

## Western Invitational Tournament 2013

Editors 5 (Auroni Gupta, Jasper Lee, Jarret Greene, Tanay Kothari, Ankit Aggarwal, Sam Braunfeld) + Louisville A + Carleton

### Tossups

1. This opera's premiere at La Scala was marred by the false exclamation that the lead soprano, Rosina Storchio, was pregnant with Arturo Toscanini's child when her dress blew in the wind. It's not *Lakmé*, but this opera sees the title character and her servant sing the Flower Duet while decorating a house. An aria in this opera tells of standing on a hill and predicting the appearance of a (\*) white ship. The love duet "Bimba, bimba" is sung in this opera, whose title character also sings "Un bel di" as she awaits the return of her husband in this opera. At the end of this opera, Pinkerton rushes in a moment too late to save his wife Cio-Cio San from committing suicide with her father's knife. For 10 points, name this Giacomo Puccini opera set in Japan.

ANSWER: Madame Butterfly [or Madama Butterfly]

2. This album's songs repeat such lyrics as "Don't let the bastards grind you down" and "Baby Baby Baby light my way." In addition to "Acrobat" and "Ultraviolet," this album contains a song narrated by Judas Iscariot, titled "Until the End of the World." Its opening track begins with a heavily distorted guitar sound that was intended to make people wonder if their music players were broken; that song is (\*) "Zoo Station." In one of this album's singles, the singer asks "Have you come here to play Jesus/to the lepers in your head." In another, he tells "Johnny" to "take a walk with your sister the moon." Its lead single "The Fly" was described by Bono as "the sound of four men chopping down *The Joshua Tree*." For 10 points, name this 1991 album by U2.

ANSWER: Achtung Baby

3. (Note to reader: pronounce the individual letters in "USAID")

It's not resource exploitation, but this concept is linked to the weakening of the manufacturing sector in a phenomenon called "Dutch disease". A book that advocates an end to this practice states that it contributes to civil unrest and poor governance and is by Dambisa Moyo. This practice was dismissed as a product of the "white man's burden" by William Easterly. An increase in it for twenty years was suggested as a way to eliminate the (\*) "poverty trap" in a book by Jeffrey Sachs, which proposed steps to achieve the UN Millennium Development Goals. George W. Bush increased contributions of this type through programs like PEPFAR that were administered by USAID. For 10 points, give this term for financial flows from developed nations to poorer ones.

ANSWER: foreign aid [prompt to be less specific on answers like sending money to Africa; accept obvious equivalents like giving money to other countries; prompt on aid]

4. The Ingwaz rune depicts a figure that is equivalent to this god. This god's son Fjolnir was said to be the progenitor of the Yngling dynasty. This god had earlier met his wife in a grove known as Barri. One animal owned by this god was created by the dwarves and was golden-bristled; that (\*) boar was named Gullinbursti. An item this god possessed could be folded up and put away when it was not being used. With the help of Skirnir, this god successfully wooed and married the giantess Gerd. This owner of the ship Skidbladnir and resident of Alfheim will not have his sword at Ragnarok, causing him to die swiftly at the hands of Surt. For 10 points, name this Norse god of fertility, the brother of Freya.

ANSWER: Freyr [accept Ing until "Yngling" is read]

5. Shots of agricultural machinery and of a crowd weeping over the open casket of this man are included in Dziga Vertov's silent film *Three Songs about [him]*. This man provided every delegate of the Second Congress a copy of his polemical pamphlet characterizing the "infantile disorder" of fringe elements of his party. He proclaimed the need for a revolutionary "vanguard party" in a pamphlet borrowing its title from a novel by (\*) Nikolai Chernyshevsky. This man led a community of expatriates in Zurich and wrote his "April Theses" on his train journey back to his homeland before landing at Finland Station. As leader, he established the Cheka and promulgated the New Economic Policy. For 10 points, name this Bolshevik leader of the 1917 Russian Revolution.

