

Fall Open 2019

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Tossups

1. A former holder of this position under Ronald Reagan asked “Which office do I go to get my reputation back?” after he was acquitted of subcontracting an extension to the New York City subway to a construction company connected to the Genovese crime family. A man who held this position allegedly introduced Hillary Clinton to Bill Clinton and now teaches at the UC Berkeley Goldman School of Public Policy. The first holder of this position refused to fire his assistant Louis Freeland Post, who, as Acting Secretary in this position, cancelled thousands of arrest warrants as part of his opposition to the (*) Palmer Raids. The longest-serving person to hold this position chaired the committee that created the Social Security Act and was the first woman to hold a Cabinet position. For 10 points, name this Cabinet position formerly held by William Wilson and Frances Perkins, which oversees issues of employment in the United States.

ANSWER: Secretary of Labor

<BL, US History>

2. The narrator of a story is encouraged to perform this action by a Counter-Strike-obsessed man sporting a pair of *Matrix*-esque shades. In that T. C. Boyle story titled for “almost” carrying out this action, a Verizon employee fails to perform it after sleeping with a religious studies student. Upon performing this action, the narrator of another work confronts the “caverns of pale pink throat” belonging to a “shrunken, immensely old” character. The narrator of a work titled for this action passes by an upturned (*) rubbish van and spots a woman angrily shooing away a crowd of naked children huddled around the mud-covered corpse of a “coolie.” At the end of that essay, the narrator wonders whether any of the locals knew he performed this action “solely to avoid looking a fool.” For 10 points, what title violent action occurs in Burma in an essay by George Orwell?

ANSWER: shooting an elephant [accept “Shooting an Elephant” or “Almost Shooting an Elephant;” prompt on shooting with “what animal?”]

<INB, Miscellaneous Lit>

3. An essay by this writer calls telling bullied boys not to cry “the way we allow the destruction of our sons to begin.” This writer noted, “to share the power of each other’s feelings is different from using another’s feelings as we would a kleenex” in an essay arguing that the erotic “can give us the energy to pursue genuine change in our world.” A speech by this writer states that people “forged in the crucible of difference know that survival is not an academic skill.” This writer collected essays like (*) “Poetry is Not a Luxury” with a speech arguing that “advocating the mere tolerance of difference between women is the grossest reformism.” That speech by this writer attacks the use of racist or patriarchal lenses to analyze “the fruits of that same patriarchy” and appears in her collection *Sister Outsider*. For 10 points name this author of *Zami: A New Spelling of My Name*, a black lesbian feminist who gave the speech “The Master’s Tools Will Never Dismantle the Master’s House.”

ANSWER: Audre Lorde (“audrey lord”) [or Audrey Geraldine Lorde] (The first sentence clues from “Man Child: A Black Lesbian Feminist’s Response,” and the second sentence clues from “Uses of the Erotic: The Erotic as Power”)

<JG, Other Academic>

4. The first movement of one of this composer’s symphonies, with narration in the style of sports commentary, comprises “New Horizons in Music Appreciation” by P. D. Q. Bach. The slow movement of this composer’s Symphony No. 4 begins with the second violins playing a “long E-flat, short B-flat” ostinato. Franz von Oppersdorff commissioned that symphony shortly after stopping this composer from beating his former patron with a chair. Robert Schumann called this composer’s Symphony No. 4 in (*) B-flat major a

“slender Greek maiden” between a pair of “Norse giants.” One of those Norse giants is this composer’s Symphony No. 3, whose third movement includes a trio section that begins with hunting calls played by three horns. This composer’s Symphony No. 3 also includes a second-movement funeral march and a fourth-movement theme-and-variations, the latter based on a theme found in this composer’s ballet *The Creatures of Prometheus*. For 10 points, name this composer who furiously renamed his *Bonaparte* Symphony to the *Eroica* Symphony.

ANSWER: Ludwig van Beethoven

<KL, Classical Music and Opera>

5. Glynne Wickham observed that the traditional costumes used in this genre were reflected in contemporary alabaster reliefs. A set of works in this genre open with a “proclamation” spoken by three banner-bearing “vexillators.” At the climax of a work in this genre, an actress descends from the ceiling aboard an intricately decorated contraption called the “pomegranate.” This genre, which was often performed through the streets on (*) pageant waggons, includes a work in which a gossiping wife is dragged onto a boat to avoid the flood.

Popular works in this genre include the Hegge (“HEG-guh”) cycle, set in N-Town, and the Towneley cycle, set in Wakefield. This genre differed from other contemporary genres in that it focused neither on the life of a saint, nor on a moralistic message; instead, it used tableaux to tell such stories as the expulsion of Adam and Eve from Eden. For 10 points, Biblical stories were told with vocal accompaniment in what genre of medieval drama?

