King Fahd University of Petroleum and Minerals
Department of Math & Stat
Math 102 Section # 4,5,8 (091)
Quiz 2(a)

Time: 20 minutes Marks:_____ /9

Name:_____ Secion#: _____

ID#: _____ Serial #: _____

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1. $\int_{-1}^{1} |x^3 - x|\,dx =$

(a) 1

(b) $\frac{1}{2}$

(c) π

(d) $\sqrt{2}$

(e) 1.5

2. The volume of solid generated by revolving the region enclosed by $x = y^2$ and $x = y$ about the line $y = -1$ is

(a) $\frac{\pi}{2}$

(b) 3π

(c) $1 - \pi$

(d) 1

(e) $\frac{3\pi}{4}$

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Quiz 2(b)

Time: 20 minutes Marks:_____ /9

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ID#: _____ Serial #: _____

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1. The area of the region enclosed by $x = y^2$ and $x = y + 2$ is equal to

   (a) $\frac{\pi}{2}$

   (b) $\frac{9}{2}$

   (c) $\frac{1}{2}$

   (d) 2π

   (e) 3

2. $\int_0^{\frac{\pi}{2}} \cos x \sin(\sin x) dx =$

   (a) $\sin 1$

   (b) $\sqrt{3}$

   (c) $\frac{1}{2}$

   (d) $1 - \pi$

   (e) $1 - \cos 1$

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Quiz 2(c)

Time: 20 minutes Marks:_____ /9

Name:_____ Secion#: _____

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1. The area of the region enclosed by the graphs of $y = 6 - x^2$ and $y = -2x + 3$ is equal to

(a) 2

(b) $\sqrt{3}$

(c) 5

(d) $\frac{2}{3}$

(e) $\frac{32}{3}$

2. The volume of the solid generated by revolving the region enclosed by the curves $x = 1 - y^2, x = 2 + y^2, y = -1, y = 1$ about y-axis is

(a) $\frac{\pi}{2}$

(b) 10π

(c) 3π

(d) 2

(e) $1 - \pi$

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Quiz 2(d)

Time: 20 minutes Marks:_____ /9

Name:_____ Secion#: _____

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1. $\int_0^1 \frac{x}{1+x^4}\,dx =$

(a) 3π

(b) $\frac{4}{9}$

(c) 1

(d) $\frac{\pi}{8}$

(e) π

2. $\int_0^2 |x - x^2|\,dx =$

(a) 2π

(b) $\frac{2}{5}$

(c) 1

(d) -1

(e) $\frac{2}{3}$