Eisenhower Memorial Tournament 2017: Dunning-Kruger? I Hardly Know 'Er! Questions by Vasa Clarke, Ryan Humphrey, Alex Damisch, Jacob O'Rourke, Gabe Guedes, Charles Hang, and Alex Dzurick

Packet 2: Tossups

1. This author provides romantic advice to Mario Jiménez in Antonio Skármeta's novel *The Postman*. The addressee is loved not as if she was "a rose of salt, topaz," but "as one loves certain obscure things" in the seventeenth work of one of this author's collections. The addressees of one of this author's poems are urged to "Fasten your bodies to me like magnets" and "Speak through my words and my blood." Those addresses of one of this author's poems are also asked to "Rise to be born with me" and are the (*) builders of the title location. That poem by this author comes between "A Lamp on Earth" and "The Conquistadors" in a larger work. For 10 points, name this author of *One Hundred Love Sonnets* who included "The Heights of Macchu Picchu" in his *Canto General*.

ANSWER: Pablo Neruda [or Ricardo Eliécer Neftalí Reyes Basoalto] < CH, World Lit>

2. One method of experimentally testing a property named for this scientist uses a T-E-P-O probe and analyses the system with phosphorus-31 NMR spectroscopy. The enthalpy change in a reaction involving two compounds named for this scientist can be calculated with the Drago-Wayland equation. When steric hindrance prevents a mixture of compounds named for this scientist from combining classically, the mixture is referred to as his namesake (*) "frustrated pair". One type of compound named for this scientist mediates the Mukaiyama aldol addition, and those compounds named for this scientist also typically catalyze EAS reactions. Boron trifluoride and aluminum trichloride are examples of his namesake "acids". For 10 points, name this American scientist who defined acids as electron pair acceptors.

ANSWER: Gilbert Newton <u>Lewis</u> [accept <u>Lewis</u> Acids or <u>Lewis</u> Bases] (The technique in clue one is the Gutmann-Beckett method/procedure) <RH, Chemistry>

3. In the traditional Colombian dish cayeye ["cah-YEH-yeh"], this product is cooked in water and then mixed with refrito. Sugar, vinegar, and a variety of spices are combined with this foodstuff to form a condiment which is usually dyed red so that it more closely resembles ketchup. A butter and brown sugar sauce is flambéd with this food to create a New Orleans dessert named after Richard (*) Foster. In Arrested Development, George Bluth owns a boardwalk business to sell a frozen version of this foodstuff. As part of American cuisine, layers of custard and vanilla wafers are used with slices of this fruit to create a "pudding" dish. This fruit is also traditionally served in a dessert sliced in half, topped with ice cream. For 10 points, name this starchy fruit which is produced by Dole and Chiquita.

ANSWER: bananas < VC, Trash/Other>

4. A November 2015 Michael Lewis Vanity Fair profile described how this author's best known fashion choice came from discovering a certain piece of clothing could be worn in winter as well as summer. That profile says that this man made Chuck Yeager famous in a book about the Mercury 7. At the end of one novel, this author argues that "in the court of the conscience, the defendants" in a certain case would include African-American preacher Reginald Bacon and journalist Peter Fallow of The City Light. The phrase (*) "Masters of the Universe" was coined to describe financiers in that novel by this author in which Henry Lamb is hit by a car driven by Wall Street bond trader Sherman McCoy. For 10 points, name this author of The Right Stuff and The Bonfire of the Vanities.

ANSWER: Tom <u>Wolfe</u> [or Thomas Kennerly "Tom" <u>Wolfe</u>, Jr.; do not accept or prompt on "Thomas Wolfe" by itself] <CH, American Lit>

5. In one work with this title, the chorus, soprano soloist, and boy's choir always sing in Latin, but the tenor and baritone soloists sing in English, including "I am the enemy you killed" in the "Libera Me" movement. One work with this title, written by Giuseppe Verdi, has a Sanctus movement which uses two choruses. These works often contain movements titled (*) Dies Irae. One composer of a work with this title died after writing eight measures of its "Lacrymosa" movement, which begins with strings playing ascending and descending minor seconds in groups of two. That work was finished by Franz Süssmayr ["SOOS-my-err"]. Benjamin Britten and Wolfgang Amadeus Mozart all set, for 10 points, this traditionally Catholic mass for the dead.

