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



**End Semester Examination – Nov / Dec – 2019**

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| **Code :** | **15EI2021** | **Duration :** | **3hrs** |
| **Sub. Name :** | **ERGONOMICS IN HOSPITALS** | **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. | Illustrate the human technological system in hospital with a sketch. | CO1 | 10 |
| b. | Write in detail the merits and demerits of an autonomous system. | CO1 | 10 |
| **(OR)** | | | | |
| 2. | a. | Classify the parameters of the patient monitoring system. | CO1 | 15 |
| b. | Deliberate on various stresses during material handling in hospital. | CO1 | 5 |
|  |  |  |  |  |
| 3. | a. | Illustrate the various controls in medical device with applications. | CO1 | 10 |
| b. | Analyse the motor functions in hospital workers that leads to injury. | CO3 | 10 |
| **(OR)** | | | | |
| 4. | a. | Discuss the design aspects of hospital workplace. | CO3 | 10 |
| b. | Analyse the stress developed to the nursing staff in hospital while operating blood pressure monitor. | CO3 | 10 |
|  |  |  |  |  |
| 5. | a. | Elaborate on the methodology in preventing the hazards in hospital. | CO3 | 12 |
| b. | Explain the significance of operation theatre lights. | CO1 | 8 |
| **(OR)** | | | | |
| 6. | a. | Analyse the merits of ergonomis in a wireless digital thermometer. | CO3 | 12 |
| b. | Examine the environmental factors that favor the efficiency in the hospital workplace. | CO3 | 8 |
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| 7. | a. | Evaluate the scope of the electromyogram in ergonomics. | CO3 | 12 |
| b. | Design the ergonomics based approach in patient shifting equipment. | CO3 | 8 |
| **(OR)** | | | | |
| 8. | a. | Present the applications of implementing climate control and ventilation model in hospital. | CO2 | 12 |
| b. | Develop the worktable for physician based on ergonomic parameters. | CO3 | 8 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Elucidate the computer based assessment of cognitive stress. | CO2 | 10 |
| b. | Describe in detail the applications of ergonomics in improving human life in hospital. | CO2 | 10 |