ANSWER: Vladimir Ilyich Lenin [or Vladimir Ilyich Ulyanov; or V. I. Lenin]

6. L. Ron Hubbard claimed to be this figure in his poem “Hymn of Asia.” The Chinese empress Wu Zetian justified her seizure of power by proclaimed herself an incarnation of this deity. This deity imparted his Five Treatises to Asanga, one of the founders of the Yogacara school, while waiting in the (\*) Tushita Heaven for the time when he will reintroduce the Dharma to the world after it has been long forgotten. He is sometimes depicted as the fat and smiling monk Budai, though his physical body is many times larger than a human’s. Eschewing tantra recitation, he will instruct a retinue of 84,000 monks when the world is ruled by Shankha. For 10 points, name the bodhisattva who is prophesied to appear on Earth as the successor to the historical Buddha.

ANSWER: Maitreya Buddha [prompt on Laughing Buddha or Buddha]

7. This function can be defined as the product of elementary divisors of its associated map. The Jordan canonical form exists if this function splits completely over the base field. This function annihilates its associated map, by the (\*) Cayley-Hamilton theorem. This function’s zeroes lie on the unit circle for a unitary map. If the geometric multiplicity is less than the algebraic multiplicity of one of this function’s zeroes, then the associated map is not diagonalizable. This function’s constant term is the determinant. This function can be computed by taking the determinant of its associated map minus  $\lambda I$ . For 10 points, name this polynomial whose roots are the eigenvalues of its associated linear map.

ANSWER: characteristic polynomial [or characteristic equation]

8. One character with this name becomes engaged to a wheelchair-bound girl who attempts to crush her own fingernails under a door. Besides that fiancé of Liza Khokhlakov, another character with this name stays with Buinovsky and is given a biscuit after moving cinder blocks efficiently. That character keeps most of the Old Testament written in a small notebook and tries to convert a prisoner who asks if his rations are the same as the (\*) Lord’s daily bread. Another character with this name leaves his monastery after he discovers that Father Zosima is not a saint. For 10 points, give this name shared by both a devout Baptist in the same labor camp as Ivan Denisovich and the youngest Karamazov brother.

ANSWER: Alyosha [or Alexey; or Alyoshka]

9. The TRPM8 receptor is activated either directly or indirectly by a change in this variable. The symptoms of multiple sclerosis worsen with a change in this variable in Uhthoff’s phenomenon. If altered, this variable can change the firing rate of nerve fibers in the pit organ. It lowers for the annealing step and increases again for the elongation step of PCR. The (\*) HSP chaperone proteins are upregulated when this variable increases.

Progesterone slightly increases the value of this variable on the day of ovulation, whereas in men, spermatogenesis requires that it be slightly lower in the testes than in the rest of the body. A large drop in this variable results in hypothermia. For 10 points, name this variable, which in the human body is optimally 98.6 degrees Fahrenheit.

ANSWER: basal body temperature [also accept heat, I suppose]

10. One character in this work claims that he once witnessed the title character talking to a jay-bird that sat in his lap. Another character in this work is an English sailor named “Man o’ War Jack” who sings this story’s central character a 90-stanza lullaby about a ship called the Arethusa. At a christening ceremony in this story, the bigamist Stumpy decides on naming the title character (\*) Tommy. In this story, Kentuck starts bathing regularly because of the title character, who he calls a “damned little cuss” after he “rassled with” his finger after his birth. For 10 points, name this story about a baby who is killed in a flood after being born to Cherokee Sal and raised by a California mining camp, written by Bret Harte.

ANSWER: “The Luck of Roaring Camp”

11. In a tone poem by this composer, a loud D sharp that leads into an E, played by the violas, denotes the passing of an old man. Near the end of a work written for 23 strings, this composer quotes the funeral march from the *Eroica Symphony*. The bombing of Dresden inspired this composer’s *Metamorphosen*. In his dying moments, this composer is said to have praised the accuracy of his (\*) *Tod und Verklarung* in depicting death. Another of this composer’s tone poems uses a wind machine and 20 horns and depicts the “Ascent” and “Descent” of a mountain. A more famous one ends with the “Song of the Night Wanderer” and begins with the trumpet playing the motif of C-G-C. For 10 points, name the composer of *An Alpine Symphony* and *Also Sprach Zarathustra*.