ANSWER: <u>requiem</u> mass [accept War<u>Requiem</u>, Mozart's <u>Requiem</u> Mass, or Verdi's Messa da <u>Requiem</u>] <AWD, Music>

- 6. This novel's protagonist is harassed by three girls, after which he gets advice from the court painter Titorelli, from whom he buys several identical manuscripts. This novel's protagonist meets Rudi Block, who has been under the control of the nurse Leni and the attorney Huld for five years. In this novel, a priest tells the protagonist the parable of a man who spent all his money and his whole life bribing a gatekeeper, who continually put him off with the phrase "but not now." That parable which appears in this novel ends with the man's death without passing through the gate, even though he is told the gate was made only for him. The protagonist of this novel dies (*) "like a dog" shortly after hearing that parable, titled "Before the Law." For 10 points, name this novel about Joseph K, who is placed into an inscrutable legal process, written by Franz Kafka. ANSWER: The <u>Trial</u> [or Der <u>Process</u>] < CH, European Lit>
- 7. One opera from this country begins with a muted trumpet depicting the title bird before the tenor altino Astrologer sings the aria "I Am A Sorcerer." In the prologue of another opera from this country, a fictionalized ruler of this country has his coronation announced by brass instruments playing seventh chords a tritone apart, and (*) clanging bells. In an opera from this country, a captured ruler sings the aria "Nor sleep, nor rest of any kind" before a women's chorus sings a B-B-high F-sharp motif and performs the *Polovtsian* ["polo-VETS-ian"] *Dances*. 10 points, name this country whose operatic works have included *Prince Igor, Boris Gudonov* ["GOO-din-off"], and *The Life of the Tsar*.

ANSWER: Russia < AWD, Other Art>

8. One type of these materials uniquely experience two sign changes in their Hall coefficient as electron doping proceeds from n equals zero to n equals two. That example of these materials are described by Hubbard theory. Another type of these materials may be characterized by a Z2 index, and they exhibit spin-momentum locking, and possess edge states protected by time-reversal symmetry. Another of these materials deviates from conventional (*) band theory, and was first proposed with a nickel(II) oxide model by Nevill Mott. In that type of these materials, electrons hop between unit cells, unlike in their "charge-transfer" and "topological" versions. These materials typically possess large band gaps and high dielectric constants. For 10 points, name these materials in which electric currents do not flow.

ANSWER: electrical <u>insulators</u>: [accept topological <u>insulators</u>, or Mott <u>insulators</u>; prompt on <u>dielectrics</u>] <RH, Physics>

9. A Pope with this name declared that marriages between Catholics and Protestants were invalid unless they were performed in a Catholic Church or with a promise to raise the children as Catholic in the bull *Ne temere*. A different Pope with this name served as the adopted father of Edgardo Mortara, a Jewish child who was taken from his parents because a servant had baptized him. The fourth Pope of this name codified the Tridentine Creed while presiding over the last session of the Council of (*) Trent. The longest-serving Pope with this name wrote the Syllabus of Errors and defined the doctrine of papal infallibility. The last Pope with this name was criticized as the "Pope of Silence," due to his lack of action against the Holocaust. For 10 points, give this papal name of twelve Popes, the ninth of whom was the longest serving Pope in history.

ANSWER: Pius [number does not matter, so accept Pius I through Pius XII] < JO, European History>

10. This thinker expressed views similar to Marcionism after claiming to represent a non-denominational "Positive Christianity." David Berlinski asserted that this thinker's views were influenced by Charles Darwin. Kimberley Cornish controversially suggested that this thinker developed his views after being antagonized at school by Ludwig (*) Wittgenstein. This thinker described trade unions as "building stones for the future economic parliament" and appealed to workers with the "Strength Through Joy" program. Pressure from this figure caused Walter Benjamin to commit suicide. This thinker argued for territorial expansion or "lebensraum" ["LAY-bens-rowm"] in his most famous publication, *Mein Kampf*. For 10 points, name this leader who promoted his anti-Semitic, totalitarian views as leader of the Nazi Party.

