

I. Match the sentence halves and decide if the sentences describe advantages or disadvantages of rapid prototyping. In the answer rubric below write the appropriate letter next to the number and then match A for advantage and D for disadvantage. (10p)

1	Reduced design	a	accuracy
2	Lack of	b	and not economical
3	Elimination or	c	at a fraction of the cost
4	expensive	d	& development time
5	Allows functionality testing	e	reduction of risk

1 \_\_\_\_ → A/D? \_\_\_\_ , 2 \_\_\_\_ → A/D? \_\_\_\_ , 3 \_\_\_\_ → A/D? \_\_\_\_ ,

4 \_\_\_\_ → A/D? \_\_\_\_ , 5 \_\_\_\_ → A/D? \_\_\_\_

I. Which of the following refer to **subtractive** (write S) and which to **additive**(write A) method?(10p)

1. Layers glued or fused together \_\_\_\_
2. CAD drawing \_\_\_\_
3. Carving away layer by layer \_\_\_\_
4. Crossections read by a machine and presented as layers \_\_\_\_
5. Block of plastic or wax \_\_\_\_
6. Similar to the ancient technique of building ceramic pot \_\_\_\_
7. Capable of doing large-scale objects \_\_\_\_
8. Difficult prototyping of complex shapes \_\_\_\_
9. Prototype smallish parts \_\_\_\_
10. Able to create almost every geometry \_\_\_\_

II. Complete the chart with either Polish or English equivalent of a given word. (10p)

	jedynkowy system liczbowy	shade	
domain	domena, _____		liczby pierwsze

	skomplikowany i nieefektywny	Silica sand	
fragile			the basic software of a computer game or video game
	śledzenie spojrzenia	emulate	

**III. Match words to their definitions. (15p)**

1. vigesimal system	a. numbers which can be exactly divided by two
2. even numbers	b. numbers with no decimal or fractional part
3. deploy	c. a genre of art that encompasses painting, drawing and other graphic media, where artist attempts to reproduce the image as realistically as possible in another medium after studying photo
4. sophisticated	d. numeral system based on twenty
5. photorealism	e. bring into effective action
6. hue	f. a large container for a very hot fire, used to produce power, heat, or liquid metal
7. furnace	g. developed to a high degree of complexity
8. tint	h. a degree of lightness, darkness, strength, etc. of a color
9. integers	i. network application that allows a user to interact with both the computing environment and the work of other users
10. virtual environment	j. a small amount of a particular color
11. limestone	k. to invent a new word or expression, or to use one in a particular way for the first time
12. rejuvenate	l. glass that has been colored and cut into various shapes to form pictures or patterns, used especially in church windows
13. distinctive	m. a sedimentary rock composed principally of calcium carbonate (calcite) or the double carbonate of calcium and magnesium
14. stained glass	n. marking something as clearly different from others
15. coin	o. give new energy or vigor to something

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

11\_\_\_\_\_, 12\_\_\_\_\_, 13\_\_\_\_\_, 14\_\_\_\_\_, 15\_\_\_\_\_

**IV. Decide if the sentences are True(T) or False (F). (20p)**

1. We say nought before the decimal point. \_\_\_\_\_
2. We say nil in tennis. \_\_\_\_\_
3. The reason why videogames don't use fully photorealistic graphics is to lower the cost of making a game \_\_\_\_
4. To design and explore virtual replicas of the real product we use 3d printed objects. \_\_\_\_
5. VR is an increased perception of reality \_\_\_\_
6. VR applications in smartphones include Global Positioning System (GPS) to locate the person's location and its phone's inbuilt compass to find device orientation.\_\_\_\_
7. AR can be used to recreate different structures and overlay them in the real environment so that researchers can study them correctly \_\_\_\_
8. Triadic colors stand out from one another and make for a vibrant, lively color palette regardless of which particular colors are used.\_\_\_\_
9. Yellow, purple and orange are primary colors \_\_\_\_
10. Green symbolizes hope, joy, excitement but also warnings. \_\_\_\_
11. Glass becomes transparent in the swift cooling process \_\_\_\_
12. Mirrors were invented by Aztecs. \_\_\_\_
13. Glass was discovered in ancient Egypt. \_\_\_\_
14. Fostering positive and sustained interactions among people and the natural environment is one of conditions of effective biophilic design\_\_\_\_
15. Biophilic design is mainly about using colours of nature and not necessarily real greenery. \_\_\_\_
16. Emotional connections to spaces and settings kills productivity and lowers motivation. \_\_\_\_
17. The term biophilia in 1960s was coined by unknown scientist. \_\_\_\_
18. Too many choices will decrease cognitive load for users \_\_\_\_
19. Content needs to be organized into smaller chunks to help users process, understand and memorize easily \_\_\_\_
20. If you describe something or someone as ubiquitous, you mean that they seem to be everywhere.\_\_\_\_