

Instructions

This verbal reasoning test comprises 30 questions, and you will have 25 minutes in which to correctly answer as many as you can.

You will be presented with a passage to read, and a statement about that passage. You must select one of the following answers:

True: The statement follows logically from the information or opinions contained in the passage.

False: The statement is logically false from the information or opinions contained in the passage.

Cannot Say: It is not possible to determine whether the statement is true or false without further information.

You will have to work quickly and accurately to perform well in this test. If you don't know the answer to a question, leave it and come back to it if you have time.

Try to find a time and place where you will not be interrupted during the test. When you are ready, begin the test.



As their name suggests, Asian carp are not indigenous to the United States, yet these invasive fish have become the subject of a Supreme Court lawsuit. Introduced in the US in 1831, carp were originally intended for consumption although today they are not widely eaten. Populations have flourished in the Mississippi and Illinois Rivers since the 1970s, when it is thought that they escaped from Midwestern fish farms during heavy flooding. Carp consume only plankton, although vast amounts of it, and some species of Asian carp can grow to over one hundred pounds. Not only are the fish a hazard to recreational boaters, they also compete with native species for food and space. Environmentalists fear that carp will infiltrate the Great Lakes, via locks connecting the Mississippi to Lake Michigan, where they would damage the ecosystem. They also fear that by crowding out species such as salmon, Asian carp would also be detrimental to the Great Lakes' sports fishing industry. The US government currently spends \$80 million per annum on Asian carp control, using methods such as toxins and underwater electric barriers designed to repel carp. Evidence of carp in Lake Michigan however has led anticarp activists to call for stronger measures, such as blocking off the locks on the Chicago canal. Business interests strongly oppose the closure of this major shipping lane for economic reasons, also arguing that forcing canal traffic onto the roads will cause pollution.

Q1	Anticarp activists have demanded more drastic measures of carp control in the U Supreme Court.		
	True	False	Cannot say
Q2	Heavy flooding in the 1970s resulted in Asian carp proliferating in the Mississippi Illinois Rivers.		
	True	False	Cannot say
Q3	Environmentalists believe that Asian carp would damage the Great Lakes' ecosyst by preying on native salmon.		
	True	False	Cannot say
Q4	Electric barriers are not a fully effective means of carp control.		
	True	False	Cannot say
Q5	Anticarp activists are r interests.	notivated by envi	ronmental concerns rather than business



True

Cannot say

False

The most prevalent neurological condition in the developed world, migraine is characterised by severe, recurrent headaches, with additional symptoms including nausea and sensitivity to light and sound. The frequency and duration of migraine attacks are variable: attacks may occur a few times a year or several times per month, while pain may last between four hours and three days. Approximately one third of sufferers experience an aura - a perceptual disturbance occurring before the migraine's onset. There are numerous theories on the cause of migraines. The vascular theory posits that migraines are caused by problems with blood vessels in the brain. A more widely held view is that migraines result from low levels of the neurotransmitter serotonin in the brain. Prophylactic drug treatment, which prevents the onset of migraines, has declined in recent years, because of side effects and also improvements in medications treating an actual attack. Whereas older varieties of pain medication are potentially addictive, newer drugs called triptans work by reducing pain information travelling to the brain. Treatment plans typically include avoidance of known migraine triggers, such as diet, alcohol, and stress, as overuse of medication can lead to chronic "rebound headaches." Not only do migraines have a debilitating effect on sufferers, they are also bad for the economy, with an estimated 25 million days lost from work every year in the UK alone.

Q6	One third of migraines are preceded by a heightened sensitivity to light.		
	True	False	Cannot say
Q7	The passage states	that it is not po	ssible to work when suffering from a migraine.
	True	False	Cannot say
Q8	Although the cause of migraines is unknown, serotonin deficiency is the most commonly held theory.		
	True	False	Cannot say
Q9	Triptans are a new form of prophylactic drug which are less addictive than older medications.		
	True	False	Cannot say
Q10	The vascular theory has been discredited.		
	True	False	Cannot say



3

Is free internet access as much a universal human right as access to clean water and healthcare? Many leading experts believe that the 80% of the world's population that is not connected to the web should have access to information through free low-bandwidth connection via mobile phones. The one fifth of the world connected to the internet, however, faces a very different problem: an insatiable appetite for bandwidth that outstrips availability. Bandwidth refers to the capacity to transfer data through a channel. Emails, for example, require less bandwidth than video. Information traffic jams result when too many users try to move information at the same time, exceeding the channel's capacity. The popularity of mobile web devices means demand for wireless channels is growing rapidly, but bandwidth supply is limited - resulting in high charges for use. With bandwidth controlled by a handful of private suppliers, bandwidth is the subject of government debate in many countries, including the United States. Bandwidth suppliers are in favour of introducing tiered pricing structures, whereby customers paying higher rates would receive faster service. Critics believe that a tiered system violates the principle of net neutrality - whereby all data is treated as equal - and would allow suppliers to profiteer from controlling a scarce resource. Suppliers argue that they are funding huge infrastructure updates - such as switching from copper wires to expensive fiberoptics - in order to improve services.