ANSWER: Adolf Hitler < VC, Philosophy>

11. This group was criticized by the film *Operation Correction*, which the ACLU produced to accuse this group of misleading the public. U.S. Treasury official Harry Dexter White had a fatal heart attack shortly after being questioned by this group. After the public testimony of Elizabeth Bentley, this group subpoenaed Whittaker (*) Chambers, who told this group that Alger Hiss was a foreign agent. The Hollywood Ten were blacklisted after this group cited them for contempt. This group was supportive of similar efforts promoted in the Senate by Joseph McCarthy. For 10 points, name this Congressional body which investigated allegations of Communist infiltration during the 1950s Red Scare.

ANSWER: <u>House Un-American Activities Committee</u> [or <u>HUAC</u>; or <u>House Committee on Un-American Activities</u>] <VC, American History>

12. Contemporary cuisine of this country includes rice with laoka and Three Horses Beer. Residents of this country originated the salegy musical tradition and the moraingy martial art. Social stratification was customary in this country between the Andriana and Hova classes. This country is home to the endangered Meller's duck, which lives on the shores of this country's largest lake, Lake (*) Alaotra. Pirates may have founded the republic of Libertalia in what is now this country, long before this country was conquered by the French. This country's territory is separated from the mainland by the Mozambique Channel. For 10 points, name this island country which is the only native habitat of the lemurs.

ANSWER: Madagascar [or Madagasikara] < VC, Geography/Current Events>

13. This quantity is held constant in the stochastic Moran process. The rate of change in this quantity is given by the dominant eigenvalue in the Leslie matrix, and changes in this quantity are represented by the lambda term in the Euler-Lotka equation. The Chapman estimator for this quantity reduces the small-sample size bias encountered when estimating this quantity with the (*) Lincoln-Peterson method. That method for estimating this quantity frequently uses data obtained with the mark-recapture technique. Sharp reductions in this quantity are referred to as "bottlenecks", and very large values of this quantity are a fundamental assumption for Hardy-Weinberg equilibrium. For 10 points, name this variable describing the number of individuals from one species in a region.

ANSWER: population size [accept either/both; do not accept "population density"] <RH, Biology>

14. One of this author's protagonists remembers being called "a certain sorry little scrub" in a conversation that noted he was not "pricked on by your popes and kings," unlike a rival. That protagonist created by this author notes that "the arm is wrong" in a rival's work and asks "What wife had Rafael, or has Agnolo?" That poem by this author is addressed to Lucrezia by her husband, the title (*) Italian Renaissance artist. In another poem, this author described a "bough of cherries some officious fool broke for" the title figure, who appears in a Fra Pandolf painting. That poem by this author is about a woman whose heart was "too soon made glad." For 10 points, name this poet who included "Andrea del Sarto" in his collection *Men and Women* and who also wrote "My Last Duchess."

ANSWER: Robert **Browning** < CH, European Lit>

15. It's not green, but this color titles a series of paintings by Frank Stella consisting predominantly of rectilinear stripes of this color. In the final years of his life, artist Ad Reinhardt exclusively produced square paintings in different shades of this color. A horizontal "stripe" of this color lends its name to painting number thirty-six by Mark Rothko, which was notably sold by Christie's in 2015. Ovals and rectangles of this color are the primary component of the *Elegy to the Spanish Republic* series by Robert (*) Motherwell. A square of this color and a circle of this color are central to two works by the Soviet artist Kazimir Malevich. One work in a series titled for this color depicts two men fighting with the title sticks, while another depicts a certain titan "devouring his son". For 10 points, name this color of a series of paintings fourteen dark paintings by Francisco de Goya.

