)!n} + c$	
$\sum_{n=2}^{\infty} \frac{x^n}{(n-2)!n} + c$	
$\sum_{n=2}^{\infty} \frac{x^{n+2}}{(n)!(n+2)} + c$	
$\sum_{n=0}^{\infty} \frac{x^n}{(n)!(n+2)} + c$	
$\sum_{n=1}^{\infty} \frac{x^n}{(n)!(n+2)} + c$	