

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

**Term-End Examination**

**December, 2016**

00673

**BIMEE-014 : SAFETY ENGINEERING**

*Time : 3 hours*

*Maximum Marks : 70*

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

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1. (a) What are biological health hazards ? Write in detail about the biological agents and different diseases caused by them.  
(b) What is the greenhouse effect ? What are the effects of climate change ? 7+7
2. (a) What are the causes of industrial accidents ? Suggest some practical measures to minimise them.  
(b) What are the safety inspections ? Discuss the objectives and role of safety inspectors. 7+7
3. (a) Discuss the role of government and society in keeping safety management in industry.  
(b) What is the role of protective equipment and clothing to avoid hazards in the workplace ? 7+7

4. (a) What purposes are served by the Legislative Acts in respect of occupational health and safety ?
- (b) Describe the various factors polluting the environment. 7+7
5. (a) What are the methods of detecting gaseous pollutants in industrial environment ? Describe the methods which detect CO<sub>2</sub>, methane and SO<sub>2</sub>.
- (b) What do you understand by land filling ? What are the different types of land fills ? How is a land fill designed and its size selected ? What chemical reactions occur in a land fill and what is the output ? 7+7
6. (a) Describe the types of accidents due to electricity and discuss the preventive measures.
- (b) Explain in detail how the industrial accidents are connected with employees, employer, government, society, product, processes and environment. 7+7
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