ANSWER: mystery plays [accept miracle plays ONLY on the “pageant waggons” until “dragged”]

<INB, Drama>

Note to players: specific term required.

6. This practice is redefined in a passage that describes a handyman’s satisfaction when “he plugs something into an electric socket” and equates this practice to “the production of production.” It’s not performatives, but an essay describes one figure as a myth because without this process that figure would create the *verbe* itself, as part of its author’s claim that this “mythopoetic” practice underlies discourse. A passage that describes how the creation of miniature models is a form of this practice analyzes the lace collar of a portrait of Elizabeth of Austria. A book that builds on its author’s earlier book *Totemism* uses the chapter “The (*) Science of the Concrete” to develop its author’s theory of this practice, which Jacques Derrida reinterprets in his essay “Structure, Sign, and Play.” This practice, which relies on “odds and ends,” characterizes a mode of mythical thought that titles a book that contrasts it with the “scientific mind” of the engineer. For 10 points, name this French term for construction popularized in *The Savage Mind* by Claude Levi-Strauss.

ANSWER: bricolage (“bree-co-LAZH”) [or the bricoleur (“bree-co-LUR”)]

<AK, Philosophy>

7. The LA-based artist Sandow Birk parodied this painting in a work of the same title whose background includes the iconic “Hollywood” sign obscured by smoke. A preparatory sketch reveals that the artist had intended to greatly magnify a lion-shaped fountain found in this painting’s bottom-right corner. This painting was the fourth its artist produced for Luman Reed, and was followed by a painting whose focus is a dilapidated, moss-covered (*) column topped by a bird’s nest. In this painting’s foreground, an armored man grabs a woman by her cloak as she leaps off a ledge. This painting’s right side is occupied by an enormous marble statue of a shield-wielding, headless gladiator, as buildings behind him burn and armies below him slaughter each other. For 10 points, identify this violent painting which precedes *Desolation* in Thomas Cole’s *The Course of Empire* series.

ANSWER: Destruction of Empire

<INB, Painting and Sculpture>

8. Candelabra and bazooka elements are often coupled to these devices, which can be combined in a Butler matrix. The super turnstile or batwing type of these devices have a very high value for one quantity when their VSWR (“viz-wer”) is properly calibrated. The axial ratio and front-to-back ratio of these devices is

measured in decibels. Array synthesis of these devices can ensure desired values for their nulls and sidelobes. A cosine squared loss factor gives the decrease in performance of these devices due to (*) polarization mismatch. The directivity is an important parameter of these devices, which can experience fading due to multipath propagation. A donut-shaped radiation pattern is produced by a simple one of these devices that is modeled with a Hertzian (“hertz-ian”) dipole. For 10 points, name these devices that transmit and receive signals through radio waves.

ANSWER: antennas

<AK, Physics>

9. This ruler chose July 20th as the date to institute a treaty, since it coincided with the feast day of an identically named saint from Antioch (“anti-ock”). The wealthy landowner and royal favorite Abraham Brodersson was executed by this ruler’s heir after a failed siege. The daughter of Henry IV (“the-fourth”), Philippa of Lancaster, traveled to this ruler’s court as part of a marriage deal that began a defensive alliance with England during the Hundred Years’ War. This ruler, who was often mocked as being (*) “Pantsless” by Albert of Mecklenburg, was the first target of the Victual Brothers, who provided supplies to counteract this ruler’s siege of Stockholm. This youngest child of Valdemar IV (“the-fourth”) chose her great-nephew Eric of Pomerania to inherit her recently expanded realm. For 10 points, name this queen of Denmark who absorbed Sweden and Norway into the Kalmar Union.

ANSWER: Margaret I of Denmark [or Margrete Valdemarsdatter; prompt on Margaret]

<KS, European History (Continental)>

10. Barrier dysfunction in this disease was connected to up-regulation of claudin 2 and down-regulation of claudins 5 and 8 in a 2007 paper by Zeissig et al. The severity of this disease is divided into subcategories based on age of onset, location, and behavior, in the Montreal classification system. The drug mesalazine (“mess-ah-luh-scene”) is used to treat mild forms of this disease. Studies in animals have linked Paneth cell dysfunction caused by mutations in the genes XBP1 and (*) NOD2 to this disease. Rectal fistulae are a common complication of this disease, which sometimes presents with chronic anemia as a result of improper iron metabolism from chronic inflammation. One form of this disease can be diagnosed by looking for skip lesions on a colonoscopy. The most common symptoms of this disease are bloody diarrhea and abdominal pain. For 10 points, identify this disease characterized by inflammation of the digestive tract.

