### TEST Z JĘZYKA ANGIELSKIEGO DLA KANDYDATÓW DO SZKÓŁ DOKTORSKICH

# I. Listen to four people talking about recycling (Sally, Jo, Jill and Pranjal) and match speakers to their opinions. Allow one minute to read the task. You will hear the recording twice. $(5 \times 2 = 10)$

\_\_\_\_ & \_\_\_\_ think the government should offer money for recycling and producing less rubbish.

thinks it's up to people themselves to realize that it's worth recycling.

\_\_\_\_\_ thinks the government should provide more containers for recycling.

\_\_\_\_\_ thinks the government should do more to show people why recycling is good for the environment.

(Adapted from English File Upper-intermediate Coursebook)

# II. Listen to a talk about motivation and decide if the following statements are True or False. Allow one minute to read the task. You will hear the recording twice. $(10 \times 2 = 20)$

1. We try to motivate workers in the same way that we try to motivate our children.

2. In the Glucksberg experiment, 25 dollars was offered to the person who finished the fastest.

3. In the same experiment, the people who were offered a reward finished faster than people who were not offered one.

4. For both groups in the experiment, time was taken into consideration.

5. In business, bonuses and rewards work well for simple tasks.

6. For some types of tasks, traditional incentives work well.

7. The people who were offered smaller rewards in Ariely's experiment performed better than those offered bigger rewards.

8. In Ariely's experiment, people were more creative when they were concentrating on achieving a goal.

9. In the future, jobs will require workers to be more creative.

10. People always work better when they start the day later and work into the night.

(Adapted from the British Council website)

### The Therapeutic Potential of Altered States of Consciousness

There is a long history in the fields of psychology and psychiatry of using non-ordinary states of consciousness (sometimes referred to as altered states) to accompany deep psychological work. These approaches have included guided imagery, hypnosis, LSD-assisted psychotherapy, and Holotropic Breathwork, to name a few. Current research and theories related to psychedelic-assisted therapies may help us understand what these approaches have in common and why they are so impactful.

Several studies have recently suggested that the therapeutic value of psychedelic experiences may lie in their ability to increase or facilitate mental flexibility, insight, and acceptance. One of the leaders in the field of psychedelic research, Robin Carhart-Harris, has proposed an entropic theory of consciousness to help explain and understand how this process might work. Essentially, this theory suggests that many or most mental health concerns are associated with a reduced level of psychological and cognitive flexibility. In essence, the brain/mind becomes stuck in certain patterns that are no longer useful to the person. By introducing a powerful experience that shifts awareness into a broader perspective and expression, it is possible to help the mind become "unstuck." When this process is conducted in a therapeutic context with ongoing therapy, it can potentially enhance outcomes.

This psychological/cognitive flexibility can be described in terms of entropy. The term entropy originally comes from the field of thermodynamics to describe the direction of change in a system. Technically, it is a measure of the amount of energy available to do work. So, higher levels of entropy imply more energy, which includes less structure and greater uncertainty. Low levels of entropy exist in systems that are rigid and have less energy for change. You can see why this concept makes sense in the context of psychological flexibility. Essentially, higher entropy equals greater flexibility. Neuroscientists have figured out a variety of methods to measure the amount of entropy in the brain, allowing us to examine what types of psychological interventions can be used to increase brain flexibility. Not surprisingly, research on psychedelics has consistently demonstrated greater entropy during psychedelic states. However, not everyone interested in gaining cognitive/psychological flexibility is interested in working with psychedelic drugs.

In a series of pilot studies, our team examined brain changes in relation to a variety of altered state interventions that did not involve the use of psychedelic medicines. These trials include examinations of Soma breathwork, Vibroacoustic Therapy (VAT), SoundSelf Virtual Reality meditation, and cannabis used in a psychedelic therapeutic setting (Medicinal Mindfulness). Initially, we were interested in the likelihood of decreased activity in the posterior cingulate cortex (PCC), the hub of the Default Mode Network (DMN), similar to that observed during the use of psychedelics and meditation. In all of our preliminary studies, this is precisely what we found. As a follow-up, we were also curious if these same interventions showed increases in entropy. Interestingly, when we ran these analyses, the findings were somewhat inconsistent. In some cases, participants showed increases in entropy during the altered states interventions, and in other cases, they did not.

