

- List out major points to be included in housekeeping inspection checklist at workplace.
- Q.24 Write a short note on Onsite and offsite Emergency Plan.
- Q.25 Explain heat stress and heat strain.
- Q.26 Explain the Raynaud's Syndrome.
- Q.27 Explain the factors affecting industrial lighting.
- Q.28 Explain Local Exhaust Ventilation system along with example.
- Q.29 Write a note on classification of fires.
- Q.30 Explain unconfined vapour cloud explosion.
- Q.31 Explain the engineering control measure to mitigate and control noise.
- Q.32 Explain the safety precautions to be taken while working with electrical circuits.

SECTION-D

- Note:** Long answer questions. Attempt any three questions out of two Questions. $(3 \times 10 = 30)$
- Q.33 Write a note on various important factors to be considered during Plant Layout for ensuring Industrial Safety.
- Q.34 Write a note explain various electrical safety devices used for earth fault protection in electrical circuits along with their working principle.
- Q.35 Explain the different sources of artificial light and their importance in industrial safety.
- Q.36 Explain in detail the causes of fire and mitigation measure in an industrial set up.

No. of Printed Pages : 4
Roll No.

RLI-095403

1st Year / Industrial Safety Sub.: Safety Engineering-II

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note: Objective type Questions. All Questions are compulsory. $(10 \times 1 = 10)$

- Q.1 Fires may be started by electricity in several ways. The main cause/s are.
- Overheating of cables and electrical equipment due to overloading of conductors;
 - Leakage currents due to poor or inadequate insulation;
 - The ignition of flammable materials by arcing or sparking of electrical equipment, including the scattering of hot particles from electrical equipment.
 - Both A & B
 - All the above
- Q.2 'Speed removal of scrap, waste, debris & unused materials at regular intervals' is the part of _____.
- Construction Process
 - Good Housekeeping
 - Trenching
 - Material Management

- Q.3 Which Zone as per hazardous zone classification is considered as most hazardous due to continuous presence of flammable vapours/gases?
- a) Zone-O
 - b) Zone-1
 - c) Zone-2
 - d) Zone-3
- Q.4 Oxygen levels are maintained between _____ and _____ by volume; and ventilation is typically used to maintain permissible oxygen concentration.
- a) 20.5% and 22.5%
 - b) 19.5% and 22%
 - c) 30.5% and 32.5%
 - d) None of the above
- Q.5 Which of the following is standard deals with “Code of Practice for Industrial lighting”
- a) IS 5566
 - b) IS6665
 - c) 1S 5656
 - d) None of the above
- Q.6 The noise level in excess of _____ dB (A) is not permissible as per the Factory Rules, 1952 As Applicable in The State of Haryana.
- a) 115
 - b) 90
 - c) 85
 - d) 80
- Q.7 The reciprocal of frequency (f), $1/f$, is the _____ of the wave form;
- a) Time Period
 - b) Wavelength
 - c) Velocity
 - d) None of the above
- Q.8 Which of the following is/are part of “Fire Tetrahedron” Model?
- a) Fuel
 - b) Oxygen
 - c) Chain reaction
 - d) All of the above

- Q.9 Which class of Fire involves flammable liquids?
- a) Class A
 - b) Class B
 - c) Class C
 - d) Class D
- Q.10 The minimum acoustic pressure audible to the young human ear is approximately _____.
- a) 20×10^{-6} Pa
 - b) 20×10^{-5} Pa
 - c) 20×10^{-4} Pa
 - d) 20×10^{-2} Pa
- SECTION-B**
- Note:** Very short answer type Questions. Attempt any ten questions out of twelve Questions. (10x2=20)
- Q.11 What is “Stroboscopic Effect”?
- Q.12 Specify the importance of Earthing while using electrical power.
- Q.13 Explain the elements of “Fire tetrahedron” Model.
- Q.14 Explain the importance of good ventilation system at workplace.
- Q.15 Explain in short which instruments are used to measure noise in an industrial work place.
- Q.16 Write a note on control of hazards due to static electricity.
- Q.17 Explain importance of housekeeping in ensuring safety at workplaces.
- Q.18 What do you mean by term Electrocution?
- Q.19 Explain in short the different types of ventilation system.
- Q.20 Write a short note on First Aid measures in case of electrical shock?
- Q.21 What are flame proof electrical equipment?
- Q.22 Write a note on Colour rendering index.
- SECTION-C**
- Note:** Short answer type Questions. Attempt any eight questions out of ten Questions. (8x5=40)
- Q.23 Write a note on Safety and good house-keeping or “5S”.