ANSWER: Crohn’s disease [accept inflammatory bowel disease or ulcerative colitis]

<SK, Biology>

11. This country rescinded a 60% claim to its Mazowe Dam made by the Citrus Estate of its former first lady. The leader of a teacher’s union in this country, Obert Masaraure, was arrested in January 2019 during crackdowns that its government claims were perpetrated by “fake” police. The Generation 40 faction within this country’s dominant party was blamed for a 2018 stadium bombing targeting its president. One of its former leaders was opposed by the popular #ThisFlag (“hashtag-this-flag”) movement led by pastor (*) Evan Mawarire. In 2019, this country introduced the RTGS Dollar and faced protests over fuel price hikes led by the Movement for Democratic Change-Tsvangirai. This country’s president, who instituted 99-year leases for white farmers, was given a nickname meaning “crocodile” for leading the Lacoste faction of the ZANU-PF. For 10 points, name this country where Emmerson Mnangagwa (“moo-na-nga-gwah”) became president after a coup overthrew Robert Mugabe.

ANSWER: Zimbabwe [or Republic of Zimbabwe]

<KS, Current Events>

12. An art dealer from this country owns a gallery in Hong Kong’s H Queen’s building and topped ArtReview’s Power 100 in 2018. An artist from this country was the first photographer to win the Turner Prize in 2000 and is known for his abstract *Blush* series. The author of *Duty-Free Art* is from this country,

which is also home to a husband and wife pair of photographers known for their grids of photos of industrial structures. This country is the site of the *documenta* exhibition and is also home to a photographer that (*) removed a factory from a photo consisting of bands of green and grey and depicts a flowing river. That photographer from this country captured the *Chicago, Board of Trade* in one of his characteristic large format photographs, with one depicting several rows of multicolored products in a diptych format. For 10 points, the photograph *99 Cent II* is from what home country of Andreas Gursky, the photographer of *Rhein II*?

ANSWER: Germany [or Federal Republic of Germany; or Bundesrepublik Deutschland]

<AK, Photography>

13. A city in this region was allegedly sacked when its insistence on teaching its horses to dance meant that its cavalry could be neutralized by flutists. Noble casualties at the Battle of Kailia in this region led to a city becoming a democracy. That city in this region generically lent its name to Greek mercenary light cavalry, like those that joined Mede cavalry in seizing the Silver Shields' baggage train at Gabiene. Exiles called the "Partheniai" founded a city in this region that often warred with the native Iapygii. The famously profligate city of (*) Sybaris was located in this region. A battle in this region prompted the remark "another such victory and we are undone." The battles of Heraclea and Asculum were fought in this region when Pyrrhus intervened against Rome on behalf of this region's city of Tarentum. For 10 points, name this ancient region nicknamed for its concentration of Greek colonies like Locroi, Kroton, and what is now Naples.

ANSWER: Magna Graecia [or Megale Hellas; accept Apulia; accept translations like "Greater Greece"; accept descriptions of southern Italy, the boot/foot of Italy, the toe of Italy, or the heel of Italy; anti-prompt on Sicily even though it was generally considered distinct from Magna Graecia; prompt on Italy until mentioned]

<JG, European History (Commonwealth, Ancient, Historiography)>

14. This metal is found in the catalyst of a variant of the Nazarov cyclization for dichlorocyclopropanes ("di-chloro-cyclo-propanes"). Compounds containing this metal serve as activators for the catalyst in methods developed by Toste and Echavarren for enyne ("een-ine") cycloisomerization ("sahy-kloh-ahy-som-uh-rah-y-ZAHY-shun"). Transmetalation ("trans-meh-tahl-AHY-shun") of N-heterocyclic ("N-hetero-cyclic") carbenes ("car-BEANS") is often done by bonding them to this metal. This transition metal can catalyze the rearrangement of (*) diazoketones ("di-azo-ketones") into ketenes ("key-teens") in the Wolff rearrangement. Alkyl halides are produced from the reaction of a halogen and carboxylic ("car-box-ILL-ick") salts of this metal in the Hunsdiecker reaction. Two equivalents of ammonia are complexed to this metal in a reagent that produces a negative result for ketones. When mixed with a solution of sodium chloride, this metal's nitrate produces a white precipitate. For 10 points, the Tollens test for aldehydes produces a mirror of what metal?

ANSWER: silver [or Ag]

<AK, Chemistry>

15. The "auricular" version of this practice began in the 6th century in Ireland, but was banned by the Fourth Lateran council. This practice is the "second plank" in a metaphor about a sailor explained by Tertullian. The Fourth Lateran council also partly prescribed the modern version of this practice to be done annually through the decree "*Omnis utriusque* ("ooh-TREE-oos-kway") *sexus*." During recitations of a prayer named for this practice, participants strike their breast three times; that prayer named for this practice is part of a section that precedes the (*) *Kyrie* ("KEE-ree-ay") of the Roman Rite for Mass. One of the people involved in this practice is bound by a "seal" concerning the mortal or venial actions discussed in this sacrament, which can take place in a booth with a screen. For 10 points, name this sacrament in which an individual is absolved of a sin by admitting it to a priest.