ANSWER: Richard Strauss [prompt on Strauss]

12. This quantity can be measured using a porous earthenware container with a copper ferrocyanide precipitate inside, a contraption devised by Wilhelm Pfeffer. The contribution of proteins to this quantity is termed the Donnan effect. The difference in a form of this quantity is multiplied by the reflection coefficient in Starling's equation. One equation that yields this quantity was improved upon by the (\*) Morse equation, which used molal, instead of molar, concentration. This quantity, which the van't Hoff equation sets equal to MRT, is equal on both the inside and outside of a cell in an isotonic solution. For 10 points, name this colligative property, a difference in pressure across a semipermeable membrane.

ANSWER: osmotic pressure [or oncotic pressure; or colloid osmotic pressure; just osmotic is fine after "pressure" is read; prompt on pressure; prompt on osmosis; prompt on pi]

13. Koitalel Samoei, a leader of the Nandi tribe in this nation, opposed the construction of a railroad on the existing McKinnon-Sclater Road. Harry Thuku advocated land reform in this nation. The Swynnerton Plan redistributed land to punish a rebellion in this nation which would end with Operation Anvil and the capture of (\*) Dedan Kimathi. A 2002 injunction saw Daniel Arap Moi constitutionally restricted from re-election. After electoral violence involving the supporters of opposition leader Raila Odinga, Mwai Kibaki of the National Rainbow Coalition took power in this nation in 2007. This nation was the site of the Mau Mau Rebellion against colonial British rule. For 10 points, name this African country, whose founding father was Jomo Kenyatta.

ANSWER: Republic of Kenya

14. One person involved in this event wrote a letter in which he declared that "my blood will fall over" members of his political party. One conspiracy theory alleges that a Masonic Lodge known as P2 was behind this event. Venezuelan terrorist Carlos the Jackal attempted to negotiate an end to this event at an airport in Beirut. This event was instigated by men wearing Alitalia airline uniforms who ambushed a man in a blue Fiat. Its perpetrators of this issued nine communications during it, the last of which announced the (\*) execution of the leader of the Christian Democrats. For 10 points, name this event lasting 55 days in which the Red Brigades captured and later executed an Italian prime minister.

ANSWER: The Kidnapping of Aldo Moro [or the murder of Aldo Moro; accept clear knowledge equivalents indicating that Aldo Moro was captured or killed]

15. At the close of one story by this author, Francis Marion is revealed to have died during a game of hide-and-seek. In another story by him, a boy named T leads the Wormsley Common Gang in the dismantling of the home of a man they call Old Misery, whom they lock in an outhouse. This author of "The End of the Party," and "The Destroyers" wrote a novel referencing a type of candy in the title in which (\*) Pinkie Brown is tracked down by Ida Arnold after killing newspaperman Fred Hale. In another novel by this author, Yusuf smuggles diamonds on a Portuguese ship with the help of Henry Scobie. For 10 points name this British author who wrote *Brighton Rock*, *The Heart of the Matter*, and novel about the Whiskey Priest, titled *The Power and the Glory*.

ANSWER: Graham Greene

16. Joseph Pennell claimed that this man had no right to paint images of WWI, such as a painting depicting nude Belgians holding up their arms in defiance against the German invasion. He's not Thomas Eakins, but he painted a large group of boys about to jump off a wooden pier and into a lake in another work. This artist of *The Barricade* and *42 Kids* depicted a surprised (\*) crowd as a man in shorts falls through rope. The most famous painting by this artist contrasts with a similar work, *Dempsey and Firpo*, with its less-defined borders between objects and the less sophisticated crowd cheering on the two fighters in a boxing match. For 10 points, name this American painter of the Ashcan school, best known for *Stag at Sharkey's*.

