## New Trier Scobol Solo 2013

## Round 7



1. A widening of this river that holds Mbamu Island is the Pool Malebo. This river passes near the city of Matadi, which is near this river's Inga Falls. One of its feeder rivers is the namesake of a deadly virus first identified in 1976, Ebola. This river is generally considered to begin at the Boyoma Falls, which are at the end of the Lualaba River, though this river's main tributary is the Chambeshi River. Its mouth help forms the northern border of Angola. Name this river formerly called the Zaire that flows to the Atlantic Ocean and which flows between Brazzaville and Kinshasa, which are the capitals of the two countries named for this river.

Answer: <u>Congo</u> River [prompt on <u>Zaire</u> River]

2. Wilhelm Johannsen's pure line theory of this concept is often applied to self-pollinating plants, and a common goal of this process is hybrid vigor. Dmitri Belyaev successfully used this method to domesticate the silver fox. Darwin devoted the first chapter of *On the Origin of Species* to this concept, focusing on varieties of fancy pigeons. Broccoli, cabbage, and kale all descended from the wild mustard plant because of this process that in dogs resulted in radically different types like the Great Dane and Chihuahua. Identify this process in which humans produce plants and animals with desirable traits by choosing which individuals get to reproduce.

Answer: <u>artificial selection</u> [accept <u>selective breeding</u>; prompt on "breeding"]

3. The test named for this concept can be used to show that a series diverges, but it can only show convergence for alternating series. Evaluating derivatives of the numerator and denominator of a rational function separately can be used in some cases to evaluate this value using L'Hôpital's rule. This concept may be formally defined using delta-epsilon proofs, and this concept applied to a difference quotient is the definition of the derivative. The left and right values of this must equal both each other and the value of a function for a function to be continuous. Name this value that a function approaches.

Answer:  $\underline{\mathbf{limit}}$ s

4. The narrator of this novel is thought by the servant Joseph to have stolen a lantern, and that narrator is consequently attacked by dogs set loose by Joseph. One character is adopted from an orphanage in Liverpool and throws applesauce at another character. Hindley, whose wife Frances dies after giving birth to Hareton, hates that orphan. Nelly Dean tells the story of the house to the narrator of this novel, Mr. Lockwood, who rents a room at Thrushcross Grange. Identify this novel centering on the romance between Heathcliff and Catherine, a work by Emily Brontë.

Answer: Wuthering Heights

5. An African American is seated in front of clothes hanging on hooks in this artist's A Crow Flew By. One work by this artist shows red, white, and blue streamers on the handlebars of a bicycle and a matching feather on top of a pole on the same bike, which is ridden by a boy looking away from the picture. That work is Young America. During the 1970s and '80s, this painter made several portraits of Helga Testorf. One of his works shows tire tracks on the right side leading to a farmhouse, toward which a polio-stricken woman pulls herself. Name this artist who lived in Pennsylvania and Maine and who painted Christina's World.

Answer: Andrew (Newell) Wyeth

6. This leader oversaw his country's States Reorganization Act, which attempted to draw boundaries to increase linguistic unity. The smallest state in this leader's country was controlled by Portugal until, soon after the Portuguese fired on the *Sabarmati*, his country launched Operation Vijay. His daughter and grandson also became prime ministers, but both were assassinated. This prime minister lost a border war with China in 1962, and he was unable to stabilize his country's border with Pakistan. Name this supporter of Mohandas Gandhi who was the first Prime Minister of India.

Answer: Jawaharlal Nehru

7. This man proved his parentage by retrieving a ring from the ocean floor. Castor and Pollux kidnapped his mother while this man was in the Underworld, from which he was rescued by being pulled out of the Chair of Forgetfulness. Rampaging horses caused his son Hippolytus to crash his chariot and die, and his mortal father committed suicide when this man forgot to change the sails on his ship. Dionysus courted one of his lovers, Ariadne [air-ee-AHD-nee], who was abandoned on an island after she lent this man a ball of string with which to navigate the Labyrinth. Name this king of Athens who slayed the Minotaur.

Answer: Theseus

8. This scientist's work on surface tension was unified with work done by Pierre-Simon Laplace [luh-PLAHS] in an equation worked out by Carl Friedrich Gauss. He was a doctor, and his early work on light led to the discovery of astigmatism and the theory that three types of photoreceptors are used in sight. His paper "On the nature of light and colours" supported the wave theory of light by describing what happens when two portions of light from the same original source are combined. Identify this namesake of the measure of the elasticity of a substance, who found interference patterns while performing his double-slit experiments.

