



1. This language answers the questions "koho" and "co" with the accusative case, and, like Albanian, it contains the insult "kurva." Unique features of this language's orthography include the "r with a hook over it." Dialects of this language include Chod and Central Moravian. It is the second-most-spoken West Slavic language, behind Polish. For 10 points, identify this Central European language which has extensive mutual intelligibility with Slovak.

ANSWER: Czech language [or Cestina; prompt on Bohemian]

019-12-85-22101

BONUS: What storms form from tropical depressions and are measured by the Saffir-Simpson scale?

ANSWER: hurricanes

124-12-85-2210-1

2. One story tells of the Pierides (pee-ERR-uh-deez) being turned into magpies for being compared to this group. This group gathered at Mount Helicon and included such members as Erato and Melpomene (melk-PAH-muh-nee). They were the daughters of Mnemosyne (neh-MAH-zuh-nee) and also included Urania, who oversaw astronomy, and Clio, the patron of history. For 10 points, identify this group of nine Greek goddesses who also inspired epic poetry, song, and dance.

ANSWER: the muses

019-12-85-22102

BONUS: What term denotes an operation used to determine whether or not an object is chiral, as well as the way light bounces off a mirror, in optics?

ANSWER: reflection

023-12-85-2210-1

3. A hormone secreted from this organ is responsible for triggering the formation of red blood cells; that hormone is erythropoietin. This organ contains balls of capillaries surrounded slit diaphragms and podocytes, which are responsible for keeping proteins from leaking out of the circulation. The functional unit of this organ contains a pair of convoluted tubules book-ending the Loop of Henle, and is called the nephron. This organ is responsible for maintaining salt balance. For 10 points, name this organ which produces urine.

ANSWER: kidney

048-12-85-22103

BONUS: In which Shakespeare romance does Antigonus "exit, pursued by a bear" while under orders from Leontes?

ANSWER: *The Winter's Tale*

190-12-85-2210-1

4. This god took the form of a turtle to stop a mountain from sinking into the sand during the churning of the milk ocean. In the form of a fish named Matsya, he saved the first man, Manu, from a flood. This god rides on the eagle Garuda and rests on the many-headed serpent Shesha. This deity's consort is the goddess of luck, Lakshmi. With Shiva and Brahma, this god makes up the Trimurti. For 10 points, name this Hindu preserver god whose avatars include Rama and Krishna.

ANSWER: Vishnu [or Kurma before "fish" is read]

080-12-85-22104

BONUS: What ancient Persian prophet told of a cosmic struggle between the good Ahura Mazda and the evil Ahriman in his namesake religion?

ANSWER: **Zoroaster** [or **Zarathustra**; or **Zartosht**]

104-12-85-2210-1

5. The most common Sanskrit form of this construct is the *shloka*. In ancient Greek, this can be analyzed using units known as *morae*, and in many languages it is ascertained and marked using scansion. In English literature, this rarely features caesuras and is usually divided into dactyls, trochees, and other "feet" such as the iamb. For 10 points, name this term for the rhythmic structure of a line of poetry.

ANSWER: poetic **meter** [prompt on **prosody**; prompt on **stress**]

104-12-85-22105

BONUS: What ragtime musician composed the "Maple Leaf Rag" and "The Entertainer"?

ANSWER: Scott **Joplin**

080-12-85-2210-1

6. During this dynasty, the military was divided into the Eight Banners. This dynasty included the longest-reigning Chinese emperor, whose grandson was in power at the time of the White Lotus Rebellion. Including the Kangxi (KONG-shee) and Qianlong (CHYAN-lawng) emperors, this dynasty also defeated the forces of Hong Xiuquan (SHEE-oo-CHEW-on) in the Taiping Rebellion. This dynasty was established by the Manchus after the fall of the Ming Dynasty. For 10 points, name this final Chinese dynasty.

ANSWER: **Qing** Dynasty [accept **Manchu** Dynasty before read]

014-12-85-22106

BONUS: Name this collection of pieces in which Edward Elgar used musical cryptograms to depict his family and friends in movements like "Nimrod."

ANSWER: **Enigma Variations**

020-12-85-2210-1

7. In 2012, a clip was released showing four soldiers in this country urinating on three corpses. Uniformed police officers and soldiers in this country have killed over 100 fellow servicemen in "green-on-blue" attacks. This country's poppy fields supply 90% of the world's illicit opium, which is used to fund its insurgency. Its president is Hamid Karzai. For 10 points, name this country where the Taliban is fighting coalition forces, which have been there since a 2001 invasion.

ANSWER: Islamic Republic of **Afghanistan**

080-12-85-22107

BONUS: Simone de Beauvoir's *The Mandarins* and Jack Kerouac's *On the Road* are examples of what kind of "novel with a key," in which real people and events are slightly fictionalized using new names?

ANSWER: **roman à clef**

019-12-85-2210-1

8. A creature from the second game in this series speaks in rhymed couplets of trochaic heptameter and is named Gravemind. The first game in this series features a beach invasion on the level The Silent Cartographer and has the subtitle *Combat Evolved*. The main character in this series is assisted by Cortana, but he did not appear in the games *Reach* or *ODST*. For 10 points, name this game series in which humans fight the Flood and the Covenant with the help of Master Chief.