ANSWER: black < RH, Painting>

16. Engineers from this company sent to the Soviet Union helped establish the company GAZ. Under CEO Alan Mulally, this company mortgaged all its assets to raise cash just before the Great Recession, thus avoiding bankruptcy. An Unemployment Council led a Hunger March later named for this company during the Great Depression against its River Rouge manufacturing plant. After the Second World War, this company hired a group from the Air Force's Statistical Control unit known as the (*) "Whiz Kids" to reform its operations; that group included Robert McNamara. This company's founder supported the anti-Semitic *Dearborn Independent*, but also introduced the moving assembly line and a \$5 a day wage for his employees. For 10 points, name this company whose namesake founder created the Model T.

ANSWER: Ford Motor Company < CH, Misc./Other History>

17. This period is marked in some countries by a homecoming tradition known as mudik ["MOO-dik"], after which people eat foods such as rice dumplings called ketupat ["keh-too-PAHT"]. Observers of this occurrence employ helpers called mesaharati who are tasked with walking through the streets at night playing drums. During this time period, daybreak is defined as the moment when the human eye can tell the difference between a white (*) thread and a black thread. Many people believe that this time period requires extra nighttime prayers called Tarawih ["ta-ra-WEEH"]. The sighting of a new moon at the end of this month is celebrated with the festival of Eid al-Fitr. For 10 points, name this holy month of the Islamic calendar which requires the faithful to fast during the daytime.

ANSWER: Ramadan [or answers such as Eid al-Fitr or Lebaran until "mesaharati"] < VC, Religion>

18. Some of these people died after being forced off a cliff in the Appin massacre. A group of these people protested Kristallnacht by marching to the local German consulate in a procession led by William Cooper. TV shows in the country where these people reside typically contain warnings for possible images of (*) deceased persons. After investigation from the Woodward Commission, these people won a victory in the High Court when the *Mabo* case restored these peoples' land rights. These people received an apology from Kevin Rudd for the removal of their children in the Stolen Generations. For 10 points, name this group, the indigenous peoples of Australia.

ANSWER: Australian <u>Aborigines</u> [or answers such as "<u>indigenous</u> people of <u>Australia</u>" until mentioned] <VC, World History>

19. The first "triple" example of these astronomical entities was discovered in 2007 by researchers at the Mauna Kea observatory. The Lyman Alpha Forest was discovered through the observation of one of these objects. The presence of neutral hydrogen in the intergalactic medium results in a suppression of E·M radiation at wavelengths below the Lyman alpha line in these objects, in a feature called the (*) Gunn-Peterson trough. In 1979, imaging of the double-example of one of these objects provided the first observation of gravitational lensing. These objects are powered by gravitational accretion from supermassive black holes. For 10 points, name these extremely energetic active galactic nuclei, which are classified as either "radio-quiet" or "radio-loud".

ANSWER: quasar(s) < RH, Other Science>

20. According to Plutarch, this god's accidental infidelity was revealed by a garland of melilot flowers. A student of this god declares that a horse is the most useful animal to have in battle, because they let you chase down and slaughter your enemy. In later years, symbols like a white vulture and crescent moon were characteristic of a black (*) bull that was merged with this god. The medjed fish allegedly ate the genitals of this god, whose death was avenged by a falcon-headed character. Despite being torn into fourteen pieces, this god continued to rule over the Duat and was succeeded on earth by his son, Horus. For 10 points, name this Egyptian god of the dead, the husband of Isis and brother of Set.

ANSWER: Osiris <VC, Myth>

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Packet 2: Bonuses

1. One song by this band describes a "major player in the cowboy scene" who "drove to the desert, fired his rifle in the sky / And says 'God, if I have to die, you will have to die." For 10 points each:

[10] Name this Isaac Brock-led band that recorded "Cowboy Dan" and "Bankrupt on Selling" on *The Lonesome Crowded West*, the follow-up to their debut album *This is a Long Drive for Someone with Nothing to Think About*.