ANSWER: confession [or penance; or reconciliation]

<AK, Religion>

16. In one poem, this thing is compared to Thomas Otway as it tells a tale of a lost little girl who screams for her mother. In the seventh stanza of “Dejection: An Ode,” this thing is called an “Actor,” a “Poet,” and a “Mad Lutanist” who celebrates the “Devils’ yule.” This thing “caressed” the title object “like some coy maid half yielding to her lover” in a poem that asks if this thing “sweeps / Plastic and vast... At once the Soul of each, and God of all?” This thing serves as a metaphor for poetic inspiration in a poem in which the speaker implores this thing to (*) “make me thy lyre” and “drive my dead thoughts over the universe.” “Frost at Midnight” opens by describing the frost as it “performs its secret ministry, unhelped” by this phenomenon, which produces music in a poem addressed to “my pensive Sara.” The speaker of a poem asks this thing, “If Winter comes, can Spring be far behind?” For 10 points, which natural phenomenon titles an “ode” by Percy Shelley?

ANSWER: wind [or breeze; or “Ode to the West Wind”]

<NC, Non-epic Poetry>

17. In this country, the Awakened Youth, or Wikh-e-Zalmayan, split from its nationalist Red Shirts movement. Prior to one conflict in this country, Ivan G. Pavlovsky led a lengthy reconnaissance mission. A fighter from this country known for his hit and run strikes was called the “Lion of the Valley of the Five Lions.” The Sarandoy was a militia controlled by this country’s secret police, which was known as the KHAD. During a conflict in this country, over 2,000 people died during the Salang tunnel fire. (*) Gubdullin Hekmatyar fought in a conflict in this country that resulted in the formation of the Seven Party alliance. In this country, the Khalq and Parcham factions made up its PDPA, which gained power in a revolution that installed Nur Muhammad Taraki. After the Saur Revolution, rebels in this country were supplied Singer missiles in a conflict that began in 1979. For 10 points, name this country where a Soviet invasion during the 1980s was repulsed by the mujahideen.

ANSWER: Afghanistan [or Islamic Republic of Afghanistan; or Da Afġānistān Islāmī Jumhoryat; or Jomhūrī-ye Eslāmī-ye Afġānestān]

<AK, Other History>

18. This poem concludes with a speaker who hopes that he “blazed a trail” for “more versatile singers” in the “rising younger generation.” This poem’s reliance on stock epithets is exemplified by its repeated description of the main character as “steadfast old.” This poem makes frequent use of parallel repetitions within verses, as in its opening lines, “It is my desire / It is my wish / to set out to sing, / to begin to recite.” This poem’s “old” edition was updated fifteen years later with material gathered by David Europaeus, including a tragic (*) “cycle” about an orphan who kills himself after sleeping with a maiden who turns out to be his sister. This poem’s main character sails away aboard a copper raft in its fiftieth and final section, or *runo*. This poem’s use of trochaic tetrameter inspired Henry Wadsworth Longfellow to do the same in his *Song of Hiawatha*. For 10 points, Elias Lönnrot compiled stories about Lemminkäinen and Väinämöinen into what Finnish epic?

ANSWER: *The Kalevala*

<INB, Mythology>

19. In a novel from this country, the narrator and his wealthy friend nearly starve to death during their stay at Mr. Goat’s school of hunger. A pair of youths grow disillusioned with a “brotherhood” of thieves in a story from this country alternatively titled “Peter of the Corner and the Little Cutter.” A resident of this country receives a ration of one onion every four days from a miserly priest who keeps loaves of bread locked up in a chest. A barber’s son plans to flee to the Indies at the end of a novel from this country titled *The* (*) *Swindler*. The title character of a novella from this country serves a number of masters, including a miserly pastor and a pardoner, before marrying the daughter of an Archpriest. Edith Grossman translated a two-part novel from this country that was itself presented by its author as a supposed translation of a text by Cide Hamete Benengeli. For 10 points, identify this country home to the *picaro* Lazarillo de Tormes and the windmill-tilting Don Quixote.

ANSWER: Spain [or Kingdom of Spain, or Reino de España]

<INB, Long Fiction>

20. This problem must be solved to program pick-and-place robots during PCB assembly. A shortcutting step ends one algorithm for this problem that begins by constructing a perfect matching among the nodes of odd degree in a minimum spanning tree. That algorithm gives a three-halves approximation to this problem in polynomial time. A dynamic programming approach to this problem that has a runtime of “big O of n -squared times two-to-the- n ” was developed by Bellman, (*) Held, and Karp. The Christofides algorithm finds approximate solutions to this problem when the edge weights belong to a metric space. This NP-complete problem asks whether or not a graph has a minimum weight Hamiltonian cycle. For 10 points, name this problem that tries to find the shortest path through a list of cities while visiting each city only once.

