**Design & Technology**

**AQA GCSE** Logo

Description automatically generated with low confidence

**Industry**

**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.** How can automation improve efficiency in the workplace?

**A** By reducing the need for human movement

**B** By eliminating all human jobs

**C** By making workplaces smaller

**Q2.** What is a benefit of remote work technology?

**A** It makes communication more difficult

**B** It increases the need for in-person meetings

**C** It reduces the need for physical office space

**Q3.** How can technology improve workplace safety?

**A** By monitoring worker fatigue and alertness

**B** By increasing workload expectations

**C** By removing all manual labour

**Q4.** How can smart infrastructure improve building efficiency?

**A** By increasing the number of office workers

**B** By using sensors to optimise energy use

**C** By limiting the use of technology

**Q5.** What is an advantage of modular construction?

**A** It requires traditional brick-and-mortar methods

**B** It increases the cost of construction

**C** It allows buildings to be assembled quicker

**Q6.** Why are sustainable materials being used in modern buildings?

**A** They make buildings more expensive to construct

**B** They are often stronger and more environmentally friendly

**C** They require more maintenance than traditional materials

**Q7.** What is the purpose of collaborative robots (cobots)?

**A** To work alongside humans safely

**B** To fully replace human workers

**C** To increase production costs

**Q8.** How can wearable technology, such as exoskeletons, benefit workers?

**A** By reducing fatigue and physical strain

**B** By making tasks more complex

**C** By increasing the risk of injury

**Q9.** Outline the negative effects mass-production has had on employment **(4 marks)**

**Q10.** Many products are mass produced nowadays. Explain two benefits that mass production has had on employment. **(6 marks)**

**Answers**

**Q1**. A

**Q2**. C

**Q3**. A

**Q4**. B

**Q5**. C

**Q6**. B

**Q7**. A

**Q8**. A

**Q9.**

* Workers replaced by machines (1)
* Low job satisfaction/ morale/ self-pride in the work (1)
* Low wages (1) • Poor quality living conditions/ poverty (1)
* Sweatshop employment/ long hours/ few breaks (women/children) (1)
* Poor/ unsafe/ bad working conditions (1)
* Uprisings/ strikes/ friction/ resentment (1)
* Unemployment/ less employment/ less demand for labour (1)

**Q10.**

* Creates more jobs (1) giving employees a regular income/higher pay (1) increasing their quality of life. (1)
* Employers need skills (1) so employees are trained up (1) leading to greater job satisfaction/promotion (1)
* Established a need for health and safety laws (1) which were brought in by the government (1) making the work environment a safer place (1)
* Trade unions established (1) increasing the influence/power of employees (1) brining many employee benefits (sick pay, holidays, pensions etc.) (1)