

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. (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. ____
- Starlink is a technology that can help humans interact with machines. ____
- Starlink could create a long-term space debris resulting in collisions. ____
- Rapid prototyping is one of the disadvantages of 3d printing due to its high time-consumption. ____
- Extruder is a machine that forces metal, plastic or clay through a die ____
- One of the most widely used methods of 3d printing is Injection-moulding . ____
- Solar panels consist of a silicone cells layer. ____
- Polycrystalline cells are made of single silicon crystal while monocrystalline cells are made of fragments or shards of silicon. ____
- To protect security and privacy, MiR robots and AI cameras only send decisions and images. ____
- With AI, MiR robots can efficiently and appropriately react to different types of obstacles to improve navigation and efficiency. ____

V. Translate into Polish or English (10p)

	krok milowy	loop	
cornerstone		Additive manufacturing	
	nieunikniony		pojemność
	częstotliwość		uprzedzenie
Ion thruster		immense	

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.	Exit part, place where filament leaves the printer
3.	diameter	c.	to invent a new word or expression, or to use one in a particular way for the first time
4.	hardware	d.	not in use any more, having been replaced by something newer and better or more fashionable
5.	filament	e.	a confusing problem or question that is very difficult to solve
6.	nozzle	f.	too important not to have; necessary
7.	tailor	g.	straight line passing from side to side through the centre of a circle
8.	dopant	h.	To adjust
9.	obsolete	i.	a thin thread or fibre of natural or artificial material used in 3D printing
10.	conundrum	j.	an impurity added to a pure substance to produce a deliberate change, as with laser crystals and semiconductors

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