

**National Exams May 2019**  
**17-Ind-B10 Workplace Health and Safety**  
**3 hours duration**

**NOTES:**

1. If doubt exists as to the interpretation of any question, the candidate is urged to submit with the answer paper, a clear statement of any assumptions made.
2. This is a Closed Book exam. No calculators are allowed for this exam.
3. Any five questions constitute a complete paper. Only the first five questions as they appear in your answer book will be marked.
4. All questions are of equal value.
5. Write your answers in point-form whenever possible, but fully.

**Marking Scheme (marks)**

1. (i) 7, (ii) 7, (iii) 6
2. (i) 6, (ii) 7, (iii) 7
3. (i) 7, (ii) 7, (iii) 6
4. (i) 7, (ii) 7, (iii) 6
5. (i) 7, (ii) 6, (iii) 7
6. (i) 7, (ii) 6, (iii) 7
7. (i) 7, (ii) 7, (iii) 6

1. (i) Define the term 'policy statement' as related to industrial safety as explained in the Ontario Health and Safety Act (OHSA). What types of issues should the policy statement cover?  
(ii) State who has responsibilities under the policy and what their responsibilities are.  
(iii) Write a note on the need and objectives of 'safety standards' in an industry, focusing on how accidents are reported/documented, investigated and analyzed. How does it help in the prevention of future accidents?
  
2. (i) As detailed by the Canadian Centre for Occupational Safety, what is a hazard control program and why is it important to monitor and review the program and methods regularly?  
(ii) When dealing with chemical agents how you know what kind of control method is required.  
(iii) What are the main ways to control a hazard? Provided a detailed description of each.
  
3. (i) What are the responsibilities of facilities and equipment designers in providing the need for environment control?  
(ii) How do 'noise' and 'heat' effect the efficiency and accuracy of the work environment?  
(iii) What essential steps need to be undertaken for safeguarding the health of the workers?
  
4. (i) What is your understanding of the terms for the three tasks that constitute the central activities in any risk management framework? A)Risk estimation B)Risk evaluation C)Risk control  
(ii) What sections should be included in a risk management policy?  
(iii) Choose 4 risk assessment techniques and write a brief description detailing the importance of this technique and how is it utilized.
  
5. (i) Explain what a job safety analysis is and what the benefits of completing one are.  
(ii) In detail, describe the stages associated with a job safety analysis.  
(iii) What are the basic steps of an effective training plan as it relates to the job safety analysis to ensure that the operators follow the operating procedures?
  
6. (i) What are the key methods for controlling hazards in the workplace?  
(ii) When applying controls what are the (3) areas where controls can be placed?  
(iii) Describe how the best method is chosen, can there be more than one and why?
  
7. (i) Create a simple process flow chart for any industrial process. (min. 6 steps)  
(ii) Explain the hazards that may be present at each step as well as the controls that are in place for the identified hazard.  
(iii) Create an alternate process flow chart that would reduce the number of hazards listed in your original flow chart.