ANSWER: George Bellows

17. Missions to these locations used to use halo orbits, but now the quasi-periodic Lissajous orbits are more common. Another orbit around these locations, similar to but smaller than the horseshoe orbit, is the tadpole orbit. Since one of these locations is at the tip of the (\*) Roche lobe, mass transfer in binary systems occurs through them. The giant impact hypothesis posits that a body formed at one of these places before crashing into Earth. The first asteroids discovered at these places were the Trojans, in the Sun-Jupiter system. For 10 points, name these five points where an object with negligible mass can remain stationary relative to two other bodies.

ANSWER: Lagrangian points [or Lagrange points; or libration points]

18. This character was introduced in a Redd Evans and John Jacob Loeb song that mentions how “other girls attend their fav’rite cocktail bar / sipping martinis/ munching caviar” while this character abstains. The image of Isaiah from the Sistine Chapel was used as a basis for an image of this character eating a sandwich and holding a foot on a copy of Mein Kampf; that depiction of this character first appeared in the (\*) Saturday Evening Post. The most famous image of this character was done by J. Howard Miller and features a woman in a red bandana flexing her right bicep and is accompanied by the words “We Can Do It!” For 10 points, name this icon painted by Norman Rockwell, who was used to encourage women during World War II to take factory jobs.

ANSWER: Rosie the Riveter

19. This thinker summed up his ethics by writing “what is good is also divine” in a collection of personal notes. One of his works notes that philosophy’s goal is to clarify and to critique. Another of his works asserts that the purpose of one field of study is to decompose statements into atomic propositions. He structured his first major work around seven basic propositions, the first being that “the (\*) world is everything that is the case.” He later criticized this work for being too dogmatic in one that discussed family resemblances and language games while rejecting the idea of private language. For 10 points, name this linguistic philosopher and logician who wrote *Philosophical Investigations* and *Tractatus Logico-Philosophicus*.

ANSWER: Ludwig Josef Johann Wittgenstein

20. Uncle Arhat is skinned alive in one novel from this nation, in which the narrator’s grandmother creates alcohol for troops using the title substance, which has turned green by the novel’s end. A former prisoner changes a part of his tattoo that says “Communism” into “U.S.” in a novel from this nation. Another author from this country wrote a play in which Mad Woman is gagged by the crowd, which keeps the Card Player in business, but is better known for a novel in which a man finds out that he doesn’t actually have lung cancer and ventures into this country’s (\*) wilderness while encountering voices named “He,” “You,” and “She.” That novel is titled *Soul Mountain*. For 10 points, name this birthplace of Nobel Laureates Gao Xingjian and Mo Yan.

ANSWER: People’s Republic of China [or PRC; or Zhonghua Renmin Gongheguo; do not accept or prompt on “Republic of China” or “Taiwan”]

### Tiebreakers

21. One example of this phenomenon was constructed by taking the limit of the linear interpolation of the dyadic rationals, which converges uniformly. A fluctuation-diffusion relation for this phenomenon sets the diffusion constant proportional to mobility times temperature. Considering only a drag force and a random force of zero mean lets this phenomenon be modeled by the (\*) Langevin equation. Only when the temperature of the pawl is higher than the paddle can work be extracted from this process in a thought experiment of Feynman. The average displacement of a particle in this process is proportional to the square root of the time, as in a random walk. For 10 points, name this process modeling the random motion of particles in a fluid.

ANSWER: Brownian motion [or Wiener process]

22. The idea that despotic regimes should be responsible for this thing separately from the countries they rule is known as the “odious” theory of it. Minsky’s financial instability hypothesis supports the idea that this thing leads to distress selling and a slowing velocity of money, a theory of Irving Fisher’s named for its “deflation.” Swapping this quantity with equity is one way to (\*) “restructure” it. Many countries have violated the allowed 60% ratio of this quantity to GDP, sparking a 2010 European crisis. The US credit rating was downgraded during a crisis in which Congress could not agree on this quantity’s namesake ceiling. For 10 points, name this amount, some \$9.1 trillion of which is owed by the US.

