

JK LAKSHMIPAT UNIVERSITY, JAIPUR

INSTITUTE OF ENGINEERING AND TECHNOLOGY

End Term Examination November 2018

M. Tech (as applicable) in Health, Safety and Environmental Engineering, Semester First

Roll No.....

COURSE CODE: MTHSE102

Time: 3 hours

Max. Marks: 80

COURSE TITLE: Occupational Health and Hygiene

Instructions to students:

1. Do not write anything other than your roll number on question paper.
 2. Assume suitable data wherever required and mention it clearly.
 3. Writing appropriate units, nomenclature, and drawing neat sketches/schematics/ flow chart wherever, required are an integral part of the answer.
-

Q.1A Objective type multiple choice questions (10 questions @ 1 mark) 10

- i. In order to maintain good health standards at the workplace the following rules must be adhered to:
 - (a) Cleanliness, adequate sanitary facilities, Protection against dangerous substances
 - (b) Wellness of workers
 - (c) Promoting a positive social climate
 - (d) None of the above
- ii. A Safety Guard refers to:
 - (a) Something that is done in advance in order to avoid risks or dangers
 - (b) A device designed to prevent a mechanism from being operated unintentionally
 - (c) Assessing the severity of a hazard
 - (d) All of the above
- iii. The Ministry responsible for Occupational Health and Safety in terms of the Labour Act of 1992 is:
 - (a) Ministry of Health and Social Services
 - (b) Ministry of Labour
 - (c) Namibia Employers Federation
 - (d) All of the above
- iv. Physical Hazards in the workplace refers to:
 - (a) Unsafe conditions in the workplace that can cause injury
 - (b) Substances that pose a threat to living organisms, for example bacteria,
 - (c) Chemical hazards
 - (d) None of the above
- v. An accident is:
 - (a) An unsafe act
 - (b) An unsafe condition
 - (c) Unplanned, something that happens by chance
 - (d) All of the above
- vi. **What is the role of the workplace's health and safety representative?**
 - (a) To represent the workers' views and concerns on the workplace's OH&S practices to the employer
 - (b) To document the workplace's OH&S policies and practices
 - (c) To check on whether all workers are complying with the workplace's OH&S policies and practices

- (d) *To train and assess all workers in their knowledge of the workplace's OH&S policies and practices*
- vii **Workplace related injuries, illnesses and deaths impose costs upon?**
 (a) Employers (b) Employees (c) The community (d) All of the above
- viii **What are the most common injuries in the hospitality industry?**
 (a) Sprains and strains (b) Being hit by falling objects (c) Falls (d) all of the above
- ix **What is prevention?**
 (a) *Taking precautions to prevent or reduce risks.*
 (b) *Investigating accidents and incidents.*
 (c) *Supervising safety at work.*
- x **The Primary Goal of Occupational Health is about:**
 (a) *Protecting the safety, health and welfare of people engaged in work*
 (b) *Protecting co-workers, family members employers, suppliers, nearby communities and other members of the public who are influenced by the workplace environment*
 (c) *Protecting the natural environment*
- Q.2 Short answer type questions (4 questions @ 2.5 marks) 10
 What are the principles of health and safety?
 Name the five groups of hazards found in workplaces.
 Describe Occupational Health & Safety policies and procedures.
 What can employees do to show that they are fulfilling their duty of care obligation?
- Q.3A Mention what you consider are the main roles of a sanitarian in Occupational health, safety and hygiene programs 05
- Q.3B What are the common health hazards of organic solvents? 05
- Q.4A What are the advantages of hazard warning symbols or signs? 05
- Q.4B What variables would you use to determine the level of safety in a given Occupational settings? 05
- Q.5A How can you evaluate the level of noise in occupational setting? 05
- Q.5B What are the causes of miss utilization of personal protective devices among the workforce? 05
- Q.6A How can work affect health and health affect work? Give practical examples 05
- Q.6B Explain the difference between grab sampling and integrated sampling? 05
- OR
- Q.6B Evaluate your classroom in terms of biological hazard, noise, dust, ergonomic and other physical hazards. 05
- Q.7 Select ten occupations common to your community. List the potential and real occupational risks associated with each type of employment. 10
- Q.8 What are the principles and control methods of occupational health safety and hygiene problems? 10
- OR
- Q.8 Explain the reasons why the magnitude of occupational health hazards is increasing in health care industries (hospitals, health centers, laboratory etc). 10