ANSWER: **Halo**

023-12-85-22108

BONUS: This is a calculation question. What is the negative root of the polynomial $3x^2 - 21x - 24$.

ANSWER: $x = -1$

001-12-85-2210-1

9. Augustin de Candolle demonstrated these phenomena using the action of a plant's leaves. These phenomena can be shifted by stimulating the suprachiasmatic nuclei in the hypothalamus, and they are influenced by cues known as zeitgebers. These phenomena are partially influenced by melatonin, though they are more heavily influenced by environmental cues such as light. For 10 points, identify these "biological clocks" which influence our daily cycles and sleep patterns.

ANSWER: **circadian rhythms**

189-12-85-22109

BONUS: This is a 20-second calculation question. An external angle of a regular polygon measures 12 degrees. How many sides does the polygon have?

ANSWER: **15**

174-12-85-2210-1

10. One of this author's poems begins, "Among the rain and lights I saw the figure 5 in gold." He used the title "Poem" for a work about a cat that stepped down "into the pit of the empty flowerpot." This author wrote "I have eaten the plums that were in the icebox" in his oft-parodied poem "This Is Just to Say." For 10 points, name this poet and pediatrician who wrote that "so much depends upon" the title object in "The Red Wheelbarrow."

ANSWER: William Carlos **Williams**

015-12-85-22110

BONUS: What Kiefer Sutherland played character fought terrorists and frequently utilized torture on the show 24?

ANSWER: Jack **Bauer** [or **Jack** Bauer]

052-12-85-2210-1

11. One approximation related to these objects states that the index of refraction minus one times the difference between the reciprocal of the radii of curvature equals the inverse of a certain quantity. That approximation is the thin "this device" approximation. When an object is placed off their primary axis they create comas. Their focal length over their focal length minus their distance from an object is equal to their magnifying power. For 10 points, name these optical devices that refract light and come in concave and convex forms.

ANSWER: **lens**

149-12-85-22111

BONUS: Name the eclectic French intellectual who philosophized about power dynamics in modern society through outwardly historical books such as *Madness and Civilization* and *The History of Sexuality*.

ANSWER: Michel **Foucault**

019-12-85-2210-1

12. William Yancey led a group of "Fire-Eaters" from this state. This state was the namesake of a Confederate warship that took down dozens of Union merchant ships before being sunk by the USS *Kearsarge*. Before moving to Richmond, the capital of the Confederacy was in this state. Another city in this state was the site of a bus boycott during the Civil Rights movement. For 10 points, name this Southern state where Civil Rights clashes occurred in Selma, Montgomery, and Birmingham.

ANSWER: **Alabama**

015-12-85-22112

BONUS: This is a 20-second calculation question. Let theta be the arccosine of the quantity negative square root of two, divided by two, close quantity. Find the tangent of theta.

ANSWER: **-1** [do not accept "1"]

174-12-85-2210-1

13. One tributary of this river gains its name from the clay sediments carried into it above Malakal by the Sobat River. Another tributary of this river is sometimes called the Abay River and flows out of Lake Tana. Abu Simbel was forced to relocate when a decision was made to dam up this river. The man-made Lake Nasser was created by water from this river being diverted by the Aswan High Dam. For 10 points, name this river with Blue and White tributaries that is the longest in the world.

ANSWER: **Nile** River [or Bahr Al-**Nil**; or Nahr Al-**Nil**]

023-12-85-22113

BONUS: This is a 30-second calculation question. An unfair coin is twice as likely to land tails as heads. If it is flipped three times, what is the probability of getting exactly one head?

ANSWER: **4/9** [or **12/27**]

174-12-85-2210-1

14. In one work, this man created Clive Durham and Alec Scudder, who are both lovers of the title character, *Maurice*. In another work by this author, Helen tries to help Leonard Bast with advice from Mr. Wilcox, costing him his job. That work ends with the union of the Wilcox and Schlegel families at the title estate. Another novel by this author of *Howards End* sees Dr. Aziz accused of sexually assaulting Adela Quested in the Marabar Caves. For 10 points, name this British author of *A Passage to India*.

ANSWER: E. M. **Forster** [or Edward Morgan **Forster**]

191-12-85-22114

BONUS: What molecular geometry occurs in complexes with six ligands and no lone pairs?

ANSWER: **octahedral**

048-12-85-2210-1

15. Cancer of the cells producing this hormone can be treated with streptozotocin, and those cells release this hormone after the closing of a potassium channel. This hormone is activated after the cleaving off of a C-peptide, and it works by binding to a tyrosine kinase receptor. This hormone, released from the beta cells of the islets of Langerhans, promotes the synthesis of glycogen and accelerates glycolysis, and is typically released after a meal. For 10 points, name this pancreatic hormone that decreases blood sugar levels, which is deficient in diabetes.