ANSWER: national debt [or government debt; or public debt; or corporate debt]

## Bonuses

1. This work features the motif of G-C-E-G and one part of it begins with the line “Fellow citizens, we cannot escape history.” For 10 points each:

[10] Name this composition, which also includes the melody of “Camptown Races.” Most notably, it features a speaker who quotes lines from speeches, including the end of the Gettysburg Address.

ANSWER: A **Lincoln Portrait**

[10] A *Lincoln Portrait* is by this American composer of the ballets *Rodeo* and *Billy the Kid*. His other orchestral works include *Fanfare for the Common Man*.

ANSWER: Aaron **Copland**

[10] Copland’s music career was bolstered by this conductor’s performance of his *Symphony for Organ and Orchestra*. This leader of the Boston Symphony Orchestra established the Tanglewood Music Center.

ANSWER: Serge Alexandrovich **Koussevitzky**

2. A namesake “triple junction” is responsible for the creation of this area, which includes the fossil-rich Hadar region. For 10 points each:

[10] Name this sunken landform that contains incredibly saline lakes like Lake Africa’s lowest point, Lake Assal.

ANSWER: **Afar Depression** [or **Afar Triangle**; or **Danakil Depression**; prompt on **Afar**]

[10] The Afar people are the largest minority ethnic group in this tiny African country on the eastern part of the Great Rift Valley, where Lake Assal is located.

ANSWER: **Djibouti**

[10] Djibouti is bordered to the northeast by this sea, which is connected to the Mediterranean Sea by the Suez Canal.

ANSWER: **Red** Sea

3. It fetches code, interprets the opcode, and executes the specified instruction. For 10 points each:

[10] Name this piece of hardware that generally consists of an arithmetic-logic unit to perform mathematical operations and a control unit that directs the computer.

ANSWER: **central processing unit**

[10] This technique for improving performance has several instructions execute simultaneously, each using a different part of the cpu. It improves throughput, but not time per instruction.

ANSWER: instruction **pipelining**

[10] This technique prevents bubbles in the pipeline by trying to guess whether the Boolean test for a conditional jump will be true or false.

ANSWER: **branch prediction**

4. A red-robed Jesus stands in front of an army in this artist’s *The Disrobing of Christ*. For 10 points each:

[10] Name this artist, whose nickname came from his nationality. He showed a stormy sky in his *View of Toledo*, which depicts the Spanish city that he lived at for most of his career.

ANSWER: **El Greco** [or Domenikos **Theotokopoulos**; prompt on the **Greek**]

[10] Saints Steven and Augustine hold the dead body of Don Gonzalo Ruiz while Jesus, Mary and John the Baptist float in a triangle above in this El Greco work.

ANSWER: *The* **Burial of the Count of Orgaz**

[10] This El Greco painting was left unfinished and was originally titled *Profane Love*. It features a man in blue with

his arms raised on the sky on its left, while others in the background receive yellow, green, and white garments.

ANSWER: The *Opening of the Fifth Seal* [or The *Fifth Seal of the Apocalypse*; or The *Vision of St. John*]

5. These people were central to a genre of literary writing called *gunki*. For 10 points each:

[10] Name these formidable warriors. In a novel by Endo Shusaku with this name, Matsuki travels to Mexico on a missionary mission, and one named Yoshitsune leads the Minamoto clan's ascent to power in *The Tale of the Heike*.

ANSWER: samurai

[10] This author rejected his samurai upbringing and traveled alone across northeastern Japan. He recorded his experiences in a book of *haikus* that includes one about a frog jumping into a pond.

ANSWER: Matsuo Basho

[10] A samurai named Magoemon discovers a relationship between his brother Jihei and a prostitute named Koharu in this play by Chikamatsu Monzaemon, which ends with the two lovers killing themselves.

ANSWER: The *Love Suicides at Amijima* [or *Shinjū Ten no Amijima*]

6. Its end is attributed to the impact that created the Chicxulub crater. For 10 points each:

[10] Name this geologic period that ended with the extinction of the dinosaurs.

ANSWER: Cretaceous period

[10] The high concentration of this element in the K-T boundary led to the hypothesis that an impact event caused the end of the Cretaceous.

