

**BACHELOR OF TECHNOLOGY IN  
MECHANICAL ENGINEERING  
(COMPUTER INTEGRATED  
MANUFACTURING)  
Term-End Examination**

**December, 2013**

**BME-030 : SAFETY ENGINEERING**

*Time : 3 hours*

*Maximum Marks : 70*

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*Note : Answer any seven questions.*

*All questions carry equal marks.*

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1. (a) "Safety alone is not the objective of Safety Engineering. Health of workers should also be included in the objective". Justify the statement. 5
- (b) Describe format of keeping record of worker related injury, ill health or death. 5
2. (a) Discuss Heinrich theory of accident causation. 5
- (b) What are the diseases that commonly affect industrial workers ? 5
3. (a) What do you mean by Environment pollution ? 5
- (b) What is TLV ? How can you detect a disagreeable environment ? 5

4. (a) What is ozone hole? What suggestions were made by UNO to avoid ozone layer depletion? 5
- (b) What are the effects of  $\text{SO}_2$  and CO on health of human being? 5
5. (a) What is Municipal Solid Waste? How is solid waste disposed off? 5
- (b) What are the effects of discarding batteries in open? 5
6. (a) Distinguish between short term acute hazard and long term environmental hazard. 5
- (b) What is CWTF and how does it function? 5
7. (a) What preparations are to be made for recycling a waste? 5
- (b) Distinguish between recycling of industrial waste and MSW. 5
8. (a) What is a heat stroke? What symptoms you should look for to ascertain that a person has received heat stroke? How should the victim be treated? 5
- (b) What are different elements of emergency planning? 5

9. (a) What do you understand by vulnerability to disaster ? Give examples. 5
- (b) What is the difference between orientation and in-depth safety training ? 5
10. Write notes on *any two* : 2x5=10
- (a) Bhopal Gas Disaster
- (b) Electrical Hazards
- (c) Economics of recycling
- (d) COD and BOD
- (e) Landfill
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