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**Question Paper Code: 59917**

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2020

Elective

Chemical Engineering

15UCH923- CHEMICAL PROCESS PLANT SAFETY

(Regulation 2015)

Duration: One hour

Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

**(Answer any six of the following questions)**

1. The product of probability of the event that might occur and severity of the event if it occurs is CO1- R  
(a) Accident                      (b) Hazard                      (c) Risk                      (d) None of the above
2. Industrial safety management is the branch of management which is concerned with \_\_\_\_\_ hazards from the industries. CO1- R  
(a) Reducing                      (b) Controlling                      (c) Eliminating                      (d) All of the above
3. Method of maintenance made after the equipment is out of order CO2- R  
(a) Scheduled                      (b) Preventive                      (c) Breakdown                      (d) Predictive
4. The most important initiating factors for the runaway reactions are. CO2- R  
(a) Incorrect charging                      (b) inadequate cooling  
(c) both a and b                      (d) none of the above
5. Implementation of safety can be through CO3- R  
(a) Safety Audit                      (b) Safety Week                      (c) Safety Day                      (d) All of the above
6. A self propagating reaction of a material with oxygen in air is CO3- R  
(a) fire                      (b) loss                      (c) decomposition                      (d) none of the above
7. Decibel (db) is a unit used to measure CO4- R  
(a) Light                      (b) Sound                      (c) Frequency                      (d) None of the above

8. Which of the following helps to prevent occupational health hazards? CO4- R  
 (a) Good Housekeeping (b) Good Maintenance  
 (c) Secure Guarding and Cleanliness (d) Controlling environmental conditions
9. Safety Audit is a systematic process of CO5- R  
 (a) Reviewing (b) Evaluating (c) Monitoring (d) All of the above
10. Employee's State Insurance act is for CO5- R  
 (a) sickness (b) maternity (c) employment injury (d) all of the above

PART – B (3 x 8= 24 Marks)

**(Answer any three of the following questions)**

11. Explain the elements of a good safety program. CO1- U (8)
12. Elucidate the safety criteria in a FBR CO2- U (8)
13. Explain the types of fires and the methods for controlling fire in chemical process industries. CO3- U (8)
14. Explain the tools for evaluating thermal explosion. CO4- U (8)
15. Discuss the role and measures taken by the government for ensuring safety in industries. CO5- U (8)