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**MATRIC NO: 15/ENG01/015**

**DEPARTMENT: CHEMICAL ENGINEERING**

**COURSE CODE: 471**

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EXTRACT STREAM

|  |  |  |  |
| --- | --- | --- | --- |
|  | Mole % | Weight % | Volume % |
| Ethanol | 22.93978 | 43.20103 | 48.84117 |
| n-heptane | 0.01478018 | 0.06054257 | 0.07919844 |
| Water | 77.04544 | 56.73843 | 51.07963 |

RAFFINATE STREAM

|  |  |  |  |
| --- | --- | --- | --- |
|  | Mole % | Weight % | Volume % |
| Ethanol | 6.586244 | 3.145145 | 2.730149 |
| n-heptane | 93.21237 | 96.81725 | 97.24386 |
| Water | 0.2013852 | 0.03760589 | 0.02599441 |

The values of the mole % and volume % in the extract streams are seen to be greater than the raffinate streams while the values of the weight % in the raffinate streams are seen to be greater than the extract streams