ANSWER: iridium

[10] The volcanism that created these flood basalts in India was once thought to have been the major cause of the climate changes leading to the end of Cretaceous.

ANSWER: Deccan traps [prompt on Deccan Plateau]

7. This party took its slogan “engage in politics to suppress politics” quite literally, since its ABRI branch began to suppress political opposition when it took power. For 10 points each:

[10] Name this political party that ruled Indonesia for over 30 years under the dictatorship of Suharto. It intervened heavily in the economy during the ‘70s before liberalizing in the ‘80s and is still one of the largest political parties.

ANSWER: Sekber Golkar [or Partai Golongan Karya; or Party of Functional Groups]

[10] Suharto's rule was preceded by that of this first President of Indonesia, who distrusted the army following the circulation of the forged Gilchrist Letter. He also advocated *trisakti* as part of his “Guided Democracy” program.

ANSWER: Sukarno [or Kusno Sosrodihardjo]

[10] At least 100,000 were killed when Suharto ordered the occupation of this small country, which declared independence in 1975. This majority Roman Catholic country achieved true independence in 2002.

ANSWER: East Timor [or Democratic Republic of Timor-Leste; or Republica Democratica de Timor-Leste; prompt on Timor]

8. Soren Kierkegaard noted that only religious precepts stand the scrutiny of this concept because there is no instance in which they may be abrogated. For 10 points each:

[10] Name this philosophical account which holds that final causes exist in nature, and therefore the purpose which governs human action also governs action in nature.

ANSWER: teleology

[10] This work by Immanuel Kant discusses teleology through the lens of subjective formal purposiveness and objective material purposiveness. It is informally known as Kant's “third critique.”

ANSWER: Critique of Judgment [or Kritik der Urteilskraft; or Critique of the Power of Judgment]

[10] This Italian Dominican priest invoked teleology to prove the existence of God in one of his five “ways,” alongside the unmoved mover proof in his *Summa Theologica*.

ANSWER: Thomas Aquinas

9. For 10 points each, identify these Coen Brothers movies.

[10] George Clooney plays a character named Ulysses in this 2000 film about an escaped chain-gang seeking to find a treasure before a flood. Its soundtrack, featuring depression-era folk-music, won a Grammy.

ANSWER: O Brother, Where Art Thou?

[10] The duo drew material from their childhood for this 2009 film set in ‘60s suburban Minnesota in which Larry Gopnik decides to change a student's physics grade and his son gets high before his Bar Mitzvah.

ANSWER: A Serious Man

[10] Their first film together was this 1984 noir crime film in which Marty hires Visser to kill his adulterous wife Abby and her lover Ray, but it doesn't quite work out, to say the least.

ANSWER: Blood Simple

10. Answer the following about literary appearances of important people in the French Revolution, for 10 points each.

[10] Alexandre Dumas wrote a series of romances named for this queen, who is the subject of several prison rescue efforts after the death of her husband, Louis XVI, in *The Knight of the Red House*.

ANSWER: Marie Antoinette [or Maria Antonia Josepha Johanna; or Maria Antonia Josephina Johanna]

[10] This writer directs a performance inside an asylum that ends with the murder of Jean-Paul Marat in a play by Peter Weiss. His own unfortunate protagonists include young women named Justine and Juliette.

ANSWER: Donatien Alphonse Francois, Marquis de Sade

[10] This journalist totally flips out about getting guillotined in Hilary Mantel's *A Place of Greater Safety*. His wife Lucille yells "Long live the king!" so that they can get guillotined together in Georg Büchner's *Danton's Death*.

ANSWER: Camille Desmoulins [accept either underlined part]

11. Answer the following about solid state physics, for 10 points each.

[10] Made from a single p-n junction, these electronic components allow current to flow through them in only one direction. In their light emitting variety, recombination of electrons and holes produces electromagnetic radiation.

ANSWER: diode

[10] In LEDs, the wavelength of the emitted light is controlled by this value, the energy difference between valence electrons and conducting electrons.