Answer: Thomas **Young** 

9. Two senators from this state who led the opposition to the creation of Martin Luther King, Jr. Day were John Porter East and Jesse Helms. Another senator from this state, who chaired the Watergate Committee, was Sam Ervin. In 1960, a series of sit-ins in this state led to the integration of Woolworth's. The first English baby born in the Americas, Virginia Dare, was born in what is now

this state. She was born in Roanoke Colony. The Wright Brothers flew the first airplane in this state. Name this state, the site of a lost colony settled by the namesake of its capital, Walter Raleigh.

Answer: North Carolina

10. One character created by this author was offered debt relief if he did not release his book Some Americans: The Sense of Being in the USA and made a lot of money from his play Von Trenck. In another novel by this author, the title character—who plans to shoot Valentine and Madeleine and gain custody of his daughter June—writes lots of letters. Another novel by this author depicts a wealthy American who becomes a respected leader of the Wairiri tribe in Africa. This writer also wrote about a Chicagoan who worked for Einhorn. Name this author of Humboldt's Gift, Henderson, the Rain King, Herzog, and The Adventures of Augie March.

Answer: Saul Bellow

11. Blueschist and eclogite are characteristic minerals formed by this process, which is labeled "flat-slab" at angles less than 30 degrees. Before the Yucca Mountain site opened, Nevada considered using this process to dispose of nuclear waste. The Aleutians form an arc because of this process, which generates earthquakes in Wadati-Benioff zones. This process explains why the Farallon Plate, named for San Francisco islands, no longer exists. It only occurs at convergent boundaries and is responsible for forming the "ring of fire" volcanoes. Name this geologic process in which one tectonic plate slides beneath another.

Answer: <u>subduction</u> [prompt on <u>tectonic shifts</u> or <u>continental drift</u>]

12. Near the end of this battle, the loser's second infantry line refused to allow the first infantry line to retreat, and both were surrounded by advancing enemy *hastati*, or spear men. Syphax's fleeing cavalry was routed by Massinissa's cavalry, who then returned to surround the enemy infantry. This

Roman victory came one year after the Battle of the Great Plains, and the winning strategy involved the withdrawal of mobile troops while sounding trumpets, scattering the loser's war elephants. Name this 202 BCE battle in which Scipio Africanus defeated Hannibal, ending the Second Punic War.

Answer: Battle of **Zama** 

13. This philosopher often criticized Hans Lassen Martensen, who was a supporter of Hegel [HAY-gul].

One of his works, which includes a section titled *Diary of a Seducer*, contrasts the thoughts of ethicist Judge Vilhelm with those of aesthete Victor Eremita. This person wrote about the simultaneous

attraction and repulsion we feel when looking over a ledge and imagine falling in *The Concept of Anxiety*. Another work by this person, in which Johannes claims that loving one's neighbor is a duty to God, focuses on the decision by Abraham to sacrifice Isaac. Name this writer of *Either/Or* and *Fear and Trembling*, a 19<sup>th</sup>-century Danish philosopher.

Answer: Søren (Aabye) Kierkegaard

14. This composer's *Song of Lamentation* was written during the final years of his study at the Vienna Observatory. This composer of a song cycle based on poems by Friedrich Rückert included cowbells in his seventh symphony and three hammer blows in the fourth movement of his *Tragic* symphony.

"The Two Blue Eyes of my Beloved" is the final movement in his *Songs of a Wayfarer*. Poems of Li Po provide the basis for his *Song of the Earth*, while a version of "Frere Jacques" in a minor key features in his *Titan* symphony. Identify this composer of the *Resurrection* symphony and the *Symphony of a Thousand*.

Answer: Gustav Mahler

15. In one novel by this author, Antonia dies giving birth to Chunga, the daughter of Anselmo, in the title brothel. Another work involves a meeting between a chauffeur named Ambrosio and the activist Santiago Zavala. This author also wrote a historical novel about Antonio

Conselheiro [kohn-sell-YAIR-oh], The War of the End of the World. This author of The Green House and Conversation in the Cathedral also wrote about entertainer Pedro Camacho, who works at a radio station with a man who falls in love with his own uncle's sister-in-law. Name this Peruvian author of Aunt Julia and the Scriptwriter.