ANSWER: traveling salesperson problem [or TSP; accept traveling salesman problem; prompt on minimum cost Hamiltonian cycle before "Hamiltonian cycle"]

<SK, Computer Science>

Bonuses

1. Answer some questions about the oddly cross-culturally common mythological motif of people being born as lumps of undifferentiated flesh requiring further magical cultivation, for 10 points each:

[10] The antagonists of this epic, the Kauravas (“KO-ruvs”), were born to Gandhari (“gan-DHUH-ree”) as a single lump the epic’s author, Vyasa (“vee-AHS”), chopped up and put in special jars. This epic follows the Kauravas’ fights with the Krishna-backed Pandavas.

ANSWER: *The Mahābhārata*

[10] This wielder of the Wind Fire Wheels was born when Li Jing attacked a lump his wife gave birth to after a three-year pregnancy, defeated the greedy dragon king Ao Guang, and sliced himself back into lumps in penance to the Jade Emperor. He got better.

ANSWER: Nezha [accept Marshal of the Central Altar or Third Lotus Prince]

[10] In the Mabinogion, Lleu Llaw Gyffes is born as a lump to Arianrhod and raised in a chest by Gwydion, and can only be killed under a set of ridiculously specific conditions. Give any three of those conditions.

ANSWER: Lleu Llaw Gyffes can only be killed at dusk, while wearing/covered by a net, while standing with a foot on a goat and a/the other foot on a cauldron or (bath)tub, and with a spear made during mass [accept any obviously equivalent descriptions and treat each underlined portion as a separate condition (e.g. giving both of the feet conditions counts as two, as does “a spear made during mass”); prompt on the riddles to which the above are the solutions; i.e. neither day nor night, neither indoors nor outdoors, while neither riding nor on foot, while neither clothed nor nude, and with an illicitly-crafted weapon]

<JG, Mythology>

2. A risk neutral measure prevents the possibility of this practice, which theoretically leads to price convergence if it occurs. For 10 points each:

[10] Name this practice that names a model developed by Stephen Ross. This practice involves buying and selling an asset at different prices in different markets to ensure a return.

ANSWER: arbitrage

[10] In addition to arbitrage, the owner of an asset can also receive a return on an asset after it has undergone this process, in which an asset’s value increases over time.

ANSWER: appreciation [accept appreciate or appreciated]

[10] The capital asset pricing model is often used when adding an asset to a portfolio. In the capital asset pricing model, the market risk premium is given by the slope of this line on a graph of rate of return versus beta.

ANSWER: security market line [or SML]

<AK, Economics>

3. Prior to this event, Mohammad Reza Pahlavi was interviewed by Oriana Fallaci complaining about the price of wheat, sugar, and cement. For 10 points each:

[10] Name this event that targeted the Netherlands and the United States on the eve of the Yom Kippur War. During this period, businesses used a system of red, yellow, and green flags and rationed based on odd and even license plates.

ANSWER: 1973 oil crisis [or 1973 oil embargo; prompt on oil crisis with “what year did it occur?”]

[10] While the immediate response to the 1973 oil crisis was the passage of the Emergency Petroleum Allocation Act under the Nixon administration, the Carter administration later created this cabinet-level department in 1977.

ANSWER: Department of Energy

[10] The oil crisis was primarily architected by this Saudi Minister of Oil, who was also kidnapped by Carlos the Jackal during the 1975 OPEC siege in Vienna.

ANSWER: Ahmed Zaki Yamani

<AK, US History>

4. Oort (“ort”) hypothesized an external theory of how these bodies form that interprets them as gas left over from galaxy formation. For 10 points each:

[10] Name these cold, dense bodies that are also hypothesized to be formed from a galactic fountain. Although originally defined by their velocity relative to the local standard of rest, these bodies are now defined as having a deviation velocity larger than 50 kilometers per second.

ANSWER: **high-velocity clouds** [or **HVCs**; prompt on clouds, molecular clouds, or interstellar clouds]

[10] The deviation velocity measures how much high velocity clouds, or HVCs, deviate from models of this motion. The flatness of curves named for this motion is evidence for the existence of dark matter.

ANSWER: galactic **rotation** [accept differential galactic **rotation**; accept galaxy **rotation** curve; accept word forms of **rotation**]

[10] The standard method for detecting HVCs uses this feature in their emission spectra. This spectral line is generated by an electron transition between hyperfine states.

ANSWER: **21-centimeter** line [or **21-cm** line; accept **HI** line or **hydrogen I** line; accept **hydrogen** line]

<JS, Astronomy>

5. In a novel titled for one of these objects, Gerard finds himself stuck in a foreign city without identification papers after the *Tuscaloosa* departs port early. For 10 points each:

[10] Identify these objects which include the *Yorrike*. The sinking of another of these objects named the *Empress of Madagascar* leaves Gerard and his friend Stanislav stranded off the coast of Africa.

