

Register Number:

Name of the Candidate:

**B.Sc. DEGREE EXAMINATION, May 2015**

**(APPLIED CHEMISTRY)**

**(THIRD YEAR)**

**(PART-III)**

**740: APPLIED CHEMISTRY-II**

Time: Three hours

Maximum: 100 marks

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***Answer One Full Question from each Unit (5×20=100)***

**UNIT-I**

1. a) What are dryers? How are they classified? Explain briefly on the rotary dryers and tray dryers. (10)
- b) What is meant by evaporation? What are the basic factors affecting the rate of evaporation? How does evaporation differ from distillation. (10)

(OR)

2. a) Discuss briefly the theory of fractional distillation. (10)
- b) Write a note on rotary drum filter and filter cake. Explain the working of Vacuum evaporator. (10)

**UNIT-II**

3. a) Discuss briefly the static and dynamic characteristics of measuring instruments. (10)
- b) Explain the basic theory of mass and volume flowmeter. (8)
- c) What are flow charts? (2)

(OR)

4. a) How are the flow of solids measured by flow meters? (10)
- b) Write briefly on timers and data records. (10)

**UNIT-III**

5. a) What are hazards? Explain their various types. Discuss the guidelines and safety methods in detail. (10)
- b) What are fire hazards? Discuss the types of fire hazards. How are fire hazards handled? (10)

(OR)

6. a) What is meant by detoxification? Discuss briefly how the detoxification can be done for lead and chromium poisoning. (10)
- b) Write a note on damage minimization and control. (10)

**UNIT-IV**

7. a) What are the effect of air pollutants in the environment? How does air pollution spread and how can handle it? (10)
- b) Discuss in detail the concept and scope of energy resources. (10)

(OR)

8. a) Discuss the various sources and effects of water pollutants. (10)
- b) Explain the importance of ozone layer. How is it protected? Write a note on aerosols.

**UNIT-V**

9. a) Discuss the effects of industrial pollution. Explain how the various pollutants are assessed and controlled. (12)
- b) How are the liquid wastes disposed? Explain briefly. (8)

(OR)

- 10 a) Write a note on the disposal of solid and gaseous wastes. (10)
- b) What are the sources for radioactive wastes? Explain briefly the disposal of radioactive wastes. (10)

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