# ASSIGNMENT SET - V

**Department of Nutrition** 

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Subject- Food Processing Semester-IV

Paper Code: BVFPS404

# [Food Plant Utilities and Services]

#### Answer all the questions

#### Unit-1

- 1. What do you mean food plant utilities and services? 2
- 2. Write a short note on classification of various utilities and services in food industry. 5

- 1. What do you mean electricity? 2
- 2. Write five key elements of electricity bill. 5
- 3. Define power factor improvement. 3
- 4. Write short note on electrical transformer. 5
- 5. What do you mean system distribution losses? 2

#### Unit -3

- 1. What do you mean motor efficiency? 2
- 2. Write a short note on factors effecting motor performances. 5
- 3. What types of issues can observe during motor replacement? 4

#### Unit-4

- 1. What are the requirements of compressed air system? 3
- 2. Write a short note on components of compressed air system. 4
- 3. What do you mean capacity assessment? 2
- 4. Write a short note on factors effecting the performance and efficiency of compressed air system. 5

## Unit -5

- 1. What are the requirements of refrigeration system? 3
- 2. What do you mean refrigerants? 3
- 3. Briefly describe factors effecting refrigeration. 5
- 4. Write a short note on working principle of vapour absorption refrigeration system. 5
- 5. Define VCR system. 2

- 1. What are the importance of fan and blowers in food plant industry? 3
- 2. Write a short note on performance evaluation. 4
- 3. Write a short on flow control strategies of fan and blowers. 4

4

#### Unit-7

- 1. Write a short on flow control strategies of pumping system. 4
- 2. Write a short note on performance evaluation. 4
- 3. Define energy conservation opportunities. 3

## Unit-8

- 1. What do you mean DG system? 2
- 2. Write a short note on factors effecting selection of DG system. 5

#### Unit-9

- 1. Briefly describe the properties of
  - Coal
  - Gas
- 2. Briefly describe the classification of fuels. 10
- 3. Define artificially prepared coal. 2

#### Unit-10

- 1. Define boiler specification. 3
- 2. Briefly describe types of boiler. 5
- 3. Write a short note on feed water treatment. 3
- 4. What do you mean energy conservation? 2

- 1. Define flash steam recovery system. 3
- 2. Define various properties of steam. 4
- 3. Write short note on Steam trapping and steam leakage. 5

## Unit-12

- 1. What do you mean waste heat recovery? 2
- 2. What are the advantages and application waste heat recovery? 4
- 3. Write a short note on commercially viable waste heat recovery. 5

- 1. Define lighting in food industry. 3
- 2. What are the importance of drainage system? 4
- 3. What do you mean dust removal? 2
- 4. What do you mean waste water? 2