ANSWER: Modest Mouse

[10] Modest Mouse was founded in Issaquah, a city in this state. Nirvana, another band from this state, references it in the song title "Frances Farmer Will Have Her Revenge on Seattle."

ANSWER: Washington

[10] "Frances Farmer" is a song off this Nirvana album, the band's full-length follow-up to *Nevermind*. A song whose chorus begins, "Hey! Wait! I've got a real complaint," "Heart-Shaped Box," is on this album.

ANSWER: In Utero < GG, Trash/Other>

2. This language was used to write "The Ruin" an eighth or ninth century work juxtaposing a city's vibrant past with its decrepit present. For 10 points each:

[10] Name this language also used to write Beowulf.

ANSWER: Old English

[10] Old English was also used to write this poem in which the Anglo-Saxon noble Byrhtnoth allows a Viking invasion force to land so he and his men can halt their attacks. It ends with the death of his subordinate Godric and his men.

ANSWER: The Battle of Maldon ["MALL-dun"]

[10] A sequel to *The Battle of Maldon* was written by this scholar who also wrote the influential article "*Beowulf:* The Monsters and the Critics."

ANSWER: J. R. R. Tolkien [or John Ronald Reuel Tolkien] < CH, British Lit>

3. Napoleon Bonaparte Broward dismissively called this region a "fabulous muck" and campaigned to have it destroyed. For 10 points each:

[10] Name this large Florida wetlands region which is fed by rivers such as the Kissimmee.

ANSWER: **Everglades** [or **Pa-hay-okee**]

[10] Because of agricultural development, this large inland lake is no longer technically part of the Everglades or its national park. The Kissimmee River flows into this lake, which after Lake Michigan is the second-largest freshwater lake entirely in the contiguous United States.

ANSWER: Lake Okeechobee

[10] The dike which maintains Lake Okeechobee is named for this person. Another major American landmark named for this person was the first major construction project undertaken by Six Companies, Inc.

ANSWER: Herbert Clark Hoover < VC, Geography>

4. "At St. Patrick's Purgatory" and "The Heavenly Banquet" are among the anonymous poems by Irish monks set to music in this piece. For 10 points each,

[10] Name this ten-work song cycle for voice and piano premiered by the soprano Leontyne Price in 1953. This work's composer personally played the piano at that premiere.

ANSWER: Hermit Songs

[10] The *Hermit Songs* were written by this American composer. This composer is best-known for a B-flat minor orchestral work adapted from his Opus 11 String Quartet, his *Adagio* ["uh-DAHJ-ee-oh"] *for Strings*.

ANSWER: Samuel Barber

[10] This other work by Barber for voice and orchestra begins by naming the people present in the title location, and was based on a short prose work by James Agee about his hometown in Tennessee.

ANSWER: Knoxville: Summer 1915 [or Barber's Opus 24] <RH, Music>

5. For 10 points each, answer some questions about tools you might use in a calculus class:

[10] This rule says that the derivative of the composite function f of g equals the derivative of f evaluated at g, times the derivative of g.

ANSWER: chain rule

[10] Green's theorem relates one of these around a closed curve to a surface integral. On a conservative vector field, you can compute one of these over a curve using only the curve's boundary points.

ANSWER: <u>line integral</u> [prompt on "integral"; do not accept or prompt on "line"]

[10] This more general version of Green's theorem relates a line integral to a surface integral. It says that integrating a vector function over the boundary of a surface equals the integral of the function's curl over the surface.

ANSWER: Stokes' Theorem < AWD, Other Science>

6. A modern thinker of this philosophical school argued that it is immoral to refuse to save a nearby drowning child in an analogy to the suffering of people in war-torn Bangladesh. For 10 points each:

[10] Name this philosophy whose adherents include Peter Singer, and which generally traces its origin to the hedonic calculus of Jeremy Bentham.

ANSWER: utilitarianism

[10] Singer made his name with a 1975 book arguing for the "liberation" of these entities. Jeremy Bentham said of these things that "the question is not, Can they *reason*? nor, Can they *talk*? but, Can they *suffer*?"

