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



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

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|  |  |  |  |
| **Code :** | **17ME2054** | **Duration :** | **3hrs** |
| **Sub. Name :** | **INDUSTRIAL SAFETY 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. | Define the term OSHA. | CO1 | 2 |
| b. | Explain the various responsibilities of principals in safety management. | CO1 | 18 |
| **(OR)** | | | | | |  | |  |  | (OR) |
| 2. | | a. | Write four difference between accidents vs injuries. | CO2 | 4 |
| b. | Explain the various steps involved in Industrial safety efforts that have been referred to as the people safety program. | CO2 | 16 |
|  | |  |  |  |  |
| 3. | | a. | State the functions of safety trip control. | CO3 | 5 |
| b. | List out the various methods used for safeguarding machines in an industry. | CO3 | 15 |
| **(OR)** | | | | | |  | |  |  | (OR) |
| 4. | |  | Explain in detail about safety requirements recommended in an industry for the use of power press by a safety department. | CO3 | 20 |
|  | |  |  |  |  |
| 5. | | a. | List out some of the common electrical hazards faced by an worker in an working environment. | CO4 | 5 |
| b. | Explain in detail the various safety requirements recommended in storage of chemicals. | CO4 | 15 |
| **(OR)** | | | | | |  | |  |  | (OR) |
| 6. | |  | Appraise the various safety principles to be followed during gas welding process and list out the protective equipments used for the same. | CO5 | 20 |
|  | |  |  |  |  |
| 7. | |  | Explain in detail the various environmental hazards faced during the heat treatment of various metals. | CO5 | 20 |
| **(OR)** | | | | | |  | |  |  | (OR) |
| 8. | | a. | List out the factors affecting the shot blasting process. | CO6 | 8 |
| b. | Enumerate the safety responsibility to be followed in sand blasting process. | CO6 | 12 |
|  | | | **Compulsory**: |  |  |  |
| 9. | a. | | List out the various health hazards undergone by labor in paint shop. | CO6 | 10 |
| b. | | Discuss the various hazards and safety principles to be followed during electroplating process. | CO6 | 10 |