ANSWER: band gap

[10] In a MOSFET, this effect limits the minimum thickness of the oxide layer, lest it lose its ability to contain electrons. It occurs because an electron's wavefunction is nonnegative on the far side of a finite potential barrier.

ANSWER: quantum tunneling [or electron tunneling]

12. For 10 points each, answer the following about the Five Scrolls in the Tanakh.

[10] This book, which is read on the holiday of Purim, detailing how Mordecai and Esther prevent a plot by Haman to kill the Jews of Persia.

ANSWER: The Book of Esther

[10] This narrator of the Book of Ecclesiastes says things like "vanity of vanities; all is vanity" and "to everything there is a season, and a time to every purpose under heaven."

ANSWER: Qoheleth [or Gatherer; or Teacher; or Preacher]

[10] In this erotic book of the Bible, the male voice proclaims "my sister, my bride, how much better is thy love than wine!" while the female exclaims "thy neck is like the tower of David."

ANSWER: The Song of Songs of Solomon [or Song of Solomon; or Canticle of Canticles]

13. Using body gestures instead of hand gestures and expression from a group of dancers are among this man's "five principles." For 10 points each:

[10] Name this choreographer, whose ballets include *Le Spectre de la Rose* and *Carnaval*. He also choreographed *The Dying Swan* for Anna Pavlova.

ANSWER: Michel Fokine

[10] This Fokine ballet was first performed under the title *Chopiniana*, since its music is taken from the works of Chopin and arranged by Glazunov. Having no plot, it depicts the title creatures dancing under the moonlight.

ANSWER: *Les Sylphides* [I guess *The Sylphs* is the translation?]

[10] Fokine is also known for his choreography of *The Firebird* and *Petrushka*, ballets by this Russian composer.

ANSWER: Igor Stravinsky

14. In one of this man's poems, he describes catching "morning's minion, king-/dom of daylight's dauphin," For 10 points each:

[10] Name this author of "The Windhover," a British poet whose other works include "The May Magnificat" and one dedicated to five nuns expelled from their country by Bismarck, "The Wreck of the Deutschland."

ANSWER: Gerard Manley Hopkins

[10] Hopkins invented sprung rhythm, a unique poetic meter he claims to have discovered in English folk songs. However, critics of Hopkins alleged that it was just a glorified name for this meterless, rhymeless form of poetry.

ANSWER: **free verse**

[10] A frequently used example of Hopkins' sprung rhythm is his poem "Pied Beauty," which begins by stating "Glory be to God" for this two word phrase.

ANSWER: **"dappled things"**

15. This tribe was led by men such as Crazy Horse and Sitting Bull. For 10 point each:

[10] Name this Native American who, along with the Cheyenne, surrounded and destroyed Custer's 7th Cavalry at the Battle of Little Big Horn.

ANSWER: Lakota **Sioux**

[10] Presented to the Sioux by William Sherman, this 1868 treaty signed in Wyoming ended a conflict known as Red Cloud's War.

ANSWER: Treaty of **Fort Laramie**

[10] This battle during Red Cloud's War took place near Fort Phil Kearny; during it, heavily undermanned U.S. Army soldiers using the new Springfield rifle fought back a Sioux attack on the namesake part of a vehicle.

ANSWER: **Wagon Box** Fight

16. The axonemes of these structures contain a 9+2 arrangement of microtubules. For 10 points each:

[10] Name these long, whip-like projections that protrude from many cells, generating motion alongside cilia.

ANSWER: **flagella** [or **flagellum**]

[10] Most flagellar movement is powered by this kind of activity, which also takes place across the inner mitochondrial membrane, where it drives the rotation of ATP synthase.

ANSWER: **proton pump** [or **proton motive force**; accept anything along the lines of the **movement of H+ ions** or the **movement of protons**; prompt on electrochemical **gradient**]

[10] Bacteria in this genus, such as *parahaemolyticus* or *vulnificus*, possess both lateral and polar flagella. Another organism in this genus produces a toxin that ADP-ribosylates G proteins, resulting in an efflux of chloride ions.