ANSWER: animals

[10] In his spare time, Jeremy Bentham drew up plans for one of these prisons where a single warden could watch over all inhabitants at once.

ANSWER: **Panopticon** <VC, Philosophy>

7. Mishake Muyongo led a separatist group active in this region which waged war from 1994 to 1999. For 10 points each:

[10] Name this disputed territory which protrudes eastward from Namibia.

ANSWER: <u>Caprivi</u> Strip [or <u>Caprivizipfel</u>; or <u>Okavango</u> Strip; or <u>Itenge</u>]

[10] The Aouzou ["OW-zoo"] Strip was the subject of the Toyota War, in which Libyan forces were driven out by this southern neighbor which today controls the Aouzou Strip and is currently ruled by Idriss Déby.

ANSWER: Chad [or Republic of Chad; or Jumhūrīyat Tshād; or République du Tchad]

[10] Two answers required. Because these two countries both claim a border which gives them the Hala'ib Triangle, both of them deny owning the territory of Bir Tawil.

ANSWER: Egypt and Sudan < VC, World History>

8. This story's protagonist is mockingly described as a "West Briton" by Miss Ivors. For 10 points each:

[10] Name this story in which Gabriel Conroy learns that the song "The Lass of Aughrim" reminds his wife of Michael Furey, a boy whom she once loved.

ANSWER: "The Dead"

[10] "The Dead" is the last story in this James Joyce collection which also contains the short story "Araby."

ANSWER: **Dubliners**

[10] The stories "A Little Cloud" and "Counterparts" appear halfway through *Dubliners*. At the end of both of those stories, the protagonist gets drunk and takes out his frustrations on one of these people. Name that type of person whom the protagonist attacks.

ANSWER: his son [prompt on "child"] < CH, EuroLit>

- 9. On loan from Naples in 2014, one version of this work was displayed in an American exhibit titled *Virtue and Violence*. For 10 points each:
- [10] Name this work, painted in two versions by an early Baroque artist. The main differences in those versions of this work are the appearance of a bracelet on the title woman's left arm, and the color of her dress. In her other hand, she holds a sword.

ANSWER: Judith Slaying Holofernes ["hollow-FER-fays"]

[10] Along with Artemisia Gentileschi, this artist painted a less bloody version of Judith Beheading Holofernes, in which Judith is holding Holofernes at arm's length. This man also painted *The Calling of Saint Matthew*.

ANSWER: Michelangelo Merisi da Caravaggio

[10] In the Uffizi, Caravaggio's *Judith Beheading Holofernes* hangs in the same room as his painting of this mythological figure, who was also beheaded. The title screaming figure's eyes are cast downward.

ANSWER: Medusa <AWD, Painting>

- 10. Chytrids are a species of fungi that uniquely possess these structures. For 10 points each,
- [10] Name these structures that promote the motility of microorganisms by moving in a whip-like motion. They are often contrasted with cilia.

ANSWER: flagella [or flagellum]

[10] Flagella share several homologies with this other appendage found in many gram-negative bacteria. This needle-shaped complex is used as a sensory probe as well as an apparatus for the secretion of effector proteins directly into a host cell.

ANSWER: <u>Injectisome</u> [or <u>Type Three Secretion System</u>, or <u>TTSS</u>, or <u>T3SS</u>, or prompt on partial answers] [10] This solution is commonly used to stain for bacterial flagella. Cells stained with this solution appear light brown with darker flagella in phase-contrast microscopy. This solution also turns blue-black in the presence of starch in a common lab test.

ANSWER: Lugol's solution [or Lugol's iodine test] < RH, Biology>

- 11. This ruler's daughter Mary ended up becoming the first wife of Maximilian I, Holy Roman Emperor. For 10 points each:
- [10] Name this nobleman from the House of Valois ["val-WAH"] whose death at the Battle of Nancy resulted in the dissolution of his former territory.

ANSWER: Charles the Bold [prompt on "Charles]

[10] Charles the Bold ruled this duchy whose noble house historically also owned land in the Low Countries. This region is the namesake of a type of dark red wine.