ANSWER: **death ships** [or *The Death Ship*; prompt on ships or boats or other equivalents]

[10] *The Death Ship* was written by this author, who also wrote *The Treasure of the Sierra Madre*. Though decidedly German, his exact identity is unknown – some scholars suggest he was Ret Marut or Otto Feige.

ANSWER: B. **Traven** [or perhaps Bruno **Traven**]

[10] B. Traven wrote a series of six novels, including *The Carretta*, set in this sort of place. The feral child Mowgli is raised by wolves in one of these places.

ANSWER: the **jungle**

<INB, Long Fiction>

6. Within a year of formation, the os trigonum typically fuses with this bone. For 10 points each:

[10] Name this bone that attaches to the ATFL via its lateral articular surface. The joint formed between this bone and the bone below it allows for inversion and eversion of the foot.

ANSWER: **talus** bone [prompt on tarsal or tarsus] (That joint is the subtalar joint between the talus and calcaneus)

[10] The talus, tibia, and fibula make up the only mortise and tenon joint in the body, which is responsible for these motions. One of them brings the toes closer to the shin while the other moves them further away. Name either.

ANSWER: **dorsiflexion** OR **plantarflexion**

[10] This type of injury to the ankle is classified as grade 1, 2, or 3 depending on the number of ligaments injured. Excessive force during inversion or eversion of the foot causes this injury.

ANSWER: **sprain** [accept **sprained** ankle; prompt on twisted ankle or rolled ankle]

<JS, Biology>

7. This concept names a special brand of wine from the Pelissero family, and appears in the subtitle of Brian Eno’s album *January 07003*. For 10 points each:

[10] Name this two-word concept that names a nonprofit group founded by *Whole Earth Catalog* editor Stewart Brand. Jeff Bezos is funding a clock named for this two-word concept that will be stored in the remote Mount Washington in eastern Nevada for 10,000 years.

ANSWER: the **Long Now**

[10] The Long Now Foundation maintains a project with this name that records thousands of human languages on a three-inch hard drive. That project is named after an artifact that led to the translation of Egyptian hieroglyphs.

ANSWER: **Rosetta** [accept **Rosetta Project** or **Rosetta Stone**]

[10] This author's novel *Anathem* was inspired by his work with the Long Now Foundation. This former employee of Jeff Bezos's space company Blue Origin popularized the modern meaning of the word "avatar" in *Snow Crash*.

ANSWER: Neal **Stephenson** [or Neal Town **Stephenson**]

<KS, General Knowledge>

8. This instrument introduces the fugal subject that opens Béla Bartók's *Music for Strings, Percussion and Celesta*. For 10 points each:

[10] Name this instrument for which Bartók wrote a concerto whose three movements are respectively preceded by a short soloist interlude, a short bassoon interlude, and another short soloist interlude.

ANSWER: **viola**

[10] This technique of plucking an instrument's strings has a "snap" variety named for Bartók, wherein the strings should be plucked with enough force that they rebound against the instrument.

ANSWER: **pizzicato**

[10] A prominent viola solo begins this autobiographical Bedřich Smetana ("SMET-uh-nuh") piece, whose final movement is marked by a sudden, shrill E that represents the composer's hearing loss.

ANSWER: **String Quartet No. 1** [or *From My Life*; or *Z mého života*; prompt on partial answer]

<KL, Classical Music and Opera>

9. This work was followed up by its author's *Ideen* ("ee-DAY-un") and a work written with Eugen ("OY-gun") Fink that was structured as five Mediations and introduced the concept of the eidetic reduction. For 10 points each:

[10] Name this book that critiques psychologism by taking the position that, contra its author's earlier *Philosophy of Arithmetic*, statements in mathematics and the title discipline are not reducible to psychological states.

ANSWER: **Logical Investigations** [or *Logische Untersuchungen*]

[10] This author of *Logical Investigations* also wrote *Cartesian Meditations*, and founded phenomenology.

ANSWER: Edmund **Husserl** [or Edmund Gustav Albrecht **Husserl**]

[10] In Volume II of *Logical Investigations*, Husserl penned the rallying cry of phenomenology with his statement that we should go "back to the [this two word phrase]". You can give the English translation or German original.

ANSWER: back to the **things themselves** [or *Zu den Sachen selbst* ("tsoo den ZAH-ken zelpst")]

<AK, Philosophy>

10. During this battle, some 8,000 defenders engaged in skirmishes throughout a network of underground tunnels to prevent the aggressing army from collapsing them with explosives. For 10 points each:

[10] Identify this battle in which the victorious 70-year-old commander, the Count of Salm, was fatally wounded by a falling rock. Heavy rain limited its losing side's camel supply caravans.

