

## Test 2(10)

**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 electronical 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.

A/D? \_\_\_\_\_

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

A/D? \_\_\_\_\_

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

A/D? \_\_\_\_\_

4. possible /Computer/ are/ errors.

A/D? \_\_\_\_\_

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

A/D? \_\_\_\_\_

**III. Decide whether the following sentences are T/true or F/false. (30p)**

1. The negative copy where black lines turn white and blank space turns blue is called a blue print. \_\_\_\_\_
2. Industrial revolution started in the same year in which a blue print was discovered. \_\_\_\_\_
3. Alan Turing was an American astronomer. \_\_\_\_\_

4. The term CAD was invented by Patrick Hanratty. \_\_\_\_\_
5. In 1971 General Motors introduced the microprocessor to the world. \_\_\_\_\_
6. ADAM is the CAD software known as automated drafting and machinery introduced by Patrick Hanratty. \_\_\_\_\_
7. Due to their ghostly blue look Aerogels are known as "frozen ghosts". \_\_\_\_\_
8. Aerogels cannot be used in cosmetics because they are toxic. \_\_\_\_\_
9. Aerogel is able to support heavy loads. \_\_\_\_\_
10. Graphene is arranged in a crystallized manner like graphite. \_\_\_\_\_
11. Graphene is more than 10 times stronger than steel. \_\_\_\_\_
12. Graphene has the highest electron and neutron mobility of all electronic materials. \_\_\_\_\_
13. Graphene indicates strong antibacterial properties. \_\_\_\_\_
14. Glass is an organic solid material that is usually transparent or translucent as well as hard, brittle, and impervious to the natural elements. \_\_\_\_\_
15. Glass decomposes very slowly therefore it is non-recyclable. \_\_\_\_\_
16. Tempered glass, or toughened is the most common type of glass used in balustrades or similar structural applications. \_\_\_\_\_
17. Glass is an amorphous material whose main component is silicon oxide. \_\_\_\_\_
18. Nicola Tesla was born in Smiljan, Serbia. \_\_\_\_\_
19. Tesla sold patent rights to Thomas Edison. \_\_\_\_\_
20. Tesla's interest in electrical invention was spurred by his father. \_\_\_\_\_
21. Tesla discovered the rotating magnetic field. \_\_\_\_\_
22. Crystalline solar cell is sandwiched between conductive layers of silicon. \_\_\_\_\_
23. To protect panels from the harsh environment temperature changes, cold, wet etc. the laminators are put on the top of them. \_\_\_\_\_
24. There are less toxic elements used in such electronic devices, mobile phones, computers, & TVs than solar panels. \_\_\_\_\_
25. The Earth captures a 173 thousand terawatts. \_\_\_\_\_
26. Wind turbine is device, that converts the electrical energy into the kinetic Energy of wind. \_\_\_\_\_
27. A Greek engineer, Heron of Alexandria, invented the first windwheel. \_\_\_\_\_
28. The rotor blades have an oval shape unlike airfoil wings on a plane. \_\_\_\_\_

29. Water heat pumps come in closed loop mode only. \_\_\_\_\_

30. China and USA has the most air conditioning units in the world. \_\_\_\_\_

**IV. Translate into Polish or English (10p)**

	krok milowy	prąd zmienny	
cornerstone			półprzewodnik
	azotowy		lutować
Scatter		rotor	
	przejrzysty		chłodzić

**V. Match words to their definitions. (10 points)**

1.	<b>Carbon footprint</b>	a.	be shed from a surface in scales or layers.
2.	<b>suspension</b>	b.	the portion of the electromagnetic spectrum that is visible to the human eye.
3.	<b>sample</b>	c.	side higher than the other
4.	<b>vulnerable</b>	d.	the repairs, painting etc that are necessary to keep something in good condition
5.	<b>intercept</b>	e.	the total sum of greenhouse gas emissions caused directly or indirectly by a person, organisation, event or product
6.	<b>tilt</b>	f.	the top layer of earth that plants grow in
7.	<b>exfoliate</b>	g.	exposed to the possibility of being attacked or harmed, either physically or emotionally
8.	<b>Visible spectrum</b>	h.	is a heterogeneous mixture of a finely distributed solid in a liquid
9.	<b>maintenance</b>	i.	a small part or quantity intended to show what the whole is like
10.	<b>soil</b>	j.	to stop someone or something before they are able to reach a particular place

1\_\_\_\_\_, 2\_\_\_\_\_, 3\_\_\_\_\_, 4\_\_\_\_\_, 5\_\_\_\_\_, 6\_\_\_\_\_, 7\_\_\_\_\_, 8\_\_\_\_\_, 9\_\_\_\_\_, 10\_\_\_\_\_