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| Class : **IV/IV B.Tech** | **II Mid-term Examinations** | Date : **07-11-2019** |
| Branch **: ECE-A** | **RENEWABLE ENERGY SOURCES** | Time : **90 Min** |
| Sub Code : **EE-416/1** |  | Max.Marks :**18** |

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| **SECTION-A** | | | |
| **Answer All Questions:** | |  | **(6 x 1 = 6 M)** |
| 1 | a) What are the types of wind mills | **PO-1,6,7 CO -1,2,3** | **(Remembering)** |
|  | b) What are the advantages of wind energy | **PO-1,6,7 CO -1,2,3** | **(Remembering)** |
|  | c) Define tip speed ratio | **PO-1,6,7 CO -1,2,3** | **(Remembering)** |
|  | d) List the advantages of bio-gas | **PO-1,6,7 CO -1,2,3** | **(Remembering)** |
|  | e) What is digester | **PO-1,6,7 CO -1,2,3** | **(Remembering)** |
|  | f) List out the geothermal resources | **PO-1,6,7 CO -1,2,3** | **(Remembering)** |
|  | **SECTION-B** | | **(1 x 6 = 6 M)** |
| 2 | Sketch how wind energy can be converted into electrical Energy | **PO-1,6,7 CO -1,2,3** | (**Applying)** |
| **(OR)** | | | |
| 3 | Write short notes on  a) Horizontal type wind mills.  b) Applications of wind energy | **PO-1,6,7 CO -1,2,3** | (**Applying)** |
|  | **SECTION-C** | | **(1 x 6 = 6 M)** |
| 4 | Write short notes on  a) Principle of OTEC plant operation  b)Bio-gas digester | **PO-1,6,7 CO -1,2,3** | **(Applying)** |
| **(OR)** | | | |
| 5 | Classify the bio-gas plant and write about each of them with neat sketch? | **PO-1,6,7 CO -1,2,3** | (**Understand)** |



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| Class : **IV/IV B.Tech** | **Assignment-II** | **Date : 07-11-2019** |
| Branch **: ECE-A** | **RENEWABLE ENERGY SOURCES** | Time : **45 Min** |
| Sub Code : **EE-416** |  | Max.Marks :**12** |

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| 1 | a) Write the essential features of a probable site for a wind form | **PO-1,6,7 CO -1,2,3** | (**Applying)** |
|  | b) Discuss in brief about vertical axis wind mills | **PO-1,6,7 CO -1,2,3** | **(Understand)** |
| 2 | Explain different types of wind mills with merits, demerits and limitations | **PO-1,6,7 CO -1,2,3** | **(Understand)** |
| 3 | Classify the bio-gas plant and write about each of them with neat sketch? | **PO-1,6,7 CO -1,2,3** | **(Understand)** |
| 4 | Write short notes on  a) Principle of OTEC plant operation  b)Bio-gas digester | **PO-1,6,7 CO -1,2,3** | **(Applying)** |
| 5 | Sketch how wind energy can be converted into electrical energy | **PO-1,6,7 CO -1,2,3** | **(Applying)** |
| 6 | Write short notes on  a) Horizontal type wind mills.  b) Applications of wind energy | **PO-1,6,7 CO -1,2,3** | **(Applying)** |



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