Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_

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**End Semester Examination – Nov/Dec – 2017**

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| **Code :** | **17BM3006** | **Duration :** | **3hrs** |
| **Sub. Name :** | **REHABILITATION ENGINEERING** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

|  |  |  |  |  |
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| **Q. No** | **Sub Div** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Summarize the types of impairments and suggest the assistive device for traumatic brain injury with suitable examples. | CO1 | 15 |
| b. | Define the rehabilitation service standards. | CO1 | 5 |
| (OR) | | | | |
| 2. |  | Describe the assistive technology tool for recruiting and retaining individuals with disabilities. | CO2 | 20 |
|  |  |  |  |  |
| 3. |  | Illustrate the construction and working principle of sensor, used to measure oxygen and carbondioxide in blood. | CO2 | 20 |
| (OR) | | | | |
| 4. |  | John was born with a genetic condition that resulted in a variety of physical and cognitive limitations. Suggest the portable communication device to overcome the problem. | CO6 | 20 |
|  |  |  |  |  |
| 5. | a. | How improved therapy results can be obtained with the use of virtual reality technologies and the benefits. | CO3 | 15 |
|  | b. | Brief about the functional upper extremity therapy. | CO6 | 5 |
| (OR) | | | | |
| 6. | a. | Discuss the assessment and prescription process of selecting an appropriate wheelchair. | CO5 | 10 |
|  | b. | Mention the guidelines on measuring the parameters of wheelchair. | CO2 | 10 |
|  |  |  |  |  |
| 7. |  | Classify the ability to support the mobility related assistive technology devices. | CO4 | 20 |
| (OR) | | | | |
| 8. |  | Investigate the research technology developed for mobile robots to create smart wheel chairs that reduce the physical, perceptual, and cognitive skills necessary to operate a power wheelchair. | CO4 | 20 |
|  | |  |  |  |
|  | | **Compulsory:** |  |  |
| 9. |  | Explore the growing number of assistive technology and telecare systems that can help if anyone having difficulty at home. | CO3 | 20 |

ALL THE BEST