

Name: _____ Class: _____ Student Number: _____

SAMPLE READING TEST: TEXT BOOKLET[©]

This booklet remains the exclusive property of Loughborough University and must be returned before you leave the examination room at the end of the test.

INSTRUCTIONS TO CANDIDATES

This booklet contains 2 reading texts, as follows:

- Text 1: an adapted extract from an academic paper
- Text 2: an adapted extract from a journalistic article

In both texts, you will find that some technical/specialised words have been numbered (e.g. diagnostic¹). In each case, the number indicates that a definition of the word can be found in the footnotes at the bottom of the page.

Before reading the texts, first read the instructions and questions in the **Question Booklet**.

You may underline or highlight words or make notes on the texts in this booklet to help you to answer any of the questions.

Psychological aspects of travelling*

- Para. 1** A proportion of travellers go abroad in order to relax on holiday and reduce stress in their lives, yet the act of travel itself seems to expose people to stress. Some sources of this stress may not seem particularly extraordinary, such as having to cope with a short delay, but nonetheless can trigger intense emotional reactions. Away from the familiarity and security of their accustomed environment, it seems that there is increased risk to passengers of encountering psychological issues, as well as greater exposure to a range of other hazards and health risks. For many years, then, psychology has had a significantly active role in the travel arena.
- Para. 2** Travellers are generally at increased risk of psychological illness because of a multitude of problems, ranging from homesickness and not coping well with change, to the side effects of some medications (e.g. certain anti-malarial drugs and, somewhat paradoxically, tranquilisers¹ used by some fearful travellers), to the effects of illicit drug use, among many possible triggers (Beny et al., 2001). Other areas that are considered in the ever-widening arena of travel psychology include: the treatment of fear of flying; helping passengers to cope with the disrupted emotional attachments which occur as a result of travelling without their loved ones (Fraleigh and Shaver, 1998); assisting travel industry employees to manage their own personal problems (Bor and Hubbard, 2007), where these arise, in order to prevent stress from affecting work performance and therefore from endangering safety; as well as contributing psychological expertise in the selection of employees.
- Para. 3** Even the most robust of personalities may find that the challenge posed by travel, especially to some of the most primitive of needs (e.g. food, physical comfort, when they can go to the toilet) produces significant stress and, in some cases, an overwhelming fear, or even phobia of travel, either generally or towards specific situations or forms of transport (McIntosh, 1998). Indeed, some of the most hardened, regular and experienced travellers appear to carry an 'emotional charge'² when they fly, catch a train, or join a cruise, and may, thus, be no less vulnerable to a range of issues than others. Just as with less-experienced travellers, such issues include anxieties and fears associated with safety, disorientation, worry about disrupted routines, fear of dependency on others who are in control, and even seemingly less significant issues such as whether the 'right' food will be available, or fear of being separated from one's luggage. In addition to more pervasive anxieties, some individuals do have unique fears or phobias associated with certain forms of transportation, such as claustrophobia³, and these might be invoked not only when boarding a plane, for instance, but also long in advance and in anticipation of what lies ahead.
- Para. 4** Specifically in regard to aviation, psychologists have been continuously associated with developments since the Second World War, when their expertise was used to help in pilot selection. After that war, and with the rapid developments in commercial aviation, psychology was also applied in designing the layout of the flight deck of aircraft, improving communication between pilots and air traffic controllers, advising on staff rotation and workload to ensure that crew are not unduly affected by fatigue, devising the safest and most efficient means of escape from aircraft in the event of an accident, and in crew selection, among many other areas.

* Adapted from Bor, R. (2007) Psychological factors in airline passenger and crew behaviour: A clinical overview. *Travel Medicine and Infectious Disease*. Vol. 5 (4), pp. 207–216.