ANSWER: Burgundy

[10] Although Charles, Duke of Berry, nominally led this alliance, its real leader was Charles the Bold. This group of French nobles rose up against the power of Louis XI.

ANSWER: <u>League of the Public Weal</u> [or la <u>ligue du Bien public</u>; or translated equivalents such as "<u>League of the Public Good</u>"] <VC, European History>

- 12. This text shares its name with a ceremony that ends with the ab-zor, or "offering to water." For 10 points each:
- [10] Name this text in seventy-two chapters which is part of the Avesta and contains hymns called gathas.

ANSWER: Yasna

[10] The Yasna is a holy text to this Middle Eastern religion, whose adherents wear the kusti around their waists and may perform rituals in fire temples.

ANSWER: **Zoroastrian**ism

[10] According to Zoroaster, this being is the highest deity in Zoroastrianism. Persian armies would sometimes leave a chariot empty in battle as a tribute to this god, who was the opposite of Angra Mainyu.

ANSWER: Ahura Mazda < VC, Religion>

- 13. A company from this country manufactured a 40 millimeter cannon that became one of the most popular antiaircraft guns on both sides in World War II. For 10 points each:
- [10] Name this country home to Bofors ["BOH-furs"] whose defense industry also includes the builder of the Gripen jet fighter, Saab.

ANSWER: Kingdom of **Sweden** [or Konungariket **Sverige**]

[10] In the 1980s and 1990s, this country's National Congress Party became engulfed in the Bofors kickback scandal. That scandal implicated its prime minister Rajiv Gandhi.

ANSWER: Republic of **India** [or **Bhārat** Gaṇarājya]

[10] Kickbacks were also paid by Saab and its British partner, B·A·E Systems, in a 1999 deal to sell Gripens to this nation. This nation may have secretly collaborated with Israel to develop weapons of mass destruction, a test of which may have been detected in the Vela incident.

ANSWER: Republic of South Africa <CH, Other History>

- 14. A novel titled *Amiable With Big Teeth: A Novel of the Love Affair Between the Communists and the Poor Black Sheep of* [this neighborhood] was published posthumously in 2017. For 10 points each:
- [10] Name this predominantly African-American New York neighborhood which army deserter Jake Brown comes "Home to" in another novel set during a 1920s literary boom.

ANSWER: Harlem

[10] *Amiable With Big Teeth* and *Home to Harlem* are novels by this Jamaican author who also wrote the non-fictional *Harlem: Negro Metropolis*.

ANSWER: Claude McKay

[10] *Home to Harlem* was criticized as portraying "licentiousness" by this African-American author of the article *The Talented Tenth*.

ANSWER: W.E.B. <u>Dubois</u> [or William Edward Burghardt <u>Du Bois</u>] <CH,OtherLit>

- 15. The Woodward-Fieser rules are used to predict the wavelengths of the absorption maximum in this technique. For 10 points each,
- [10] Name this technique commonly used to detect transitions from the ground state to the excited state. This technique is complementary to fluorescence spect-roscopy.

ANSWER: <u>Uv-vis spectroscopy</u> [or <u>ultraviolet-visible spectroscopy</u>; prompt on absorption spectroscopy]

[10] Robert Woodward also names a set of rules describing the stereochemistry of peri-cyclic reactions with this other chemist. Those rules categorize the reactions as either symmetry-allowed or symmetry-forbidden.

ANSWER: Roald Hoffmann

- [10] Woodward also collaborated with Albert Eschenmoser to complete the first total synthesis of this compound. This B-vitamin possesses a cobalt-containing corrin ring, and it is deficient in patients with pernicious anemia. ANSWER: vitamin **B12** [or **cobalamin**] <RH, Chemistry>
- 16. One of this novel's protagonists becomes famous for her blog "Raceteenth or Various Observations About American Blacks by a Non-American Black." For 10 points each:
- [10] Name this novel about Ifemulu and Obinze ["oh-bean-ZAY"], who travel to the US and London, respectively, before returning to their African homeland.

