



DECEMBER 2016

PRINCIPLES OF CONTROL

Instructions to candidates:

- a) Time allowed: Three hours (plus an extra ten minutes' reading time at the start – do not write anything during this time)
 - b) Answer any FIVE questions
 - c) All questions carry equal marks. Marks for each question are shown in []
1. Every organisation should devise safe systems of work that match the risk potential of their operations.
 - a) Explain what managers need to consider when providing a safe system of work. [12]
 - b) Discuss what needs to be taken into account when devising a safe system of work. [8]
 2. It is essential that a fire is controlled before it can cause devastating consequences.
 - a) A manager must carry out a fire risk assessment examining the dangerous substances present or likely to be present in the workplace. Examine what he should take into account to eliminate or reduce the safety risks from dangerous substances. [10]
 - b) Identify the FOUR main methods of extinguishing a fire in the workplace. [4]
 - c) Discuss briefly when fire routines should be tested. [6]
 3. The senior manager of an organisation has to consider a Permit to Work procedure for a specific task.
 - a) Summarise some of the possible potential hazards that could be found in a confined space. [8]
 - b) The senior manager has to ensure the effective operation of the permit system. Assess what responsibilities an operator has within the permit. [12]
 4. Employees in a factory are able to access machinery which could have dangerous parts. Under the hierarchy of control, examine the considerations for exposure reduction and the regulation that this would come under. [20]
 5. As an employer, you have to use and maintain safety signs as described under the relevant legislation.
 - a) State which regulation safety signs come under. [2]
 - b) Explain the meaning of the term 'safety sign'. [8]
 - c) Outline what a **prohibition sign** is, its colour, and give an example. [10]
 6. As a health and safety director of a high risk manufacturing business, you must review your first aid provision.
 - a) There are 100 employees on site, some undertaking shift work. Identify what first aid personnel provisions have to be made. [6]
 - b) Summarise the statutory requirements for recording accidents in the workplace. [14]
 7. A senior manager has to carry out a risk assessment for an organisation as required by legislation.
 - a) Describe the FIVE steps to risk assessment. [5]
 - b) Under step one of the risk assessment, identify what the manager will look at to help in his assessment. [10]
 - c) If the factory had an inspection by the authorities, briefly discuss why they look at written records. [5]
 8. A manufacturing organisation is trying to improve its engineering controls in the workplace.
 - a) Explain how the employer could control the risk of exposure to hazards to protect the employees. [10]
 - b) Evaluate the methods that may be used by the employer to control the risks at source. [10]