



B.E DEGREE EXAMINATIONS: NOV/DEC 2022

(Regulation 2018)

Seventh Semester

MECHANICAL ENGINEERING

U18MEE0018: Industrial Safety

COURSE OUTCOMES

- CO1: Understand the industrial safety, health standards and safety measures
 CO2: Illustrate the philosophies behind industrial accidents and hazards
 CO3: Analyze about Industrial fatigue, Environmental factors and Industrial waste
 CO4: Discuss about human side of safety
 CO5: Illustrate human welfare and discuss about handling emergencies
 CO6: Study the different types safety organization and acts

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 2 = 20 Marks)

(Answer not more than 40 words)

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| 1. What are the various factors that lead to growth of safety movement? | CO1 | [K1] |
| 2. How the safety is related to productivity? | CO1 | [K1] |
| 3. Define industrial accident according to Factory act of 1948. | CO2 | [K1] |
| 4. Name the major industrial hazards to be considered | CO2 | [K1] |
| 5. List the major effects on human body of excess temperature | CO3 | [K1] |
| 6. Name the most common environment friendly methods of waste disposal | CO3 | [K1] |
| 7. Outline the need of personal protective equipment | CO4 | [K2] |
| 8. What are the objectives of the emergency planning in an industry? | CO5 | [K1] |
| 9. What should be included in safety policy? | CO6 | [K1] |
| 10. What are the objectives of Factory Act, 1948? | CO6 | [K1] |

Answer any FIVE Questions:-

PART B (5 x 16 = 80 Marks)

(Answer not more than 400 words)

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| 11. a) Outline the focus of safety responsibility and organization in detail | 8 | CO1 | [K2] |
| b) Explain the purpose and procedure in safety planning in an industry | 8 | CO1 | [K2] |
| 12. a) Explain the types and nature of accidents in industry | 8 | CO2 | [K2] |

	b)	Explain the classification of industrial hazards	8	CO2	[K ₂]
13.	a)	Examine the various factors that contribute to fatigue in an industry	8	CO3	[K ₂]
	b)	Identify the conditions for favorable consideration of dilution ventilation along with its characteristics. Also, outline the harmful effects of industrial wastes	8	CO3	[K ₃]
14.	a)	Outline types and selection of respiratory protective equipment	8	CO4	[K ₂]
	b)	Summarize the following: (i) occupational dermatitis (ii) contents of First-aid box	8	CO4	[K ₂]
15.	a)	Explain on site emergency planning and off-site emergency planning	8	CO5	[K ₂]
	b)	Explain safety signs, color and categories in brief.	8	CO5	[K ₂]
16.	a)	Outline the purpose and functions of safety committee	8	CO6	[K ₂]
	b)	Compare ISO 14000 and ISO 9000	8	CO6	[K ₂]
