

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

Term-End Examination

00642 December, 2017

BIMEE-014 : SAFETY ENGINEERING

Time : 3 hours

Maximum Marks : 70

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

1. (a) What is the need of safety training in educational institutions ? 7
- (b) What is the role of first aid in dealing with an emergency ? Describe the contents of a first aid kit. What are the different elements of emergency planning ? 7
2. (a) What is Noise-Induced Hearing Loss (NIHL) ? What types of sounds cause NIHL ? 7
- (b) Explain the procedure of safe handling of inflammable chemicals in industries. 7
3. (a) What precautions would you prescribe for a work environment which contains a risk of chemical hazards ? 7
- (b) Describe the types of accidents caused due to electricity and discuss the preventive measures. 7

4. (a) Make a list of operations performed by industrial workers that require safety. What are the benefits of practising a safety programme ? 7
- (b) What are the direct and indirect costs associated with accidents ? Explain. 7
5. (a) Describe the pollutants of air and water and discuss the greenhouse effect. 7
- (b) Discuss the health problems arising out of industrialization and the measures for the health protection of workers. 7
6. (a) What is medical waste ? What methods are commonly used for disposing off medical waste ? Also describe incineration of medical waste and common waste treatment facility. 7
- (b) What kind of safety measures should be observed during welding and foundry work in industries ? 7
7. (a) Describe the various methods of fire detection with particular emphasis on automatic fire detectors. 7
- (b) What are the objectives and salient features of a safety audit ? Explain in detail. 7