These results suggest that there may be a variety of approaches and interventions that could be used in a therapeutic context to increase entropy and potentially enhance the therapeutic process. However, it is important to explore why some people experience increased entropy during these interventions and others experience a decrease. Similar to psychedelics, we suspect that the set and setting of the experience will play a large role in influencing the brain's response to the intervention. Perhaps if these interventions were couched in the same framework as psychedelic interventions, we would see more consistent results. Of course, these are questions for researchers to explore.

(Adapted from Psychology Today, an online magazine)

#### a) Decide whether the following statements are True or False. $(10 \times 1 = 10)$

1. LSD-assisted psychotherapy has been used for some time already.

2. Scientists nowadays fully understand the therapeutic potential of non-ordinary states of consciousness.

3. Insight and acceptance facilitated during altered states of consciousness may increase patients' chances of recovery.

4. People's increased levels of psychological and cognitive flexibility may lead to mental health problems.

5. Robin Carhart-Harris is a specialist in the field of entropy in thermodynamic systems.

6. The lower the entropy level in the brain, the better.

7. Some people who would like to increase their brain flexibility don't want to take any psychedelic medication.

8. Pilot studies have demonstrated that people in altered states of consciousness had different levels of activity in their PCC.

9. It is relatively easy to explain the differences in the levels of entropy that people experience.

10. There is probably going to be more research in this field.

## b) For each phrase below find a synonym (ONE word) in the text as in the example. $(10 \times 2 = 20)$

### 0. changed – altered

1. contemporary, present-day -

- 2. make something easier –
- 3. moves, transfers –
- 4. end results, products -
- 5. indicate, suggest -
- 6. is the same, means –
- 7. getting, obtaining -
- 8. probability -

9. diminished, smaller –

10. coherent, containing no logical contradictions -

### V. Fill in the gaps with the words listed below. There is an extra word you will not need. $(5 \times 1 = 5)$

## PROPEL RESOLUTION SOLVE VARIABLES VERIFIED VARIOUS

What is a Research Project?

A research project is when someone conducts an experiment to find the answers to a question or to \_\_\_\_\_\_ a problem they have observed. When we think of an experiment, we often think about test tubes and beakers. But that is not the only kind of experiment that can be run. The possibilities for research projects are really endless. It could be following a group of people over some time, it could be testing new technology, or it could be growing a plant with different \_\_\_\_\_.

A research project can \_\_\_\_\_ the study of any field of interest. The only requirement is that there is a problem to be solved, a theory to be \_\_\_\_\_ or a question to be answered. If one of those exists, a research project can be developed to find the \_\_\_\_\_.

#### V a. Language elements - multiple choice. $(10 \times 1 = 10)$

#### 1. You look exhausted.

- a) Did you run?
- b) Were you running?
- c) Have you run?
- d) Have you been running?

#### 2. It is advisable that toxic waste \_\_\_\_\_ be disposed of in the safest possible way.

- a) may
- b) would
- c) should
- d) shall

### 3. You \_\_\_\_\_ leave him now, somebody should stay here in case he needs something.

- a) wouldn't better
- b) would better not
- c) hadn't better
- d) had better not

## 4. This device is faulty. It needs \_\_\_\_\_.

- a) to repair
- b) repairing
- c) be repaired
- d) to have repaired

## 5. I'd rather they \_\_\_\_ now.

- a) leave
- b) are leaving
- c) left
- d) had left

## 6. \_\_\_\_\_ being well qualified, she didn't get the job.

- a) Despite
- b) Despite of
- c) In spite
- d) Although

## 7. The school building looks impressive outside \_\_\_\_\_ the classrooms are poorly equipped.

- a) as well
- b) whereas
- c) but not
- d) so that

### 8. I work from home so I \_\_\_\_\_ people around me all day.

- a) 'm not used to have
- b) 'm used to not having
- c) used to having
- d) used to have