ANSWER: 1529 **Siege of Vienna** [do NOT accept answers that mention "1683"]

[10] The Siege of Vienna took place just three years after this crushing defeat for Louis II ("the-second") in modern-day Hungary.

ANSWER: Battle of **Mohács** ("MO-hatch")

[10] The victor at Mohács ("MO-hatch") was this "Magnificent" Ottoman, whose ambitious westward expansion was stymied at the 1529 Siege of Vienna.

ANSWER: **Suleiman** the Magnificent

<INB, European History (Continental)>

11. The male lead of a musical based on a film by this man recalls the prostitute Saraghina's advice to "Be Italian," and his child self later reminds him of the sacrifices required by "Getting Tall." For 10 points each:

[10] Maury Yeston gave that musical the title *Nine* because he figured that the process of musical adaptation added "half a film" to the title of this director's 8½. This Italian director's other films include *La Dolce Vita*.

ANSWER: Federico **Fellini**

[10] Fellini's *Nights of Cabiria* was loosely adapted into this musical by Cy Coleman, Neil Simon, and Dorothy Fields. Its title dancer gets pushed into a pond, and it features the songs "If My Friends Could See Me Now" and the Fosse-choreographed "Big Spender."

ANSWER: Sweet Charity

[10] Beyoncé's music video for "Get Me Bodied" is based on Fosse's influential, isolation-focused choreography for this dance from *Sweet Charity*, which is divided into "The Aloof," "The Heavyweight," and "The Big Finish."

ANSWER: "The Rich Man's Frug" [prompt on partial answer]

<JG, Theater>

12. The parameters that define these concepts are related by scaling laws like Rushbrooke's identity, which sets $\alpha + 2\beta + \gamma = 2$. For 10 points each:

[10] Name these concepts. A particularly robust one of these concepts is used to study directed percolation models.

ANSWER: universality classes

[10] Models in a universality class have the same set of exponents described by this adjective. On a pressure-temperature phase diagram, the liquid-vapor phase boundary ends at a point described by this adjective.

ANSWER: critical [accept critical point; accept critical exponents]

[10] The critical exponent is incorrectly predicted to be one-half by mean-field theories of the Ising model. Mean-field theories typically neglect the contribution of this process, which is related to dissipation by one theorem.

ANSWER: fluctuation [accept fluctuation-dissipation theorem]

<AK, Physics>

13. In one tradition, the four corners of printed fabric artworks depict a dragon, tiger, snowlion, and animal named for this phenomenon. For 10 points each:

[10] Name this phenomenon that is purified by artworks known as *lung ta*. The center of those artworks depicts a creature named for this phenomenon with a jeweled saddle that may have been ridden by King Gesar.

ANSWER: wind [or wind horse]

[10] The wind horse is frequently depicted on the multicolored prayer flags of the Bon religion of this region, which is also home to the Gelug school of Buddhism.

ANSWER: Tibet

[10] Tibetan prayer flags usually use a repeating pattern of this many colors. The *Heart Sutra* describes this many *skandhas*, or "aggregates," that must be avoided to prevent suffering.

ANSWER: five

<AK, Religion>

14. Leaders of these places like Thomas Marshall, Hugh Faringdon, and Richard Whiting were executed en masse in 1539. For 10 points each:

[10] Identify these religious institutions. Henry VIII took advantage of the Act of Supremacy to dissolve these institutions.

ANSWER: monasteries [or abbeys; or convents]

[10] The dissolution of the monasteries was one factor that triggered this revolt, which grew out of the Lincolnshire Rising and was led by the lawyer Robert Aske.

ANSWER: Pilgrimage of Grace

[10] Years before Henry VIII's anti-monastic campaign, "alien priories" like those at Modbury and Stogursey were forfeited and incorporated into this institution by Henry VI. A popular misquote of the Duke of Wellington claims that "the battle of Waterloo was won on the playing fields of" this institution.

ANSWER: Eton College

<KS, European History (Commonwealth, Ancient, Historiography)>

15. In 2010, the SFMOMA (“S-F-moe-mah”) used infrared scanning to reveal parts of this artwork, which was grouped along with its artist’s “White Paintings” as an exploration of the “monochrome no-image.” For 10 points each:

[10] Name or describe this piece, which consists of a largely blank piece of paper with faint lines of charcoal and graphite. It resulted from a nighttime meeting between Robert Rauschenberg and another artist, who eventually said “I want to give you something I’ll miss.”

ANSWER: **Erased de Kooning Drawing** [accept descriptions which include **erasure** and Willem **de Kooning**]

[10] The drawing that Rauschenberg erased is similar to entries in this series of de Kooning’s, which depicts grotesque female nudes.

ANSWER: **Woman** series

[10] The piece features an inscription by this other American artist. This artist depicted “things the mind already knows” in pieces created using thick encaustic over newspaper collage.

