**Entrance Scholarship Paper 2022**

**Psychology**

**Time allowed: 2 hours**

**Answer TWO questions. Feel free to build your argument by drawing on several domains of psychology, if appropriate. However, make sure that your answer is based on the scientific literature on each topic, and not only on your speculations.**

1. Discuss the effects of social influence such as conformity, on adherence to covid-19 guidelines and restrictions (such as use of face coverings/ maintaining social distancing etc.). In your answer, draw on key research studies to support your answer.

1. Imagine that you are a researcher and you are interested to determine whether spending time with puppies has an effect of mood levels. How would you design a study to test this?
2. Describe and evaluate ONE core study in the field of developmental psychology. What are the practical implications of this study?
3. Katie has a phobia of elevators. When she was 8 years old, she was stuck in an elevator for 20 minutes before help arrived. As an adult, even the thought of taking an elevator causes her immense stress. Katie avoids taking elevators and chooses to climb staircases even if she has to climb up to 30 stories. Explain how might the behavioural approach explain (a) how the phobia developed, and (b) how you could treat the phobia?

1. Discuss the impacts of psychiatric labels. In your answer, provide references to scientific literature.
2. Distinguish Type I and Type II errors in hypothesis testing. In your answer provide examples of type I and type II errors.

1. You are a police officer and you are recording testimonies of eyewitnesses to a recent stabbing. With reference to the scientific literature, explain why or how the testimonies can be problematic.
2. There are several theories presented in psychology to explain human forgetting. Describe and evaluate at least TWO of these theories with evidence from research.
3. A correlational research study was conducted that found that adults with drug addiction did not have dinner with their parents when they were growing up. Based on this study, can the authors state that not having dinner with their children caused their children to become drug addicts? Why or why not?
4. Psychologists have a range of different tools to help them investigate the human brain and behaviour. Two of these tools are Functional Magnetic Resonance Imaging (fMRI) scanners and electroencephalogram **(**EEG) devices. Explain the key differences between fMRI and EEG. Why might a researcher choose to use one over the other?