KING FAHD UNIVERSITY OF PETROLEUM & MINERALS

ELECTRICAL ENGINEERING DEPARTMENT

EE 202

EXAM I

DATE: Wednesday 15/10/2014

TIME: 6:30 PM-8:30 PM **\***

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| --- | --- |
| **SER #** |  |
| **ID#** |  |
| **Name** | **KEY** |
| **Section#** |  |

|  |  |  |
| --- | --- | --- |
|  | **Maximum Score** | **Score** |
| **Problem No 1** | **40** |  |
| **Problem No 2** | **20** |  |
| **Problem No 3** | **20** |  |
| **Problem No 4** | **20** |  |
| **Total** | **100** |  |

**Problem No 1 (40) ( 4 point for each correct answer)**

**(a)**



If *I*x = 2 A , then the voltage *V*x is



**(b)**



For the circuit shown above, the voltage if the voltage *V*x =15 V , then R equal



**(c)**



For the circuit shown above, the current *I*x is



**(d)**



For the circuit shown above, the voltage *V* is



**(e)**



For the circuit shown above, the voltage *V*ab is



**(f)**



For the circuit shown above, the power deliver by the independent voltage source is



**(g)**



For the circuit shown above, the current *I*x is



**(h)**



For the circuit shown above, if the 2  absorbs 200 W , then the 1  absorbs



**(k)**



For the circuit shown above, the equivalent resistant  is



**(l)**



For the circuit shown above, the voltage *V*x



**Problem No 2 (20)**



For the circuit shown above without sing **Node Voltage Method or Mesh** ,find  ? ( Hint : **Do not combine the resistors**  )







**Problem No 3 (20)**



For the circuit shown above find the nodal equations necessary to solve for the node voltages  **DO NOT SOLVE ANY SYSTEM OF EQUATIONS**



**Problem No 4 (20)**



