Uka Tarsadia University (Diwaliba Polytechnic)

Diploma in Environmental Engineering

Assignment (Occupational Health and Safety -EV1006)

Unit-1 Occupational Hazard

- 1. Define Dust and write type of dust affecting lung.
- 2. Classify occupational diseases.
- 3. Write notes on diseases caused by Hazardous chemicals.
- 4. Discuss main objectives and importance of Ergonomics.
- 5. What are threshold limit value and give their three components?
- 6. Write Ergonomics applications
- 7. Write measures for occupational health.
- 8. Explain lethal concentration
- 9. What do you understand by LD50 and LC50?
- 10. Explain in brief about lethal dose.

Unit-2 safety, accident and safety management

- 1. Discuss reasons for accidents due to material handling.
- 2. Define accident and write factors responsible for causing accident
- 3. Give examples of unsafe acts.
- 4. Write responsibility of management in field of safety.
- 5. Define safety.
- 6. What is risk?
- 7. Discuss importance of safety in industry.
- 8. What is various measure of employer's participation in safety?
- 9. What is plan layout? Discuss safety consideration in plant layout.
- 10. Write not on safety and working environment.
- 11. Define industrial accidents.
- 12. What are various types of accident in industry?
- 13. What are causes of accident? Explain in details.
- 14. What is different measurement taken up in organization to prevent accident?

Unit-3 Electrical and Mechanical Safety

- 1. Write causes of electrical hazards.
- 2. State safety norms as per Indian Electricity rules.
- 3. Write notes on safety colour codes.
- 4. State main sources of mechanical hazards.
- 5. Write remedies to control mechanical hazards.
- 6. State safety norms as per Indian Electricity rules.
- 7. Write provisions in factory act 1948 for Cleanliness
- 8. Write provisions in factory act 1948 for Cleanliness / ventilation and temperature
- 9. Discuss electrical hazard in general.
- 10. Write reasons for electrical shocks.
- 11. Write remedies to control electrical hazards.
- 12. Explain various safety colour codes which are prevalent in industries.
- 13. State precautionary measures suggested in connection with machine guards.
- 14. Discuss various health provisions of factory act 1948
- 15. Write reasons for electrical shocks.

Unit-4 Fire and explosion

- 1. Define Fire, Explosion, and Combustion.
- 2. Explain in brief what is smothering?
- 3. What are the different types of fire extinguishers?
- 4. Define: Firefighting, Fire prevention, Fire escape
- 5. What are the different fire awareness signs?
- 6. Write causes of Fire
- 7. Write the general points regarding fire safety.
- 8. Write methods of fire fighting
- 9. Write duties of fire inspector
- 10. Write list of flammable materials.
- 11. Explain fire extinguishing technique

Unit-5 Hazards and Risk identification, Assessment and control techniques

- 1. Define the following terms: Hazard, Risk, and Harm.
- 2. Write a note on Lethal Concentration.
- 3. Write a note on Preliminary Hazard Analysis.
- 4. Explain how an LD50 value should can be used.
- 5. Write short note on HAZAN.
- 6. Write a short note on HAZOP.

Unit-6 Occupational Hazard

- 1. Write requirements of PPE.
- 2. Write notes on Mechanical filter respirators
- 3. Write notes on Equipment used for protection of Finger.
- 4. Explain in brief safety belts for industrial operation.
- 5. Write Special tools for live line maintenance.
- 6. Write Notes on Chemical cartridge type respirators.
- 7. Write notes on safety shoes.
- 8. Write short notes on Equipment used for protection of Finger
- 9. Equipment used for protection of Lungs and respiratory tract.
- 10. Write notes on types of eye protection equipment.
- 11. Write notes on safety shoes.
- 12. Write Notes on Chemical cartridge type respirators
- 13. Write short notes on Equipment used for protection of Finger
- 14. Write notes on types of eye protection equipment.
- 15. Write notes on Air line respirators.
- 16. What is respiratory?