

I. What professions use CAD and what for? Write professions next to the right description.(5 points)

1.	designing and testing how the air will flow over the component, determining how the object will react to different variables as ice, snow, strong wind etc.	
2.	designing components and units which are present in every electronic device	
3.	testing strength of materials before they are used in constructions	
4.	design and develop life-saving and health-improving devices	
5.	test how all products look, feel, interact	

II. Put the following words in the right sequence to make sentences CAD/CAM systems, then write A(for advantage) or D (for disadvantage). (10 points)

1. percent /productivity /software/ increases/ by /CAM/ as much as/ 50 /initially.

2. of /Work/ be/ because/ can /the/ breakdown/ of/ sudden/ lost/ computers.

3. erasing /can /without/ be/ Designs/ altered.

4. possible /Computer/ are/ errors.

5. elements/ be/ Certain/ to/ facilitate/ can/ inspection/ magnified.

III. Match words from A and B into pairs to form collocations. Translate into Polish in C. (20p)

A	B	C
1. 3D ____	A. aided	
2. geometrical ____	B. to	
3. computer-__	C. testing	
4. time-__	D. representation	

5. refer __	E. parameters	
6. real-__	F. saving	
7. derived __	G. pattern	
8. rapid __	H. changing	
9. thought__	I. world (adj)	
10. game __	J. from	

IV. Decide whether the following sentences are T/true or F/false. Write the appropriate letter next to each sentence. (15p)

- The negative copy where black lines turn white and blank space turns blue is called a blue print. ____
- Industrial revolution started in the same year in which a blue print was discovered. ____
- Alan Turing was an American astronomer. ____
- The term CAD was invented by Patrick Hanratty. ____
- In 1971 General Motors introduced the microprocessor to the world. ____
- ADAM is the CAD software known as automated drafting and machinery introduced by Patrick Hanratty. ____
- The basic components of a MEMs devices include micro-resonators and micro-pumps ____
- The size of MEMS devices range from 20 micrometers to 1 millimeter. ____
- Most of the current MEMS technologies are based on silicone. ____
- 5s methodology should be implemented only by managers. Regular employees have nothing to do with it. ____
- 5S was invented by Chinese manufacturers who wanted to improve efficiency of the production process. ____
- Solar panels can generate electricity by directly using sunlight. ____
- Solar energy creates only a small amount of pollution and is therefore less harmful than other sources of energy. ____
- Graphene transmits more light through its structure than standard materials used in the construction of photovoltaic cells. ____
- The graphene knife, under the influence of the hand temperature, heats up and cuts the ice without pressure. ____

V. Translate into Polish or English (10p)

	krok milowy	abnormality	
cornerstone			schludny
	System zintegrowany		lejek
	krzem	stiff	
layer			para

VI. Match words to their definitions. (10 points)

1.	coin	a.	the physical and electronic parts of a computer, rather than the instructions it follows
2.	indispensable	b.	affecting someone in a way that annoys them and makes them feel uncomfortable
3.	sensor	c.	to invent a new word or expression, or to use one in a particular way for the first time
4.	hardware	d.	Hidden or unexpected danger or difficulty
5.	actuator	e.	expressing the highest or a very high degree of a quality
6.	MINDSET	f.	too important not to have; necessary
7.	PITFALLS	g.	a device that discovers and reacts to changes in such things as movement, heat, light
8.	debris	h.	part of a machine or system that moves something or makes something work
9.	intrusive	i.	broken or torn pieces of something larger
10.	superlative	j.	The established set of attitudes held by someone

1 _____, 2 _____, 3 _____, 4 _____, 5 _____, 6 _____, 7 _____, 8 _____, 9 _____, 10 _____