

Uka Tarsadia University (Diwaliba Polytechnic)
Diploma in Environmental Engineering
Assignment (Cleaner Production Engineering-020060604)

Unit-1 Cleaner Production Concept

1. Define cleaner production in detail.
2. Discuss need for cleaner production in detail.
3. Enlist and explain benefits of cleaner production.
4. Explain need of cleaner production for industries in detail.
5. Discuss concept of Cleaner production in detail.
6. Write a difference between CP and end of pipe treatment.
7. How can government promote CP?
8. What is CP? And what is not CP? Discuss it.
9. Enlist various CP practice and explain each in detail.
10. Write an advantages of cleaner production in detail.

Unit-2 Cleaner Production

1. Write a short note on CP hierarchy.
2. Enlist internal and external barriers of cleaner production.
3. Write a difference between environment management system and cleaner production.
4. Define internal barriers and explain each in detail.
5. Define external barriers and explain each in detail.
6. Write basic elements and benefits of EMS.

Unit-3 Cleaner Production Methodology

1. Define Total Quality Management in detail.
2. Discuss six step methodology in CP detail.
3. Discuss principles of Total Quality Management in detail.
4. Write a PDCA cycle for Total Quality Management.
5. Write a short note on benefits of Total Quality Management.
6. Write an advantages and disadvantages of Total Quality Management.
7. Draw a CP tools diagram and explain it in detail.
8. Write down a various techniques consider for CP and discuss it detail.
9. Write down objectives of sustainable production indicators.

Unit-4 Good House Keeping

1. Write a short note on G.H.K.
2. Write benefits of G.H.K.
3. Enlist elements of G.H.K. and explain each in detail.
4. Prepare a check list for material and handling.
5. Write a short note on need to implement of G.H.K.
6. Which are the basic step to implement G.H.K.?
7. Why it is need to implement G.H.K.?
8. Prepare a check list for material and handling.
9. Prepare a checklist for water and waste water.
10. Prepare a checklist for storage and handling materials.
11. Prepare a check list for energy management.
12. Prepare a check list for working safety and health protection.

Unit- 5 Pollution Prevention Methods

1. Discuss LCA with their phases in detail.
2. Enlist various goal and scope of life cycle analysis and explain any two in detail.
3. What is LCA? And explain four step methodology for LCA.
4. Discuss relation between environmental impact assessment and LCA in detail.
5. Enlist various step of LCA and explain any two in detail.
6. Discuss advantages and disadvantages of LCA in detail.
7. Discuss LCA is a tool of EIA.

Unit- 6 Case Studies on Cleaner Production

1. Discuss various CP tools for textile process industry in detail.
2. Discuss various CP tools for rice mill distillery industry in detail.
3. Write a short note on various CP tools for paper industry.
4. Write a short note on various CP tools for Dye manufacturing industry.
5. Discuss CP six step methodology for oil extraction in detail.
6. Give the details of CP tools for paper industry and discuss any one CP tool for environmental point of view.
7. Give the details of CP tools for Dye industry and suggest any one CP tool for environmental point of view.
8. Discuss CP tools for any one industry.