

**B.Tech. MECHANICAL ENGINEERING
(BTMEVI)**

Term-End Examination

June, 2014

BIMEE-014 : SAFETY ENGINEERING

Time : 3 hours

Maximum Marks : 70

Note : Answer any five questions. All questions carry equal marks.

1. (a) "Safety is not only the objective of safety engineering, health of workers should also be included in the objectives". Justify the statement. **7+7**
- (b) Discuss the health problems arising out of industrialisation and the measures for the health protection of workers.
2. (a) What are biological health hazards ? Write in detail about the biological agents and different diseases caused by them. **7+7**
- (b) Describe pollutants of air and discuss green house effect.
3. (a) What are the occupational hazards ? Mention their control measures in detail. **7+7**
- (b) Explain in detail the adverse effects of noise. How do you prevent them ?

4. (a) What is occupational stress ? What are the causes and impact of stress at work place ? 7+7
(b) Describe the pollutants of water and how they enter into water ?
5. (a) What safety measures should be observed during welding work in industries ? 7+7
(b) Bring out the distinguishing features of :
(i) domestic solid waste
(ii) municipal solid waste and
(iii) industrial solid waste
What hazards are associated with these wastes ?
6. (a) Can hazardous wastes be generated in homes ? What are the characteristics indicators that will define if domestic waste is hazardous ? What steps can be taken in safe disposal of hazardous domestic waste ? 7+7
(b) What is medical waste ? What methods are commonly used for disposing off medical waste ? Describe incineration of medical waste and common waste treatment facility.
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