

Shree Manibhai Virani and Smt. Navalben Virani Science College (Autonomous)

Affiliated to Saurashtra University, Rajkot

SEMESTER END EXAMINATION APRIL – 2017

M.Sc. Industrial Chemistry

16PICCC09 – INDUSTRIAL SAFETY AND MANAGEMENT

Duration of Exam – 3 hrs

Semester – II

Max. Marks – 70

Part A (5x2= 10 marks)

Answer **ALL** questions

1. i) Virus contamination is _____ type hazard.
ii) Finely divided combustible solids, if intimately mixed with air, can explode, this explosion is called _____
2. i) Give full form of PRV safety device _____
ii) Define: Flame arrester.
3. i) Give full form of GMP
ii) Give full form of GLP
4. i) Write Instant emergency actions while disaster.
ii) Assurance shutdown is preventive in nature. Is this statement true or false?
5. i) Enlist examples of natural & man-made disasters
ii) Enlist any four disasters took place in history of industries.

Part B (5X5= 25 marks)

Answer **ALL** questions

6a Explain potential risk treatments in detail.

OR

6b Explain intrinsic and extrinsic safety in industries.

7a Explain blow down systems in detail.

OR

7b Write a note on explosion suppression.

8a What it means by GMP? Write its components.

OR

8b Give guidelines on GMP.

9a Give introduction of shutdown management. Enlist types of shutdown.

OR

9b Write steps for shutdown procedure, explain each in detail.

10a Explain disaster prevention management.

OR

10b Explain emergency planning ideals.

Part C (5X7= 35 marks)

Answer **ALL** questions

11a Explain the term flammability of material in detail with examples.

OR

11b Write a note on properties of explosions.

12a Explain in detail: pressure relief valve

OR

12b Explain flare system used in chemical industries.

13a Explain GLP in chemical laboratory.

OR

13b Explain GLP principles in detail.

14a Explain routes and exits while disaster with employee responsibilities & actions for safe evacuations.

OR

14b Write a note on evacuation of plant with evacuation elements and conditions under which an evacuation would be necessary.

15a Write a detailed note on Bhopal gas tragedy.

OR

15b Draw disaster risk management cycle and PDCA cycle with description.