#### 9. In his paper, he tried to analyze how social media influence \_\_\_\_\_ people's political choices.

- a) ----
- b) at
- c) on
- d) for

10. I wish people \_\_\_\_\_ more openly about their problems. I'm not very good at reading between the lines.

- a) spoke
- b) speak
- c) had spoken
- d) have spoken

# V b. Language elements - word formation. Complete the gaps with words derived from the words in capitals. $(10 \times 1 = 10)$

- 1) The government has shown no \_\_\_\_\_\_ to cooperate with the environmentalists. WILLING
- 2) You can't withdraw from the \_\_\_\_\_\_ after you have signed the document. AGREE
- 3) These new cars are much more \_\_\_\_\_\_ than the older models. **ECONOMY**
- 4) The TV station provided its audience with live \_\_\_\_\_\_ of the event. COVER

5) A new survey shows that computers and smartphones do not \_\_\_\_\_\_ relationships in families. **WEAK** 

- 6) It was an \_\_\_\_\_\_ virus that nobody had ever heard about before. KNOW
- 7) The documents that were stolen were highly \_\_\_\_\_. CONFIDENCE
- 8) Happiness and misery are two values that are hardly \_\_\_\_\_\_. MEASURE
- 9) The law proved to be \_\_\_\_\_. Nobody cared about it. **EFFECT**
- 10) I am looking for a job, \_\_\_\_\_\_ related to my studies. **PREFER**

#### VI. Writing. Complete the letter by choosing the correct word. (15 x 1 = 15)

Dear Dr. Matthews,

I am writing to apply for the position of Assistant Professor in Structural Engineering beginning in Fall 2022, as advertised on your department website. I am (1) currently/current a doctoral candidate at the University of Illinois at Urbana-Champaign, and fully (2) except/expect to complete my Ph.D. degree requirements by May 2024. I am extremely interested (3) around/in obtaining a faculty position (4) on/at the University of Texas, where I can (5) contribute/confront to its focus on engineering education, continue my research on concrete structures, and lead campus and professional service activities.

My academic training and six years of experience working as a structural engineer have prepared me to be an effective researcher and instructor in your department. My doctoral (6) theses/dissertation was conducted in consultation with Prof. John Smith and examines the use of a relatively new methodology for the design of joints, walls, footings, and other portions of reinforced or prestressed concrete structures. In my research, I developed an integrated design and analysis environment for this methodology in which both strength and serviceability requirements are (7) explicit/explicitly satisfied. This was delivered in a computer-based program that is freely available to the community and has been downloaded by more than 2500 people. I am (8) aware/excited to share and continue to explore this methodology and collaborate with your department faculty to expand its potential.

Other areas that interest me for my future research (9) **stem/appear** from my goal of developing improved analytical models and methods for the design, evaluation, and upgrade of concrete structures subjected to monotonic and reversed loading and structures equipped with passive systems. One of the studies that I have started is the development of a performance-based seismic design method for reinforced concrete wall structures based on yield displacement. I have also worked on evaluation and (10) **improving/improvement** of accuracy of nonlinear static analysis for seismic design under the auspices of a project from the Applied Technology Committee, a national organization. These are just a couple of projects I plan to continue and grow with the support of the University of Texas.

(11) While / During my graduate training, I was also fortunate enough to have served as a teaching assistant and occasionally substitute lecturer for an intermediate-level course on reinforced concrete design. I found that my professional experience as an engineer provided me with a (12) broad/board view that is useful in assisting students with projects and assignments. These experiences have built my confidence and an interest in teaching, and I look forward to (13) have/having the opportunity to not only teach the existing courses but also work to develop new ones.

I would enjoy discussing this position with you in the weeks to come. In the meantime, I am enclosing my curriculum vitae and statements of teaching and research interests. Letters of recommendation will arrive under separate cover. (14) Should/Ought to you require any additional materials or information, I am happy to supply it. Thank you very much for your consideration.

Yours (15) sincerely/faithfully,

Caroline Abwerg