BME-030

B.Tech. MECHANICAL ENGINEERING (COMPUTER INTEGRATED MANUFACTURING)

□□760□ Term-End Examination

June, 2016

BME-030 : SAFETY ENGINEERING

Time : 3 hours   *Maximum Marks : 70*

Note : *Answer any **seven** questions. All questions carry equal marks.*

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1. (a) Describe an ideal safety organisation for a large-scale industry.   5

    (b) Explain various work-related operations that attract safety precautions.   5

2. (a) What is occupational safety ? Describe the various causes of risks to the safety and health of a worker in the work-place.   5

    (b) What are the diseases commonly suffered by industrial workers ? Explain.   5

3. (a) Describe the various types of accidents and types of injuries for the purposes of compensation. 5

(b) Discuss Heinrich theory of accident causation. 5

4. (a) What are the effects of polluted water on health and environment ? 5

(b) What are the functions of safety audit ? What are the guidelines to plan safety audit in an industry ? 5

5. (a) Describe the provisions of the Factories Act, 1948. 5

(b) Describe briefly how The Compensation Act, 1923 helps workers who suffer in industrial environment. 5

6. (a) What is ozone hole ? What suggestions were made by UNO to avoid ozone layer depletion ? 5

(b) What are the different convention declarations made by UNO in respect of environment pollution ? 5

7. (a) How can waste be managed safely ? 5

(b) What is aerobic microbial composting ? Distinguish it from vermiculture. 5

8. (a) Distinguish between municipal solid waste and industrial waste. 5

   (b) List the methods of disposal of hazardous wastes. 5

9. (a) Discuss the factors that may affect the recycling programme. 5

   (b) What is critical incident technique ? 5

10. (a) What is a disaster ? Distinguish between man-made and natural disasters. 5

   (b) Write a note on Bhopal Gas Disaster, explaining the failures on the part of the company. 5

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