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| **King Saud University** | KSU logo tiff.tif | **Math 106** |
| **Science and Medical Studies Section for girls** | **First Term 1432-33H** |
| **College of Science** | **Second Midterm Exam** |
| **Department of Mathematics** | **105 Minutes** |

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| **Name:** | **Student No.:** |
| **Section No.:** | **Staff member name:** |

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| **Question No** | **I** | **II** | **III** | **IV** | **Total** |
| **Mark** |  |  |  |  |  |

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| **Question I**  **Evaluate the following integrals:** |
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| **Question II**   1. **Use the substitution to prove that**   **.**   1. **Compute .** 2. **Conclude .** |

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| **Question III**  **Use an appropriate trigonometric substitution to show that**  **.** |

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| **Question IV**   1. **Evaluate for .** 2. **Determine whether the improper integral converges or diverges.** |

Good Luck