ANSWER: Jasper **Johns**

<AK, Painting and Sculpture>

16. In an essay, this phrase, “like a poisonous mineral, eats into the heart of religion, and turns it into rankling spleen and bigotry.” For 10 points each:

[10] Give this three-word phrase. At the start of that essay, this phrase serves as an explanation as to why a person might crush a spider scuttling across the floor, despite bearing it no ill-will.

ANSWER: the **pleasure of hating** [accept “On The **Pleasure of Hating**”]

[10] This prominent essayist of the early 19th century wrote “On the Pleasure of Hating.” He included “On Coffee-House Politicians” and “On Patronage and Puffing” in the second volume of his essay collection *Table-Talk*.

ANSWER: William **Hazlitt**

[10] In another essay, Hazlitt listed this Shakespeare play as the one he’d least like to see performed. This play was deemed “an artistic failure” in a T. S. Eliot essay titled for its title character “and His Problems.”

ANSWER: **Hamlet** [or “**Hamlet and His Problems**”]

<INB, Miscellaneous Lit>

17. This man split his troops into the “mandarin duck” formation, which consisted of two groups of five soldiers that protected their corporal and cook with swords, shields, and lances. For 10 points each:

[10] Identify this badass Ming general who helped repel Altan Khan’s 1550 siege of Beijing. He pioneered the inclusion of martial arts into warfare in his *New Treatise on Military Efficiency*.

ANSWER: **Qi Jiguang** [accept **Yuanjing** or **Wuvi** or **Nantang** or **Mengzhu**]

[10] In 1561, Qi Jiguang reunited with Yu Dayou and struck a major blow to these groups on Nan’ao Island. These pirates, which the Chinese believed were primarily Japanese, terrorized the Korean and Chinese coasts.

ANSWER: **wokou**

[10] After he was recalled to Beijing, Qi Jiguang recommended that over one thousand watchtowers be constructed along this massive, often ineffective, series of fortifications.

ANSWER: **Great Wall** of China [or **Wanli Changcheng**]

<INB, Other History>

18. Based on how the e-sub-g and t-sub-2g orbitals are occupied, the strength of this effect and the resulting bond elongation can either be high or low. For 10 points each:

[10] Name this effect that leads to band splitting in UV-vis spectroscopy due to a decrease in symmetry. For octahedral complexes, this effect leads to an increase in the energy of the d-sub-x-squared minus y-squared orbital.

ANSWER: **Jahn-Teller** effect

[10] The 2+ (“two-plus”) oxidation state of this metal often forms octahedral complexes that exhibit the Jahn-Teller effect. This element alloys with tin to make bronze and has a deep blue colored sulfate salt.

ANSWER: **copper** [or **Cu**]

[10] There are three values for the total number of d electrons such that an octahedral complex exhibits no Jahn-Teller effect whatsoever. Please give any two of the three values. You have 10 seconds.

ANSWER: any two of **3**, **8**, and **10**

<AK, Chemistry>

19. Identify the following about the greatly underappreciated Danish poet Sophus Claussen, for 10 points each:

[10] This author described Claussen as the only “free” Danish poet after discovering his collection *Devilries* as a teenager. This fellow Dane recounted her time in Kenya in the memoir *Out of Africa*.

ANSWER: Isak **Dinesen** [or Karen **Blixen**; or Karen Christenze von **Blixen-Finecke**]

[10] Claussen translated the works of a number of writers, including this one, into Danish. An 1824 poem by this writer opens, “I know not if there is a reason / Why I am so sad at heart.”

ANSWER: Heinrich **Heine** [or Christian Johann Heinrich **Heine**]

[10] Claussen’s novel *Valfart* contains an extended hallucinatory scene set in this city. In “You, Andrew Marvell,” Archibald MacLeish wrote of how this city’s “trees / take leaf by leaf the evening strange.”

ANSWER: **Ecbatana** [or **Ecbatan**]

<INB, Non-epic Poetry>

20. This character leaves the stage for the last time after the violins stop playing and two “ear-splitting shrieks are heard.” For 10 points each:

[10] Identify this character whose monologue includes a promise to reveal “the horse with a fever bright as diamonds.” This character, dressed as a woodcutter, only communicates with Death disguised as a beggar woman.

ANSWER: the **Moon** [or la **Luna**]

[10] The Moon appears as a woodcutter with a painted white face in this Spanish playwright’s *Blood Wedding*.

ANSWER: Federico Garcia **Lorca** [or Federico del Sagrado Corazón de Jesús García **Lorca**]

[10] In his introduction to Lorca’s *Three Tragedies*, Lorca’s brother Francisco described this play as an “almost unplayable piece because of its scenic investiture.” This rarely performed play, whose cast consists of over 30 characters, opens as the Director and his Servant discuss an “open air” production of *Romeo and Juliet*.

ANSWER: *The Public* [or *The Audience*; accept *El público*]

<INB, Drama>