2022 National All-Star Academic Tournament Round 16 – Tossups

1. This poem compares "clandestine pleasures" to tightly squeezing a "dried up orange" and to a "penniless rake" torturing an "old prostitute" with kisses. In this poem, Trismegist lies on a pillow, and "the noble metal of our will" is "wholly vaporized by" his alchemy; that character is identified with the Devil, who "holds the strings which moves us!" This poem opens by listing "Folly, error, sin, avarice," which "occupy our minds and labor our bodies." The last stanza of this poem describes a "refined monster" dreaming "of scaffolds as he smokes his hookah pipe" and called "Ennui," while its last line addresses a "hypocritish" person called "my fellow, — my brother!" For 10 points, identify this first poem following the dedication of *Les Fleurs du Mal*, in which Charles Baudelaire addresses the peruser of its pages.

ANSWER: "<u>To The Reader</u>" [or "<u>Au Lecteur</u>"; or "<u>Preface</u>"; prompt on descriptions of the <u>first poem</u> or <u>beginning</u> of *Les Fleurs du Mal / The Flowers of Evil*; do not accept or prompt on descriptions of a "Dedication"] <Clark Smith, Literature - European>

- 2. The Percy Grainger Museum holds 79 wine glasses for use in performances of Grainger's *Tribute* to this earlier composer. A slip of paper found in this deceased composer's wallet inspired the title of Sammy Fain's "Dear Hearts and Gentle People." This creator of a book of *Ethiopian Melodies* wrote early pieces for the "Knights of the Square Table," including "Open Thy Lattice, Love." Some scholars suggest Dvorak's 7th Humoresque unconsciously borrows from a tune this composer licensed to E. P. Christy's troupe. A song by this composer of "Beautiful Dreamer" is referenced by the pen name of journalist Nellie Bly. This "Father of American Music" wrote lyrics about "old folks" who live "Way down upon the Suwannee River." For 10 points, name this composer of such minstrel songs as "Oh! Susanna," and "Camptown Races." ANSWER: Stephen Foster [or Stephen Collins Foster]

 <Clark Smith, Classical Music>
- 3. This thing is paired respectively with "meaning" and "will" in the last two sections of Peter Hacker's commentaries on *Philosophical Investigations*. A 1986 book titled for this thing, which claims it is composed of multiple "agents," puts forth Marvin Minsky's theory of the "Society of" it. Subsections of this thing must be "domain specific" and "informationally encapsulated" according to a Jerry Fodor book titled for the "modularity" of this thing. This thing titles a book which rails against the "category mistake" inherent in a view described as "the ghost in the machine," which was written by Gilbert Ryle. The 1649 book *The Passions of the Soul* claims that this non-physical entity is seated in the pineal gland, where it interacts with a physical entity. For 10 points, Cartesian dualism contrasts what incorporeal entity with the body? ANSWER: mind [accept *The Society of Mind* or *The Modularity of Mind* or *The Concept of Mind* or *Wittgenstein: Meaning and Mind* or *Wittgenstein: Mind will*]

<Joseph Krol, Philosophy>

4. A chemical that reverses this process is inhibited by trimethylamine-N-oxide. Bryngelson and Wolynes (woll-EH-nez) proposed that this process follows the "principle of minimal frustration." The last winner of the CASP contest for modeling this process was a DeepMind neural network called "Alpha" this process. After using pulsed exchange in a stopped-flow apparatus, the rate of this process is plotted against concentration to give a V shape. Hydrogen-deuterium exchange can label molten globule intermediates in this process. The large timescale involved in blindly conducting this process is the subject of Levinthal's paradox. Anfinsen's dogma underpins this process, whose intermediate stages may include alpha helices and beta sheets. When this process goes wrong, it can create prions. For 10 points, what process gives a final 3D structure to proteins? ANSWER: **protein folding** [accept protein **folding** after "proteins" but prompt before]

<Joseph Krol, Science - Biology>

5. The tale *King of Battle* recounts this monarch's campaign to protect merchants from Nur-Dagan (NER-dah-gon), the king of Purušḥanda (por-oo-SHAHN-duh). This monarch's descendants reigned until the expansion of the Gutians. Elam and Marhashi were conquered by this king during his 55-year reign. A legend cycle about this man begins with his secret birth in Azupiranu (AH-zoo-PEER-ah-noo). Ur-Zababa appointed this man as his cupbearer, but later asked Lugal-zage-si (LOO-gul-zuh-GAY-see) to kill him following a dream of this man gaining the blessing of Ishtar. After deposing the kings of Kish and Uruk, this monarch forged an empire that possibly stretched as far as Cyprus and later split into the regions of Babylonia and Assyria. The first head of an empire in world history is often identified as, for 10 points, what "Great" king of Akkad?

