

**King Fahd University of Petroleum & Minerals**

Department of Mathematical Sciences

Math 102, Section: 18, 20, 23 (052)

Quiz-4(a)

Time: 15 Minutes

Marks:...../9

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Name:

Serial #:

ID#:

Section #:

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(i) Evaluate:  $\int_{\sqrt{3}}^2 \frac{\sqrt{x^2 - 3}}{x} dx$

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Quiz-4(b)

**Time: 15 Minutes**

**Marks:...../9**

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(i) Evaluate:  $\int \frac{x \, dx}{4x^2 + 12x + 13}$

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Quiz-4(c)

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(i) Evaluate: (i)  $\int \frac{dx}{2 + \cos x}$       (ii)  $\int \frac{\sqrt{4-x^2}}{x^2} dx$

(i)

(ii)

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Quiz-4(d)

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- (i) Use partial fractions to evaluate:

$$\int \frac{5x^3 - 3x^2 + 7x - 3}{(x^2 + 1)^2} dx$$