KFUPM – Department of Mathematics and Statistics – Term 161

MATH 102

QUIZ # 3 Code 1 (Duration = 20 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (5 points) Find the volume of the solid obtained by rotating the region enclosed by the curves $y = e^x, y = 0, x = 0$ and $x = 1$ about Y-axis.

Exercise 2 (5 points) Evaluate $\int (\sin x)^7 (\cot x)^4 dx$

KFUPM – Department of Mathematics and Statistics – Term 161

MATH 102

QUIZ # 3 Code 2 (Duration = 20 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (5 points) Find the volume of the solid obtained by rotating the region enclosed by the curves $y = Lnx, y = 0, x = 1$ and $x = 2$ about Y-axis.

Exercise 2 (5 points) Evaluate $\int (\cos x)^7 (\tan x)^4 dx$

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MATH 102

QUIZ # 3 Code 3 (Duration = 20 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (5 points) Find the volume of the solid obtained by rotating the region enclosed by the curves $y = \sin x, y = 0, x = 0$ and $x = \frac{\pi}{2}$ about Y-axis.

Exercise 2 (5 points) Evaluate $\int (\tan x)^3 (\sec x)^3 dx$

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MATH 102

QUIZ # 3 Code 4 (Duration = 20 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (5 points) Find the volume of the solid obtained by rotating the region enclosed by the curves $y = \cos x, y = 0, x = 0$ and $x = \pi$ about Y-axis.

Exercise 2 (5 points) Evaluate $\int (\cot x)^3 (\csc x)^3 \, dx$