

DISTRIBUTED COMPETITION ASSIGNMENT SAMPLE

PSYCHOLOGY

11th GRADE

Time needed to complete the tasks – 120 minutes

Maximum number of points – 100

There are four parts in this assignment.

Part 1 consists of a psychology question which requires a detailed answer. *Maximum number of points – 15.*

Part 2 consists of logical problems. *Maximum number of points – 25.*

Part 3 is represented by a case which competitors should analyze. They are to give their solutions. *Maximum number of points – 30.*

Part 4 is a task related to biology. *Maximum number of points – 30.*

Part 1.

Answer the question. Briefly explain your answer.

In your opinion, what psychological factors can influence decision-making in a group? Give a detailed answer.

Hint:

When answering this question, the competitors should know the difference between individual and collective decision-making and identify the features of decision-making in a group. Some of the factors may include the influence of the majority, group pressure, the phenomena of group cohesion and polarization, group risk-taking etc.

Part 2.

2.1. Solve the anagrams below and exclude the “intruder.” Solve the anagrams and write the extra word in a blank space below (5 points).

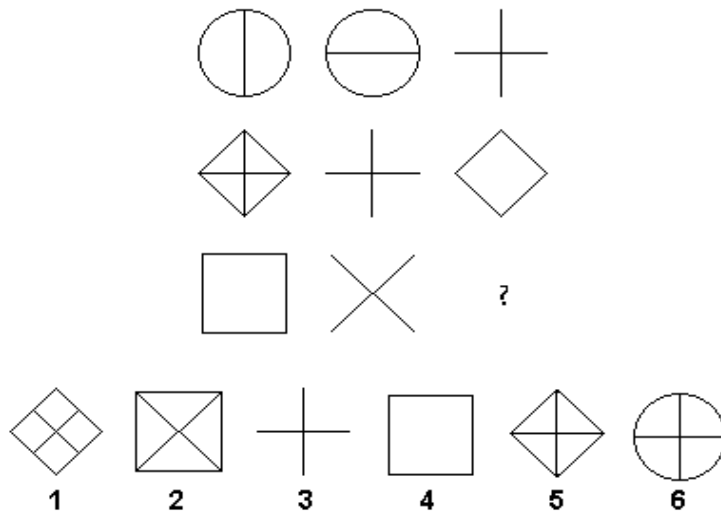
RTAES
LIOWLW
VTOIEL
HRIODC
OPEYN

Hint:

Answer: WILLOW. The anagrams are aster, willow, violet, orchid, and peony. Willow is a tree while others are flowers.

2.2. Solve logical problems:

2.2.1. Insert the missing figure by selecting it from the six numbered ones (5 points):



Hint:

Answer: 2. The third figure in each row consists of elements of figures from the same row, but these elements are not common for them.

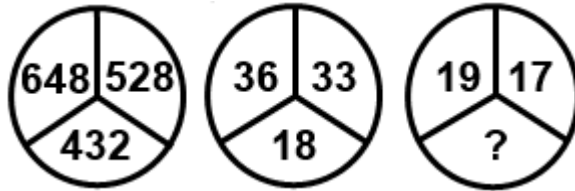
2.2.2. Continue the sequence (5 points):

6 8 10 11 14 14 ?

Hint:

Answer: 18. There are two rows of alternating numbers. In the first row, numbers increase by 4, in the second – by 3.

2.2.3. Insert the missing number (5 points):



Hint:

Answer: 25. $19 = (648/36) + 1$; $17 = (528/33) + 1$; $25 = (432/18) + 1$.

2.2.4. Insert the missing number (5 points):

420 (35) 12
884 (...) 52

Hint:

Answer: 17. The number of parentheses is the result of the division of the first number by the third number. $420/12=35$; $884/52=17$.

Part 3.

Analyse the case from the psychological point of view.

Recently there have been a lot of studies regarding consumer habits. In particular, these studies focus on how effective contextual advertising is (contextual advertising is the one coinciding with the content of a TV show). An indicator of advertising's effectiveness is how easy it is to remember it involuntarily. For example, several studies have shown that the more interesting and captivating a TV show was for a viewer, the worse they remembered a certain ad. This is contradictory to an intuitive assumption regarding the connection between the ads and the content of TV shows.

However, there are valid explanations for that. Cite those explanations.

Hint:

This may be explained as follows. The more interested in a TV show a viewer is, the more resources they spend on processing information, and the less attention is paid to contextual advertising, even if it coincides with the content of the show. It should be noted that the key parameter of this case is the content of information both in the TV show and in

the ad. Competitors should dwell upon how the information is processed, filtered, and analysed based on its content. Reasons like ad location, size, brightness, colour etc. do not offer a sufficient explanation.

Part 4.

Answer the question.

Explain the proverb “Repetition is the mother of all learning” based on the knowledge of how human memory works. What methods may improve memorizing information instead of simple repetition? Give examples using physiological foundations of memory.

Hint:

Competitors should complete this task by relying on their knowledge in biology. An excellent answer presupposes citing classic experiments related to studying human memory, Hermann Ebbinghaus’ experiments in particular. Ebbinghaus found that the human brain quickly forgets even the information memorized deliberately. Almost half of the information memorized gets lost within the first hour. However, timely repetition may improve memorizing, which is reflected in the so-called Ebbinghaus’ forgetting curve. Physiologically, it can be explained by strengthening synaptic links created when memorizing information. There also exist the most appropriate “repetition graphs” which help to memorize the biggest amount of information. Ebbinghaus also found that the human brain memorizes information that makes sense better than the information that does not. Thus, mechanical repetition is less effective than memorizing the analysed data. There are a number of methods used to improve the accuracy of memorizing. Among these, for example, is rendering a story in one’s own words. Other examples include mnemonic techniques based on rhythmization or consonance, as well as structuring the memorized information through making classifications and schemes.