

I. Complete the sentences with appropriate words. To help you some letters have been given. (5p)

1. A software that is ___ O _ A ___ is out of date and no longer in use.
2. Technology that is highly-advanced, innovative and pioneering is C _ _ _ _ _ G _ _ _ E
3. Mobile phones seem to have become ___ D _ S _ E _ _ _ _ E
4. A ___ P ___ R _ _ _ _ is simply interested in and knowledgeable about computers.
5. A building that features ultra-modern solutions is _ _ _ _ _ - _ _ - _ _ - _ _ _

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

A	B	C
1. fit ___	A. device	
2. technological ___	B. native	
3. labour-savng ___	C. in	
4. computer- ___	D. view	
5. digital ___	E. code	
6. pass ___	F. pen	
7. cross-___	G. breakthrough	
8. metric ___	H. section	
9. exploded ___	I. literate	
10. technical ___	J. system	

III. Decide whether the following sentences are T/true or F/false. (17p)

(technical drawing, measurements)

1. In engineering, most drawings consist of a set of several designs. ___
2. The final drawing is made using a technical pencil, graded according to hardness. ___

3. The visual image of a component should be accurate in terms of dimensions and proportions, and should provide an overall impression of what an object is or does. ____
4. General arrangement drawing shows one or more smaller components in detail. ____
5. Centuries ago the systems of measurement differed from one city to the next. ____
6. The basic unit multiplied by a thousand is milli, whereas divided by a thousand is kilo. ____
7. The system of measurement used in British industry is the metric system. ____

(presentations)

8. It takes around 2-3 days for a 3D printer to print a prototype model (the ultimate shoe). ____
9. It is not really a lack of money that denies people the prosthesis but the lack of trained technicians to fit the artificial limbs. ____
10. Open Bionics company is located in the USA. ____
11. The World Health Organization estimates there are about 30 million people who require prosthetic limbs, and the vast majority have them. ____
12. Charging electric vehicles will increase the demand for electricity by 50% by 2050. ____
13. The largest electrical vehicle market and the largest battery manufacturing enterprise in the world, amounting to 60% of the global capacity now belongs to Japan. ____
14. Mass production with the introduction of manufacturing lines began the third revolution. ____
15. The three layer architecture is for manufacturing and consists of: Interface, Information Processing and Intelligence layer. ____
16. The Interface layer serves one function: collect information from all the sensors in the factory. ____
17. The Intelligence layer is responsible for the coordination of all the resources in the factory. ____

IV. Translate into Polish or English (15p)

	Wzornictwo przemysłowe	unencumbered	
glossy			długodystansowy
brittle			wirnik
	przełomowy	regenerative braking	
	Podeszwa środkowa		nadzór
infancy		throughput	
	tężec		wykonalny
	Skrzynia biegów		

V. Complete the extracts with the suggested words or phrases. (15p)

breakthrough perform provide support athletes combination

In order to _____ the ultimate personalized experience for all _____, adidas created a unique _____ of material and process. The production _____ will take the running shoe standard to the next level, offering unprecedented individualized _____ and cushioning for every foot, to enable athletes to _____ at their best.

around mobility had test floors

The first person to _____ out a 3D-printed _____ device at the hospital was a four-year-old girl who until then _____ dragged herself across _____ and had to be carried _____ by her family.

driving aspect emissions poised

Electric vehicles are _____ to transform nearly every _____ of transportation, including fuel, carbon _____, costs, repairs, and _____ habits.

VI. Match words to their definitions.(8p)

1.	rapid prototyping	A.	realization of a certain method or idea in order to demonstrate its feasibility
2.	sensor	B.	a device or support, especially used to relieve or correct an orthopedic problem
3.	reusable	C.	a mechanical device sensitive to light, temperature, radiation level
4.	inverter	D.	a device that causes a machine or other device to operate
5.	recognize	E.	used to quickly build a scalable model
6.	proof-of-concept	F.	to identify as something or someone previously seen, known, etc
7.	actuator	g.	an electronic device that changes direct current to alternating current.
8.	orthotic	H.	able to be used more than once

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