ANSWER: **Vibrio** [the aforementioned bacteria is *Vibrio cholerae*]

17. Because this novel's protagonist is unhappy with her given name, she chooses to be called "Zeze the X," For 10 points each:

[10] Name this novel about Esperanza Cordero, who reads one of her first poems to her Aunt Lupe, is raped at a circus, and makes friends with the college student Alicia after moving into the title residence.

ANSWER: *The* **House on Mango Street**

[10] *The House on Mango Street* is a novel by this Mexican-American author who included a story about a character who smells like corn in her collection *Woman Hollering Creek*.

ANSWER: Sandra **Cisneros**

[10] Another prominent Chicano writer is this man that wrote about Tony Marez y Luna, who hears the confession of Narcisco after he is killed by Tenorio while trying to protect the title healer, in his novel *Bless Me, Ultima*.

ANSWER: Rudolfo **Anaya**

18. This goddess saved Iphigenia from sacrifice at the hands of her father, Agamemnon, by replacing her with a deer. For 10 points each:

[10] Name this Greek goddess of the hunt, a sister of Apollo.

ANSWER: **Artemis**

[10] Artemis and Apollo slew the children of Amphion and Niobe after Niobe boasted that she was greater than this woman, the mother of Artemis. Zeus turned her into a quail in order to prevent Hera from discovering his infidelity.

ANSWER: **Leto** [be careful to not accept "Leda," who was an entirely unrelated figure]

[10] After calling for help, this nymph was transformed by Artemis into a spring at Syracuse to stay away from the desire of the river god Alpheios.

ANSWER: **Arethusa**

19. The Germans employed mercenary infantry of this kind known as Landknechts and, during the French

Revolution, the French preferred them to musketmen since their weapon was a people's weapon. For 10 points each:

[10] Name this type of infantry which was key in the Battle of Nancy, which resulted in the death of Charles the



Bold. They tended to dominate the European battlefield in the late Middle Ages.

ANSWER: **pikemen** [prompt on **spearmen** or equivalents]

[10] Along with Flanders, this country produced the finest pikemen in Europe. Napoleon renamed this country the Helvetic Republic and its city of Geneva was home to an international convention laying out standards of war.

ANSWER: **Switzerland** [or **Swiss** Confederation; or **Schweiz**; or **Suisse**; or **Svizzera**; or **Svizra**]

[10] During the Swiss reformation, Protestant and Catholic cantons fought each other in two wars known by this name. Huldrych Zwingli led Zurich during the first of these wars.

ANSWER: **Kappel** Wars

20. This event began with students overtaking a radio station to protest the government of Mátyás Rákosi and cutting out the communist coat of arms from the center of their national flag. For 10 points each:

[10] What was this revolution against Soviet control in a certain nation which ended with Khrushchev-deployed tanks rolling into Budapest?

ANSWER: **Hungarian Revolution** of 1956

[10] This first General Secretary of the Hungarian Communist Party was installed after the suppression of the revolution and ushered in a period of relative liberalization known as “goulash communism.”

ANSWER: János **Kádár**

[10] The Soviets later intervened in 1968 to stop an Alexander Dubcek-led liberalization in this city in an event known as its namesake “spring.”

ANSWER: **Prague** [or **Praha**]

21. This scientist used the Sanskrit prefixes eka-, dvi-, and tri- to name eight elements that he predicted. For 10 points each:

[10] Name this Russian chemist who published the textbook *Principles of Chemistry*, in which he laid out his approach for categorizing elements.

ANSWER: Dmitri Ivanovich **Mendeleev**

[10] Mendeleev’s classification was the first version of this now ubiquitous system, which organizes the elements into group columns and the namesake rows. The lanthanides and actinides get their own little island in this system.

ANSWER: **periodic table** of the elements

[10] The actinides were arranged thanks to the work of this later American chemist, who discovered ten elements, advised ten presidents on nuclear policy, and became the namesake of element 106 after some silly controversy.

ANSWER: Glenn Theodore **Seaborg**