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



**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – April/May – 2017**

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| **Code :** | **14ME2035** | **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 Trauma. | CO1 | 2 |
| b. | List the factors to be considered while identifying the causes of accident | CO1 | 2 |
| c. | Explain the various responsibilities of Owners, Executives & Officers in safety management. | CO1 | 16 |
| (OR) | | | | |
| 2. | a. | Define two hand control method. | CO1 | 2 |
| b. | Write two difference between accidents vs injuries. | CO1 | 2 |
| c. | Explain the various safety committees to be formed in an organization. | CO1 | 16 |
| 3. | a. | Define guarding. | CO2 | 2 |
|  | b. | State the limitations of fixed barrier guard. | CO2 | 2 |
|  | c. | List the various principles and methods used for safeguarding machines in an industry. | CO2 | 16 |
| (OR) | | | | |
| 4. | a. | Explain the safety requirements recommended by a safety department in an industry for the use of power press. | CO3 | 20 |
| 5. | a. | Define Occupational Exposure Limits. | CO3 | 2 |
|  | b. | List any two of the common mechanical hazards faced by an worker during material handling. | CO3 | 2 |
|  | c. | Explain the various hazards and Safety principles recommended in chemical industry for handling chemicals. | CO3 | 16 |
| (OR) | | | | |
| 6. | a. | Explain the various safety principles to be followed during arc welding process and name some protective equipments used. | CO3 | 20 |
| 7. | a. | Name the three health hazards undergone by labor in shot blasting. | CO3 | 2 |
|  | b. | Mention any two Problem solving skills of the furnace operator. | CO3 | 2 |
|  | c. | Enumerate the safety responsibility to be followed in sand blasting process. | CO3 | 16 |
| (OR) | | | | |
| 8. | a. | Name the cancer causing chemicals used in paints. | CO3 | 4 |
|  | b. | Explain the various safety principles to be followed in heat treatment process. | CO3 | 16 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Enumerate the various safety principles to be followed during electroplating process. | CO3 | 14 |
|  | b. | Explain the different safety precautions to be followed while using a dynamic balancing machine. | CO3 | 6 |

ALL THE BEST