



## **NEBOSH Certificate NGC2/7**

### **Physical, ergonomic and psychological health hazards and control**

#### ***Revision questions***

**Q1** *As we have explained, we think that you will find it useful to provide a focus on this wide-ranging subject and we suggested that you should look in particular at the following syllabus sections; make a few notes for the following syllabus elements (and any others you care to add).*

- ***NGC2/2 and 3 PUWER***
  
- ***NGC2/2 and 3 safeguarding of machinery***
  
- ***NGC2/2 manual handling***
  
- ***NGC2/8 construction***
  
- ***NGC1/6 confined spaces***
  
- ***NGC2/5 fire fighting equipment***
  
- ***NGC2/6 air monitoring of dusts, gases and vapours***
  
- ***NGC2/6 control of exposure to hazardous substances***
  
- ***NGC2/1–8 personal protective equipment***
  
- ***NGC2/7 musculoskeletal disorders***
  
- ***NGC2/7 display screen equipment***
  
- ***NGC2/7 welfare factors in health and safety***
  
- ***NGC1/6, NGC1/7 and NGC2/7 safe place and safe person concepts***

*... any others you feel it is appropriate to add ...*

**Q2** *Outline some of the particular problems addressed by The Health and Safety (Display Screen Equipment) Regulations 1992.*

**Q3** *Define a 'VDU worker' and outline the basic ergonomic checks and adjustments that should be undertaken on a work station.*





- Q4** Outline an employers responsibilities regarding eye tests and the provision of prescription spectacles.
- Q5** The Health and Safety at Work etc Act 1974 makes employers responsible for providing a safe place of work for their employees. In-depth guidance on the condition and arrangement of the actual place of work is provided by which Regulations?
- Q6** The Workplace Regulations do not themselves give all the specific detail on requirements for room temperature, cleaning of windows, toilets and so on - where do you find these details?
- Q7** Who is responsible for reporting defects in the workplace?
- Q8** As in so many other areas of the syllabus and in so many sets of Regulations, maintenance considerations thread their way through the Workplace Regulations. What should a suitable system of maintenance encompass?
- Q9** In our study material, we looked at the provision of a healthy working environment under the following headings (all obviously derived from the Workplace Regulations):
- maintaining the workplace and its systems
  - ventilation
  - temperatures in indoor workplaces
  - lighting
  - cleanliness and waste materials
  - room dimensions and space
  - workstations and seating
  - conditions of floors and traffic routes
  - falls or falling objects; ladders, roof work; falls into dangerous substances; stacking and racking; loading or unloading of vehicles
  - windows, including cleaning
  - organisation of traffic routes; vehicles; people and vehicles
  - welfare facilities

*For the purposes of the NEBOSH Certificate, you should be able to write a couple of sentences under each of the above headings; see if you can.*

- Q10** Two noise sources independently give a sound pressure level of 92 dB, what will be the overall sound pressure level if they operate at the same time?
- Q11** Briefly outline the response of the 'normal' (ie young and undamaged) ear to different frequencies of sound. Briefly explain how this response will change with ageing; typically, what might be the effects of noise damage on the ear's response?
- Q12** Isolation, insulation, absorption, damping, silencing - the engineering noise control terms that NEBOSH require you to be able to explain and illustrate with examples; several times in the last ten years, this has formed the basis of a Certificate question. Accordingly, provide explanations and examples for each of these terms.
- Q13** Using examples of your own choosing, explain how different noise sources can have very different noise characteristics (sometimes called noise 'profile'). As a challenge, you might like to extend your answer to encompass the sorts of noise control measures that might be appropriate for the different noise profiles that you have identified.





**Q14 Outline the two main types of personal hearing protection together with their advantages and disadvantages.**

**Q15 Personal hearing protection is of course the last option in the hierarchy of control of noise - outline the steps that should be taken before deciding on this option.**

Please make sure that you have also attempted the questions given at the end of the *Noise, hazards and control* book.

**Q16 Outline typical uses of the following members of the electromagnetic family of radiations**

- radiowaves
- microwaves
- infra-red
- lasers
- ultraviolet
- X-rays and gamma-rays ( $\gamma$ -rays)

**Q17 Give one or two uses for alpha ( $\alpha$ ) and beta ( $\beta$ ) radiation sources.**

**Q18 Explain, in terms of the human body, the significance of the process of ionisation.**

**Q19 outline the meaning of the terms:**

- somatic effects
- genetic effects

**Q20 ... probably more than you will need for your Certificate examination, but as part of your general knowledge ... outline the three main requirements of The Ionising Radiations Regulations 1999.**

Make sure that you have also attempted the questions which we asked at the end of the *Ionising and non-ionising radiation* book.

Some of the following PPE questions can be seen to have general application throughout the syllabus.

**Q21 Present the case for personal protective equipment in a positive way (ie don't use phrases such as 'in the last resort', 'the last option in the hierarchy of control ...' and so on).**

**Q22 What are the main requirements of The Personal Protective Equipment at Work Regulations 1992?**

**Q23 Provide 10–15 examples of the use of different types of PPE to protect different parts of the body and the body as a whole.**

**Q24 Identify some hazards which may be created by the use of PPE.**

**Q25 There are hundreds of different types of RPE but they can all be classified as being in one (or occasionally both) of two main categories - what are these?**

**Q26 Under what circumstances do you think it will be necessary to use air-supplied RPE devices?**

**Q27 We have asked this before in the NGC2/7 study material ... Make a list of some possible 'heat-in' and 'heat-out' mechanisms for the human body - some mechanisms can act in both directions, some one way only.**





**Q28 Outline some illnesses associated with heat.**

**Q28 Outline some illnesses associated with exposure to cold.**

**Q30 In addition to climatic conditions, outline some other factors which might be of importance in determining the level of heat stress on an individual.**

**Q31 As regards stress and violence, the crucial sentence in our study material was the one which said:**

The examiners will be looking to see that you are able to propose general approaches to the identification and control of stress and violence workplace hazards alongside the identification and control of all other workplace hazards.

**As a reminder of the points we made in the study material, make a few notes on the identification and control of hazards in relation to the following elements in the syllabus.**

**NGC1/2 Policy**

**NGC1/4 Promoting a positive health and safety culture**

**NGC1/5 Risk assessment**

**NGC1/6 Principles of control**

**NGC2/8 Incident investigation, recording and reporting**