¹ **tranquiliser (n.):** a drug used to make a person or animal calmer

² **emotional charge:** a nervous/anxious/emotional feeling

³ **claustrophobia (n.):** a fear of closed or crowded spaces

- Para. 5** A less known sub-speciality of travel-related psychology within aviation and travel is clinical aviation psychology, and insights are typically applied in helping to understand the behaviour of crew, passengers, maintenance personnel, air traffic controllers and others involved in air travel and aviation (Bor, 2004). Clinical aviation psychologists have extensively studied the effects of ‘jet lag’, for example, in order to advise airline passengers, as well as crew, and to determine how best to reduce the unpleasant effects of transmeridian travel⁴. It is understood that long-haul, transmeridian air travel can exacerbate previously existing mental health disorders and, thus, the diagnosis and treatment of individuals who suffer from such disorders is an important area to consider (Jauhar and Weller, 1983). A further important and sensitive role for clinical aviation psychologists is to provide post-incident counselling to survivors, family members, crew and other employees, and rescue service personnel who have become involved in air travel accidents (Chung, 2007).
- Para. 6** Most travellers encounter a number of similar challenges in the course of their journeys. However, humans have not evolved naturally to fly, and are arguably better suited to terrestrial travel, possibly because of their evolved form as hunter–gatherer⁵, and almost certainly as a species with self-propelling instincts⁶. Evolutionary barriers are encountered when species exceed what they are best designed to do (Reason, 1974) and, for humans, these barriers include a range of familiar, though arguably harmful symptoms or ‘penalties’, including jet lag⁷, motion sickness and increased stress. Whereas engineering and technological developments in air travel have been rapid and spectacular, then, the human species appears to have a certain amount of catching up to do in order to cope better with both the physical and psychological demands of travel.
- Para. 7** Air travel directly and indirectly affects how people behave. Some air travellers become demanding; regress in their behaviour to an infantile stage; are difficult to please; appear to have little regard for the needs (and rights) of fellow passengers; confide the most personal and intimate details of their life to complete strangers; become emotionally dependent on others, rowdy⁸ or anxious; or withdraw into themselves. A few commit acts of ‘air rage’⁹, drink too much alcohol, ignore the rules and smoke on board aircraft, or even molest¹⁰ the passenger in the seat next to them. It would be wrong to give the impression that air travellers and air crew suffer psychological problems more frequently and intensively than other traveller groups. However, air travel can trigger or produce a wide range of adverse responses due to the unique environment, stresses, and risks involved, and the seemingly innate human problem of having to cope with environmental change.
- Para. 8** Psychology is concerned with understanding human behaviour, and the focus of clinical aviation psychology is on the understanding of the challenges to the behaviour and mental health of air travellers and all who work in the air travel industry. Given the ever-increasing numbers of travellers worldwide and growth in the airline industry, as well as the risks and challenges associated with travel, the need for a clearer understanding of the psychological effects of air travel on passengers and crew has never been greater. With this underlying significance in mind, the main aim of this paper is to outline some helpful ways that health care professionals can respond to the range of psychological challenges experienced by travellers and employees, drawing on psychological research and theory.

⁴ *transmeridian (adj.)*: descriptive of movement across different time zones in the world

⁵ *hunter-gatherer (n.)*: descriptive of species which appear to have a natural tendency to hunt/gather food for survival

⁶ *self-propelling (adj.) instinct*: an instinct for having control over your own movements and travel

⁷ *jet-lag (n.)*: a physical symptom of feeling over-tired because you have just travelled a long distance on an aircraft

⁸ *rowdy (adj.)*: noisy and possibly violent

⁹ *air-rage (n.)*: this occurs when a passenger suddenly becomes angry and violent on an aircraft during a flight

¹⁰ *molest (v.)*: to touch, push, etc. someone when he/she does not wish it

Sea of troubles*

- Para. 1** The race to exploit the last unexplored wildernesses¹ on Earth is intensifying. Survey ships have been dispatched across the oceans, and marine consultants hired. Submersible seacraft are being lowered into inky depths to record underwater contours² and take rock layer samples, and politicians around the globe, waving their countries' flags, have boasted of securing oil, gas and mineral resources for future generations in their countries. In this way, the last opportunity to paint territories in national colours on the map of the world will soon close. Extensive national claims to sub-sea territories, however, have been condemned by environmentalists as the last great colonial "land grabs" as well as a threat to undisturbed, submarine ecosystems.
- Para. 2** These national sub-marine claims have also been blamed for destabilising the international treaty regime protecting the Antarctic. Nonetheless, the expansion of state sovereignty³ across the ocean floor beyond the traditional 200-mile limit does not necessarily constitute a breach of international maritime law. The UN Convention on the Law of the Sea permits states to extract oil, gas and minerals from the seabed up to, and sometimes more than, 350 miles beyond their coastlines, if they can demonstrate the "prolongation" of a continental shelf⁴ which adjoins their country. Currently, the process of assessing national sovereignty claims is being conducted through the UN Commission on the Limits of the Continental Shelf (CLCS). Proof of a state's prolongation depends on various formulas, including tracing the 2,500-metre sub-marine contour, establishing the foot of the continental shelf, and measuring thicknesses of rock layers.
- Para. 3** For around 50 countries that ratified the CLCS, including the UK, the deadline for submitting claims of ownership expires on May 13, 2009. So far, only a relatively small number of submissions have been made. But, these submissions illustrate the kind of diversity and ambition of the flood of claims expected on the desk of the CLCS in the coming months. Britain has, until now, lodged only one formal submission - a joint claim with Spain, France and Ireland, for a 31,000 square-mile tract of the ocean bed on the edge of the Bay of Biscay, in the Atlantic, to the west of France and to the north of Spain. However, it has signalled that it intends to register further claims on the Atlantic Ocean bed around Ascension Island, the Hatton/Rockall basin west of Scotland, below waters surrounding the Falklands and South Georgia in the southern Atlantic, and on the continental shelf sloping away from the British Antarctic Territory in Antarctica itself.
- Para. 4** Unfortunately, the history of past colonial expansion and ancient rivalries between seafaring states suggests few claims will be resolved smoothly, and tension is rising in foreign ministries around the world. The UK is not the first nation to show an interest in Antarctic waters, for instance. Australia and New Zealand have already made their own submissions to the CLCS, and the revelation of Britain's intent in the southern Atlantic has provoked both Chile and Argentina to reopen polar bases and declare their aim to expand their rights over the Antarctic seabed. Yet, the 1959 Antarctic treaty, to which these three countries are all signatories, was supposed to freeze all territorial disputes.

