



SEPTEMBER 2017

## WORKING PRACTICES, HAZARDS & CONTROLS

### 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. a) What techniques can be used to reduce the effects of noise? [6]  
b) List and describe the more common methods of attenuating or reducing noise levels. [14]
  - 2. Confined spaces include chambers, tanks (sealed and open top), vessels, furnaces, ducts, sewers, manholes, pits, flues, excavations, boilers, reactors and ovens. Many fatal accidents have occurred where inadequate precautions were taken before and during work involving entry into confined spaces.  
a) Identify at least EIGHT potential hazards to any employees working in a confined space. [14]  
b) Explain the arrangements you would set up, before allowing anyone to enter a confined space, for rescue in case of emergency. [6]
  - 3. a) Define and give examples of **work-related upper limb disorders**. What are the risk factors that can lead to the onset of this? [8]  
b) Draw and/or describe how the risks could be minimised for employees who spend more than an hour at a time at a desk. [12]
  - 4. Unlike safety risks, which can lead to immediate injury, the result of daily exposure to health risks may not manifest itself for some time. Irreversible health damage may occur before any symptoms are apparent. It is, therefore, essential to develop a preventative strategy to identify and control risks before anyone is exposed to them.  
a) Outline and provide examples of risks to health from work activities. [8]  
b) List and describe the types of personal protective equipment concerned with protection from hazardous substances. [6]  
c) Outline the benefits and limitations of personal protective equipment. [6]
  - 5. There are several groups of people who require additional risk assessment due to their being 'more at risk' than other groups. Outline and describe these groups and the key elements that need consideration. [20]
  - 6. a) Explain why slips and trips in the workplace are such a worry. [3]  
b) Identify the hazards that may cause **slips** in the workplace. [5]  
c) Identify **trip** hazards commonly found in any workplace. [8]  
d) Outline measures employers and employees can take to reduce the chances of slips or trips from happening. [4]
  - 7. a) Provide TEN examples of work activities that the working at height regulations cover. [10]  
b) List FIVE measures that should be followed, when working at height, to prevent falls from occurring. [10]
  - 8. a) Draw and describe the FIVE different styles of signs (**prohibition, warning, mandatory, safe condition and fire equipment**) and what EACH one indicates. [10]  
b) Other than signs, how can safety information be provided to staff, visitors, contractors or members of the public? [10]