

Total No. of Questions : 6]

SEAT No. :

P284

[Total No. of Pages : 2

BE/INSEM/APR-611

B.E. (Chemical Engineering) (Semester - II)

409351B : CHEMICAL PROCESS SAFETY

(2015 Pattern) (Elective - III)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right side indicate full marks.*
- 4) *Use of Calculator is allowed.*
- 5) *Assume suitable data if necessary.*

- Q1)** a) Explain safety culture practiced in Process Plants. [5]
- b) Explain Fatal accidents rate. A process has a reported FAR of 2. If an employee works a standard 8-hr shift 300 days per year, compute the deaths per person per year. [5]

OR

- Q2)** a) What are the professional ethics concerning safety of society? Explain briefly. [5]
- b) Explain accident Initiation, propagation and termination processes. [5]

- Q3)** a) Outline the process for monitoring and evaluating worker's exposure to vapors. [5]
- b) List liquid toxicants. How it's release is assessed? [5]

OR

P.T.O.

- Q4)** a) What is risk management plan (RMP)? Is Bhopal gas disaster for RMP. [5]

- b) List volatile toxicants. How it's release is assessed? [5]

- Q5)** a) What are confined and unconfined explosions? Differentiate with examples. [5]

- b) With the help of diagram, explain fire triangle. [5]

OR

- Q6)** a) Distinguish between fire and explosion. [5]

- b) Explain minimum oxygen concentration and inerting. [5]

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