Answer: Mario <u>Vargas Llosa</u> [prompt on partial last name]

16. An isomer of this compound is named for James Dewar, and this compound is the second in a series of compounds that starts with cyclobutadiene [sigh-kloe-BYOOD-uh-"DIE"-een]. Changing a hydrogen atom in a molecule of this element to a hydroxyl ["high"-DRAHK-sil] group creates an ingredient of bakelite [BAY-kuh-lite] called either carbolic acid or phenol [FEE-nol], while changing a hydrogen atom to a methyl [METH-ul] group creates toluene. Discovery of the structure of this molecule is credited to August Kekulé, who claimed he had a vision of a snake eating its tail. Name this aromatic hydrocarbon sometimes pictured with alternating single and double bonds, whose chemical formula is

 $C_6H_6$ . Answer: <u>benzene</u> [prompt on  $C_6H_6$ ] 17. This poem asks "Can Honor's voice provoke the silent dust, / Or Flattery soothe the dull cold ear of Death?" before lamenting that "Full many a gem of purest ray serene, / The dark unfathomed caves of ocean bear." This poem claims that "The paths of glory lead but to the grave" and later describes how one of the people in the title location may be "some mute inglorious Milton" or "some Cromwell guiltless of his country's blood" The first stanza describes how "The plowman homeward plods his weary way" after "the curfew tolls the knell of parting day." Name this Thomas Gray poem set in a

Answer: "Elegy Written in a Country Churchyard"

18. This director's last film is about a retired German professor who repeatedly says he is not yet ready to die. In another work by this director, a leader banishes the youngest of his three sons. Another film by this director ends with three men finding an abandoned baby and deciding who should take responsibility for it. That work centers around several people giving accounts of how one of the characters died. In another film, a group of scared farmers works with a group of unemployed samurai. Name this director of *Madadayo*, *Ran*, *Rashomon*, and *Seven Samurai*.

Answer: Akira **Kurosawa** 

cemetery.

19. This country was the site of the Ardeatine massacre during World War Two, and because of that Erich Priebke, who died here in 2013, was extradited to this country from Argentina in 1995. This country is currently headed by a Grand Coalition that includes the Union of the Centre, the People of Freedom, and the Democratic Party. This country detained Khaled Bensalam after his ship from Libya sank in October 2013 near this country's island of Lampedusa. Name this country where in 2013 Prime Minister Mario Monti was replaced by Enrico Letta, the nephew of an advisor to former Prime Minister Silvio Berlusconi.

Answer: <u>Italy</u> [or <u>Italian Republic</u> or Repubblica <u>Italia</u>na]

20. The agreement under this ruler that centralized power in the empire was the Ten Years' Recess, increasing mercantilist policies favored by this ruler's Supreme Chancellor von Haugwitz. This leader allied with France in the Diplomatic Revolution, allowing the reclamation of Silesia under a treaty worked out by Foreign Policy Minister von Kaunitz. This parent of Queen Maria Carolina of Naples and Duchess Maria Amalia of Parma lost to Frederick the Great in the War of the Austrian Succession. Name this predecessor of Joseph II and successor of Charles VI, who was named the empress of Austria after the Pragmatic Sanction.

Answer: Maria Theresa [or Maria Theresia; prompt on partial answer]

TB. This woman blamed her first husband for the problems with her daughter Charlien, who was committed to an asylum. After being kicked out of the Disciples of Christ, which her second husband preached for in Medicine Lodge, Kansas, she believed that she heard the message "Go to Kiowa". Often working alone or accompanied by women singing hymns, according to legend she scared boxer John L. Sullivan and destroyed a painting of *Cleopatra at Her Bath*. Name this member of the Woman's Christian Temperance Union who destroyed several bars, events that she referred to as "hatchetations".

Answer: Carrie A(melia <u>Moore</u>) <u>Nation</u> [accept either underlined name]

TB. This city has a building nicknamed "the Hanging Church" located near buildings nicknamed the Alabaster Mosque and the Saladin Citadel. This city is the location of Al-Manyal Palace, which is located on Rhoda Island. This city also includes the Zamalek neighborhood on Gezira Island, which is crossed by the 6<sup>th</sup> October Bridge. Its most famous museum contains a Royal Mummy Room and is located on Tahrir Square. This city is across a river from the Great Sphinx and the Great Pyramids of Giza. Name this city on the Nile River which serves as the capital of Egypt.

Answer: <u>Cairo</u>, Egypt

TB. Identify the color that the indicator phenolphthalein [FEE-nawlf-THAY-leen] turns in basic solution, describes the feathers of adult wild flamingos, and names the female singer of recent hits like *Try* and *Raise Your Glass*.

Answer: **pink**