**Math 111**

**Second midterm examination**

**Second semester, 1430-1431H**

**Time: 1 ½ Hours**

**Department of Mathematics**

**College of Sciences**

**King Saud University**

|  |  |
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| **Name:** | **Sequence No.** |
| **Student No.** | **Section No.** |

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| --- | --- | --- | --- | --- |
| **Question**  | **I** | **II** | **III** | **Total** |
| **Mark** |  |  |  |  |

**QUESTION I:**

**Choose the correct answer**

|  |
| --- |
| 1. . The formula  is equal to :

i.1 ii. iii. Zero. iv. None of the previous. |
|  |
| 1. is equal to:

i. ii.  iii. iv. None of the previous. |
|  |
| 1. . If , then  is equal to:

i. ii.  iii. iv. None of the previous. |
|  |
| 1. is equal to:

i.  ii.  iii.  iv. None of the previous. |
| **QUESTION II****Evaluate the following integrals** |
| 1. .
 |
|  |
| 1.
 |
| 1.
 |
|  |
| 1.
 |
| **QUESTION III** |
| 1. Show that:

 |
| 1. Find  if
 |
|  |
| 1. . Evaluate the integral
 |
|  |
| 1. Find the partial fractions decomposition ( do not integrate) of the function
 |

 Good Luck