ANSWER: Americanah

[10] Americanah was written by this female African author of Half of a Yellow Sun.

ANSWER: Chimamanda Ngozi Adichie ["ah-DEE-chee"]

[10] The protagonists of *Americanah* are from this African country, as is Adichie. Another character from this country who has trouble adjusting upon his return here is Obi Okonkwo, the protagonist of *No Longer at Ease*. ANSWER: Federal Republic of **Nigeria** <CH, World Literature>

- 17. Name some works of sculpture that were considered controversial, for 10 points each:
- [10] This nude sculpture was viewed by men and women separately when it toured the United States in the midnineteenth century. The chained woman's locket represents her piety.

ANSWER: The Greek Slave

[10] This city's Holocaust memorial, the Memorial to the Murdered Jews of Europe, was designed by Peter Eisenman and consists of 2,711 slabs of gray concrete. This city's mayor refused to attend its groundbreaking, and the memorial has been criticized for not offering any actual information about the Holocaust.

ANSWER: Berlin

[10] This minimalist Richard Serra work made of cor-ten steel was 12 feet tall and 120 feet long—that is, until federal workers cut it into three pieces and removed it to a scrap-metal yard eight years after its installation.

ANSWER: Tilted Arc < AWD, Other Art>

- 18. Answer the following about the Louisiana Purchase. For 10 points each:
- [10] These two explorers were commissioned by Thomas Jefferson to explore the territory acquired by the Louisiana Purchase. Their party included the slave York and the translator Sacagawea.

ANSWER: Meriwether <u>Lewis and</u> William <u>Clark</u> [or the <u>Lewis and Clark</u> Expedition; or the <u>Corps of Discovery</u>] [10] This New York politician, who was nicknamed "the Chancellor," negotiated the Louisiana Purchase as the Minister to France.

ANSWER: Robert <u>Livingston</u> [or R. Robert <u>Livingston</u>]

[10] This French politician opposed the Louisiana Purchase. He employed Hottinguer ["oh-TAHN-ger"], Bellamy and Hauteval ["oh-tuh-VAHL"] in an attempt to demand bribes from three American diplomats in the XYZ Affair.

ANSWER: Charles Maurice de Talleyrand-Perigord < JO, American History>

- 19. After the death of his mother, Coronis, this man was delivered posthumously from her womb. For 10 points each:
- [10] Name this son of Apollo, whose symbol is a serpent entwined with a staff and whose children included the relevantly-named Hygeia ["high-GEE-uh"] and Panacea.

ANSWER: Asclepius ["az-KLEE-pee-us"]

[10] After performing this act on Hippolytus, Asclepius got blasted by a thunderbolt. Orpheus attempted to perform this act on his wife, Eurydice, but failed because he turned to look at her moments too soon.

ANSWER: <u>brought back to life</u> [or obvious equivalents such as <u>raising the dead</u> or <u>rescuing from the underworld</u>]

[10] The rod of Asclepius has a snake on it, and is often confused with this symbol of Hermes, which is a rod with *two* snakes wrapped around it.

ANSWER: caduceus <VC, Myth>

- 20. Liquids described by this property appear on the lower of the two curves on an Angell plot. For 10 points each,
- [10] Name this property also described by various parameters named for Avramov, Doremus, and Bruning-Sutton. This property is most commonly defined with a "kinetic index", symbolized m.

ANSWER: **fragility** [or (kinetic) fragility index, or fragility parameter, or just fragile]

- [10] Formally, fragility describes the temperature dependence of this other property as the glass transition temperature is approached from above. This quantity, a fluid's resistance to flow, is constant for Newtonian fluids. ANSWER: viscosity [or relaxation time]
- [10] Fragile materials should not be confused with brittle materials, which experience this phenomenon more easily than ductile materials. This phenomenon is marked by an X on one end of a stress-strain curve.

ANSWER: brittle fracture [or cleavage; prompt on "breaking", "shearing", or "deforming"] <RH, Physics>