**Design & Technology**

**AQA A-Level** Logo

Description automatically generated with low confidence

**The use of adhesives and fixings**

**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
* For the multiple choice questions, circle your 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.** Which adhesive requires clamping while drying and is commonly used for wood joints?

**A** UV hardening adhesive

**B** PVA

**C** Epoxy resin

**Q2.** What type of adhesive creates an instant bond when two coated surfaces are pressed together?

**A** Solvent cement

**B** Contact adhesive

**C** Epoxy resin

**Q3.** Which adhesive cures when exposed to ultraviolet light?

**A** PVA

**B** UV hardening adhesive

**C** Tensol cement

**Q4.** What is a key disadvantage of using solvent cements like Tensol?

**A** Long curing time

**B** Emission of harmful fumes

**C** Weak bond on plastics

**Q5.** State a specific application for a UV hardening adhesive. Give two reasons why it is suitable for the application you have named **(3 marks)**

Application

Reason 1

Reason 2

**Answers**

**Q1**. B

**Q2**. B

**Q3**. B

**Q4**. B

**Q5.**

Possible reasons depend on the application, but the list below gives a range.

* Reduced curing times.
* One part adhesive removing risk of mixing ratio errors.
* Joints can be tested for strength with fluorescent light (nondestructive).
* Transparent adhesive improving aesthetics.
* Solvent free adhesives for Health and Safety.
* Only sets when exposed to UV light source so excess can be cleaned away easily prior to exposure.