The main argument in the passage is that internet users are not leaving enough

	bandwidth for 80% of the world's population.				
	True	Fals	se	Cannot say	
Q12	Access to information via the internet is a basic human right.				
	True	Fals	se	Cannot say	
Q13	The growth of mobile net device use has contributed towards the pressure on bandwidth availability.			essure on	
	True	Fals	se .	Cannot say	
Q14	Proposed tiered devices.	d pricing struc	ctures would	d charge users more for usir	ng mobile web
		True	False	Cannot say	
Q15	Proponents of r	net neutrality	are against	the prioritising of certain we	b traffic.
	True	Fals	e	Cannot say	



Q11

The Dead Sea Scrolls are probably the most significant archaeological discovery of the twentieth century. More than 800 ancient documents, written on papyrus and parchment, were found in 1947 in desert caves at Qumran, near the Dead Sea. The texts mainly date from between the last century BCE and the first century CE and are comprised of three types of document: copies of books from the Hebrew Bible; apocryphal manuscripts; and documents pertaining to the beliefs and practices of a sectarian community. The former category is arguably of the greatest academic significance, as documents such as a complete copy of the Book of Isaiah enabled historians to analyse the accuracy of Bible translations. However, the secrecy of the scholars appointed by the Israeli Antiquities Authority, and their slow rate of publication, were the subject of international controversy. In 1991, the Huntington Library made photographic images of the full set of scrolls finally available to all researchers. While the scrolls' importance is indisputable, there is no consensus over the texts' origins. The traditional view is that the scrolls belonged to an ascetic Jewish sect, widely believed to be the Essenes. The Essenes' rules and doctrines are even seen by some scholars as a precursor to Christianity. A competing theory holds that the documents are sacred texts belonging to various Jewish communities, hidden in the caves for safekeeping around 68CE, during the unsuccessful Jewish Revolt against the Romans in Jerusalem.

	Christian sect called the Essenes.		
	True	False	Cannot say
Q17	Academics debate whether the scrolls are the detailed accounts of one particular sect, or provide historical information about the wider Jewish people.		
	True	False	Cannot say
Q18	Not only the origins of the Dead Sea Scrolls, but also the process of their interpretation, have been disputed.		
	True	False	Cannot say
Q19	Some scholars believe the Essenes inhabited the desert caves at Qumran, near the Dead Sea.		
	True	False	Cannot say

The traditional interpretation of the Dead Sea Scrolls is that they belonged to an early



Q16

Q20 The Dead Sea Scrolls include the oldest known copy of the Book of Isaiah.

True

False

Cannot say



Have you ever set your mouth on fire by biting into a chilli pepper? The sensation is caused by capsaicin, a chemical compound that stimulates the mouth's pain receptors, which in turn tell the brain you've eaten something hot. The body reacts by perspiring and releasing endorphins, the "feel-good" effect of which perhaps accounts for spicy food's appeal. The first scale for measuring a chilli's heat was developed in 1912 by the chemist Wilbur Scoville. Scoville Heat Units refer to the number of times a chilli must be diluted before it is undetectable to tasters. The world's hottest chilli, the Indian naga jolokia, measures 970,000 SHU. Today a chilli's heat can be measured more accurately using high-pressure liquid chromatography, a technique that calculates the concentration of capsaicin in a solution. Humans have consumed chillies for over 8,000 years; they were first cultivated 6,000 years ago in South and Central America. In the late 15th century Christopher Columbus introduced chillies to the rest of the world via Spain, where they were called peppers because they were spicy like peppercorns. In addition to their culinary uses, chillies have long been prized for their medicinal properties. Scientific studies show that capsaicin may lower blood pressure and aid weight loss. Capsaicin has traditionally been used in tropical analgesics, however new research indicates that the compound may actually be carcinogenic.

Q21 Although eaten around the world, chilli peppers are only indigenous to S Central America.		hilli peppers are only indigenous to South and	
	True	False	Cannot say
Q22	The scale developed by Wilbur Scoville is inherently subjective.		
	True	False	Cannot say
Q23	The passage suggests that some people eat chilli peppers for their psychologic effect as well as their spicy taste.		
	True	False	Cannot say
Q24	The chemical compound capsaicin sends a message to the brain that som has been consumed.		
	True	False	Cannot say
Q25	Although first consu Europeans in the 15	•	rs ago, chilli peppers were only introduced to



True

Cannot say

False

Bioprospecting refers to searching the world's remotest areas for genetic resources with commercial value. Bioprospecting is hardly a new phenomenon - the active ingredient in aspirin, for example, comes from willow bark, whose medicinal properties were known to the ancient Greeks. In recent years, however, the ethics of the practice have been debated. Opponents, who use the term biopiracy, view it as the exploitation of developing countries' resources and indigenous medical knowledge for the developed world's profit. Pharmaceutical companies argue that drugs resulting from bioprospecting can help thousands of people. Furthermore, they are not patenting native plants, rather the techniques used to extract compounds from them. Despite these arguments, in 2005 the Indian government successfully overturned a US patent to extract an anti-fungal agent from the neem tree. Central to the debate is the question of who owns the world's biodiversity. The UN's Convention on Biological Diversity (CBD) was established in 1993 to ensure that bioprospectors obtain consent from and share any profits with the source nation. The United States, however, has not ratified the CBD. It is not only the pharmaceutical industry that has fallen foul of sovereign rights to biological resources. In 2008, Mexican farmers won an appeal to revoke a US patent on Mexican Enola beans. Similarly, following a diplomatic crisis between India and the United States, a Texan company lost the right to patent basmati rice.

	knowledge.		
	True	False	Cannot say
Q27	Bioprospecting is primarily carried out by the pharmaceutical and food industries.		
	True	False	Cannot say
Q28	Under the CBD, nations grant access to sovereign genetic material in exchange for share in the rewards.		
	True	False	Cannot say
Q29	The United States gove sovereign nations.	ernment believes	that the earth's biodiversity is not owned by
	True	False	Cannot say

India has successfully defended its ownership of genetic material and traditional



Q26

Q30 Bioprospecting is defined as the practice of obtaining plants from developing countries for commercial exploitation.

True False Cannot say

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