ANSWER: **insulin**

048-12-85-22115

BONUS: What Kansas governor carried only Vermont and Maine in the 1936 election against Franklin Roosevelt?

ANSWER: Alfred Mossman **Landon**

079-12-85-2210-1

16. After being castigated by his wife, Senator Bird helps out the central characters of this novel. Its title character is married to Chloe and shares his piousness with Eva St. Clare. Another of its characters is Eliza Harris, who carries her son Harry during her daring escape across the frozen ice of the Ohio River. In this work, the goodness of George Shelby is contrasted with the evil of Simon Legree. For 10 points, name this anti-slavery novel by Harriet Beecher Stowe.

ANSWER: **Uncle Tom's Cabin**

015-12-85-22116

BONUS: What state's Indian-American governor, Nikki Haley, is tasked with replacing retiring senator Jim DeMint?

ANSWER: **South Carolina**

104-12-85-2210-1

17. This ruler helped put Stanislaw Poniatowski (POWN-yuh-TOHV-skee) on the throne of Poland. This ruler came to power with help from Grigory Orlov and apocryphally was shown fake villages constructed by Grigory Potemkin. A Cossack named Pugachev led a rebellion against this ruler while pretending to be this ruler's dead husband, Peter III. For 10 points, name this eighteenth-century German-born empress who helped westernize and add territory to Russia.

ANSWER: **Catherine the Great** [or **Catherine II** of Russia; or **Yekaterina Alekseyevna**; or **Yekaterina Velikaya**; or **Sophie Frederike Auguste**; prompt on **Catherine**]

023-12-85-22117

BONUS: What Herman Melville character tells his employer "I would prefer not to" when assigned any task?

ANSWER: **Bartleby** the Scrivener

121-12-85-2210-1

18. This character is an old man known as "the trapper" in *The Prairie*. He aids Judge Marmaduke Temple and is known as Hawkeye in *The Pioneers*. In another novel, this character helps the Munro sisters get to Fort William Henry and befriends Chingachgook and the Mohawk warrior Uncas. He is the protagonist of *The Deerslayer*, *The Pathfinder*, and *The Last of the Mohicans*. For 10 points, name this character created by James Fenimore Cooper.

ANSWER: **Natty** Bumppo [or Natty **Bumppo**; or **Nathaniel** Bumppo; or **Hawkeye** before it is read]

015-12-85-22118

BONUS: What Dutch computer scientist has a namesake algorithm that solves the shortest path problem for a graph with nonnegative edge path costs?

ANSWER: Edsger **Dijkstra** (dyke-stra)

052-12-85-2210-1

19. The four properties that guarantee reliable transactions within these systems are atomicity, consistency, isolation and durability. Common types of cardinality in these systems are one-to-one, one-to-many and many-to-many. Their unique identifiers are known as primary keys. They most commonly adhere to the relational model, in which foreign keys are used to relate multiple tables; the most popular language for that model is SQL. For 10 points, identify these systems used to store data in rows, known as records.

ANSWER: relational **databases**

066-12-85-22119

BONUS: What machine was first developed by Thomas Savery, to pump water out of mines, and was later improved upon by Thomas Newcomen and James Watt?

ANSWER: **steam** engine

066-12-85-2210-1

20. One of this composer's symphonies has an extra movement marked "Feierlich" and quotes the main theme of Brahms's third symphony in its opening *Lebhaft* movement. He never completed his "Zwickau" Symphony, but included "The Poet Speaks" and "Traumerai" among his *Scenes from Childhood*. The poems of Adolph Boettger inspired his first symphony, nicknamed the "Spring." Name this German composer married to Clara Wieck, who composed the "Rhenish" Symphony.

ANSWER: Robert **Schumann**

192-12-85-22120

BONUS: What nineteenth-century advocate of Irish Home Rule had a scandalous affair with Kitty O'Shea?

ANSWER: Charles Stewart **Parnell**

079-12-85-2210-1



21. The protagonist of this novel meets Nicholas Schliemann at a party thrown by the millionaire Fisher. Its protagonist is imprisoned for attacking his wife's boss Phil Connor after learning that he had raped her. Ona dies giving birth to her second child in this novel, pushing Jurgis Rudkus further towards socialism. This novel inspired legislation with its depictions of the Chicago meatpacking industry. For 10 points, name this muckraking novel by Upton Sinclair.

ANSWER: *The **Jungle***

015-12-85-22121

BONUS: Eamon de Valera was the president and prime minister of what country that experienced the 1916 Easter Rising?

ANSWER: **Ireland** [or **Eire**]

030-12-85-2210-1

22. Lane Turner wrote a song responding to this statement in which he described his "two rugged hands." Similar to a controversial speech given by Elizabeth Warren in 2011, this statement was uttered during a campaign stop in Roanoke. It was reversed in the motto of Day 2 of the RNC and refers back to a comment about "roads and bridges." For 10 points, name this soundbite of Barack Obama claiming that "if you've got a business," you received help from the government along the way.

ANSWER: "If you've got a business, **you didn't build that**" [or "**We Built It**" until "Warren" is read]

080-12-85-22122