* adapted from Bowcot, O. (2007) Sea of Troubles. *The Guardian*. Wednesday, 7th December, 2007.

¹ *wilderness (n.)*: an area of land that has not been cultivated or developed by humans

² *contour (n.)*: a line on a map that joins points of equal height or depth, in a way that shows high and low areas of land

³ *sovereignty (n.)*: the power of a country to control its own government and policies

⁴ *continental shelf (n.)*: the area of under-sea land extending from an above-sea land mass

- Para. 5** Territorial rivalries also led to headlines in the summer of 2007, when a manned Russian submersible craft planted a flag two miles under the North Pole, an act designed to reinforce its 2001 submission to the CLCS that laid claim to much of the oil- and gas-rich Arctic Sea floor. Canada's foreign affairs minister at the time, Peter MacKay, responded angrily by declaring: "This isn't the 15th century. You can't go around the world and just plant flags and say: 'We're claiming this territory'." Likewise, small pinpricks of land breaking the surface of the ocean can also generate massive underwater claims and subsequent tensions. France, for example, has irritated the neighbours of its overseas territory, New Caledonia, by a claim to ownership of thousands of square miles around the territory's islands in the Pacific. Nearby Vanuatu has warned that France's claim has "serious implications and ramifications on Vanuatu's legal and traditional sovereignty". Potential conflicts of interest are also likely to emerge in the Indian Ocean, as India has unresolved maritime borders with Pakistan and Bangladesh.
- Para. 6** This accelerating territorial race has also managed to energise political opinion in the US. Whereas a general suspicion of the UN had previously influenced a decision to delay America's ratification⁵ of UN seabed treaties, in November 2007, the US Senate foreign relations committee finally voted to support the UN's CLCS process, a US State Department spokesman, Tom Casey, declaring: "It would serve our national security interests ... as well as our economic and energy interests. The treaty would secure US sovereign rights over extensive offshore natural resources, including substantial oil and gas resources in the Arctic. The extended continental shelf areas we would stand to gain under the treaty are at least twice the size of California. Joining the Convention is the only viable means of protecting and maximising our ocean-related interests."
- Para. 7** In a report in 2001, research at Southampton Oceanography Centre calculated that the riches lying around on or under the ocean floor within extended legal continental shelf (ELCS) areas were worth trillions of dollars. According to the Centre's Bramley Murton, conventional oil and gas comprise an estimated 106 bboe (billion barrels of oil equivalent) of this, with a similar estimate of 115 bboe for gas hydrates. In total, the resource potential (excluding recovery and production costs) contained within the ELCS regions of the world amounts to an estimated \$11,934 trillion (at 2001's raw commodity prices). Today's values are likely to be far higher.
- Para. 8** With nations beginning to grasp the enormity of the energy resources at stake, then, it is not surprising that the dark ocean floor is becoming a battlefield of national interests. The potential wealth of mineral, oil and gas resources hidden beneath the ocean floors on extended continental shelves around the world is vast and largely uncharted. Hence, with fuel and commodity prices hitting record highs in recent years - amid fears that known reserves on land and under inshore waters are being swiftly depleted - attention is shifting to the deeper seabed. Although much of the ocean floor is still beyond current technical limits for commercial drilling, advances are being made every year. The deepest oil and gas drilling operations so far have been to 10,000 feet in the Gulf of Mexico, but those depths will soon be exceeded, US oil companies are already competing in this area, where drilling machinery will have to punch a passage through thick layers of deposited salt and penetrate six miles into the Earth's crust.
- Para. 9** The most intriguing potential for energy resource purposes lies within what are known as methane hydrates, which form ice-like crystals in the low temperatures and high pressures found on the deep seabed. They are believed to hold up to twice the amount of energy as that stored in carbon-based fossil fuels. If exploited as a fuel, however, many environmentalists fear they could trigger runaway global warming. Murton's study, for instance, noted that because hydrate reservoirs are extremely sensitive to climate change, they have positive feedback mechanisms that can catastrophically accentuate global warming. The presence of subsurface hydrate is also directly linked to major reductions in seafloor stability that influences the frequency and magnitude of submarine landslides and their associated tidal surges.

⁵ *ratification (n.)*: an official approval of or agreement to an international treaty or law, especially by governments