# Design & Technology A-Level

# Health and safety laws, regulations and impacts on the designing and making process

# Materials required for questions

- Pencil
- Rubber
- Calculator

#### **Instructions**

- Use black ink or ball-point pen
- Try answer all questions
- Use the space provided to answer questions
- Calculators can be used if necessary
- Use a cross in the box to mark you answer



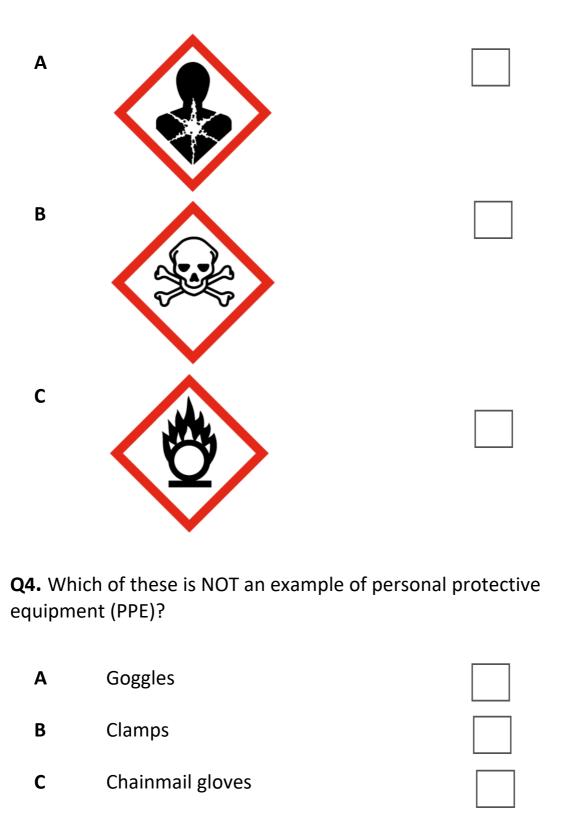
### **Advice**

- Marks for each question are in brackets
- Read each question fully
- Try to answer every question
- Don't spend too much time on one question

# Good luck!

**Q1.** What does this warning symbol mean? Hazardous product Α Corrosive В Dangerous for the environment C **Q2.** What does this warning symbol mean? Corrosive Α Flammable В Toxic C

**Q3.** Which symbol indicates a chemical that should be used in a fume cupboard?



<b>Q5.</b> Which of these is required by law to ensure safe use of tools, equipment and materials?			
Α	Risk assessment		
В	COSHH report		
С	PAT testing		
<b>Q6.</b> Which	one of the following statements is true?		
Α	Safety guards on workshop machinery are not needed when an adult is present.		
В	Quality Control only occurs when the production process is complete.		
С	COSHH regulations control the level of exposure of workers to softwood dust.		
<b>Q7.</b> Which	one of the following statements is false?		
Α	Manufacturers must follow COSHH regulations		
В	COSHH stands for Control of substances Harmful to health		
С	Safety sign regulations require employees to display an appropriate safety sign wherever a significant risk cannot be avoided or reduced		

**Q8.** Quality Control only occurs when the production process is complete.



8a. State the meaning of this symbol. (1 mark)
<b>8b.</b> State 1 safety precaution to be taken when spraying the varnish <b>(1 mark)</b>
Q8. What does the health and safety work act do (1974)? (3 marks)

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2.				
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<b>l.</b>				
5.				
Q11. Fill in the missing boxes one has been done for you. (4 marks)				
Geometric shape	Meaning	Example of use		

Square	Fire equipment	Fire extinguisher
	Safe condition	
Square		
	Prohibition	No smoking
	Mandatory action	
Circle		
		Electricity
Equilateral triangle with radiused outer corners		

# **Answers**

Q1. A

Q2. C

Q3. A

Q4. B

Q5. A

Q6. C

Q7. B

# Q8a.

Flammable / Inflammable

Do not accept fire hazard

#### 8b.

Wear face mask/respirator/dust mask; use extraction; spray in ventilated area; do not spray near naked flame; spray away from body/eyes

# Q9.

- Under this Act of parliament, employers are legally required to do all that is reasonably practicable to ensure the health, safety and welfare at work of employees
- This also applies to the health and safety of non-employees such as students and visitors to the school
- The following regulations are procedures to safeguard the risk of injury to people

# Q10.

Any five of the following points:

- 1. Identify the hazards / risks (1)
- 2. Identify the people at risk / who might be harmed. (1)
- 3. Evaluate the risks / assess the seriousness of it / likelihood of it happening. (1)
- 4. Decide / implement / check appropriate control measures / an example of a control measure Eg. guards, PPE, signage, training maintenance, etc. (1)
- 5. Record /store the risk assessment (1)
- 6. Set a review date / regularly review the risk assessment. (1) Note that the order of the points should not be considered.  $(1 \times 5)$

# Q11.

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Geometric shape	Meaning	Example of use

Square	Fire equipment	Fire extinguisher
Square	Safe condition	Emergency exit
Circle with diagonal bar	Prohibition	No smoking
Circle	Mandatory action	Wear eye protection
Equilateral triangle with radiused outer corners	Warning	Electricity