ANSWER: <u>Sargon</u> of Akkad [or <u>Sargon</u> the Great] <Lalit Maharjan, History – Ancient, Commonwealth, Cross, and Misc.>

6. This artist died tending his expansive orchid garden at Petit-Gennevilliers ("peh-TEET zhen-ah-vill-ee-AY"). This artist was influenced by his brother's "subjective camera" technique to depict rain on the Yerres river. Émile Zola mocked this painter as "anti-artistic" for a painting of his brother Martial looking over a balcony. A man carrying a ladder and a faded "PHARMACIE" sign appear in the background of a painting by this artist set at the Place de Dublin. This artist appears next to Angèle Legault in the bottom right of *The Luncheon of the Boating Party*. An open bottle of wine appears near three shirtless workers surrounded by curled wood pieces in a painting by this artist. A tall green lamp post divides a painting by this artist depicting citizens holding umbrellas. For 10 points, name this Impressionist artist of *The Floor Scrapers* and *Paris Street*, *Rainy Day*.

ANSWER: Gustave <u>Caillebotte</u> <Amogh Kulkarni, Painting and Sculpture>

8. A general in this conflict relegalized slavery and offered "King of the Slavers" Rahama Zobeir (RAH-hah-mah zoh-BAIR) a governorship to increase his support. Canadian magnate Percy Girouard (JEE-wah) was hired to construct a railway during this conflict for a territory reclamation campaign chronicled in *The River War*. During this conflict, public pressure led to the formation of a relief expedition led by Garnet Wolsey that arrived two days late. In this conflict, a general was beheaded and his body was thrown down a well at the self-proclaimed "guided one's" siege of Khartoum. Charles "Chinese" Gordon died fighting the army of Muhammad Ahmad bin Abd Allah during, for 10 points, what 19th-century millenarian conflict in modern-day Sudan named for an Islamic messiah?

ANSWER: <u>Mahdist</u> Revolt [or <u>Mahdist</u> War; or <u>Anglo-Sudan</u> War; or <u>Anglo-Egyptian conquest of Sudan</u>; or <u>siege of Khartoum</u> until it is read] <Lalit Maharjan, History - World>

9. This mineral is often found beneath an oxidized layer of a deep tawny color, called "yellow ground." A "train" of pyrope deposits that led to this mineral was discovered by Chuck Fipke. Stephen Haggerty discovered that this mineral often occurs beneath the "indicator plant" *Pandarus candelabrum*. This mineral, which is sometimes found covered in a gum-like layer called nyf (niff), tends to be found in cratons according to an empirical result called Clifford's rule. Irregular types of this mineral are called bort. The main sources for this mineral arise when a deep supersonic volcanic eruption produces a certain carrot-shaped diatreme (DIE-ah-treem). Lamproite is most notable for sometimes including this mineral, which looks similar to cubic zirconia. Pipes of kimberlite are the main source of, for 10 points, what mineral which measures 10 on the Mohs scale? ANSWER: diamonds [prompt on kimberlite pipes, asking "which contains what mineral?"]

<Joseph Krol, Science - Other>

10. In variants of one story, this deity either takes the form of a crow or shoos away a crow, causing a kamandalu to fall over and form the Kaveri river. By digging under soil, this deity sabotages a wedding procession he wasn't invited to, causing a farmer passing by to pray to him. This deity used their pasha, or noose, to tame the former musician Krauncha, who was cursed after stepping on Vamadeva's foot. While sometimes considered a brahmacārin, other sources give this god's consorts as Buddhi, Riddhi and Siddhi. This deity was made leader of the Ganas and rewarded with the sage Narana's mango after he used his mount, a giant mouse, to defeat his brother in a race. This god was decapitated by his father's trident while protecting his mother Parvati while she bathed. For 10 points, name this Hindu god of wisdom who has the head of an elephant. ANSWER: **Ganesh**a [or **Ganapati**; or **Vinavaka**] <Sean Farrell, Mythology>

11. In a novel by this author, a delivery initially mistaken for coconuts actually consists of skulls sent by the protagonist's torturer. This author was inspired to base a novel on the papers of Daniel O'Leary after reading an unfinished book by his friend Álvaro Mutis (AL-va-roh MOO-tiss). One of this author's characters constantly hears sad whistling coming from his massive testicle. Francisco Franco inspired a 200-year-old character created by this author, who is eaten by vultures after ruling a Caribbean island. In a novel by this author, a mad patriarch who is tied to a chestnut tree has a descendant with a pig's tail who is eaten alive by ants. In that novel by this author of *The General in his Labyrinth* and The Autumn of the Patriarch, José Arcadio Buendia founds the town of Macondo. For 10 points, name this author of *One Hundred Years of Solitude*.

ANSWER: Gabriel **García Márquez** [Gabriel José de la Concordia **García Márquez**; prompt on García or Márquez]

<Joseph Krol, Literature - World and Misc.>

12. The world's largest one of these devices was built at Portland State University in 2013 using especially low-density pump oil. The unexplained addition of a "micro" one of these devices to the Galaxy Nexus was meant to allow faster GPS locking. A classic physics urban legend involves someone timing one of these devices as it falls from a building during a job interview. Goethe (GURT-uh) sometimes names a type of these devices in which a sealed container of water is attached to an open spout. As they both fundamentally measure the same quantity, these devices are basically equivalent to the usual type of altimeter. Labels like "change," "fair" and "dry" can be added to the "aneroid" type of these devices, which are often used for weather prediction. A reading in torrs or pascals is given by - for 10 points - what devices used to measure pressure? ANSWER: **barometers** [or micro**barometers** or water **barometers** or aneroid **barometer**s; or **pressure gauge**s until "pressure" is read] [In the urban legend, the interviewee is asked how to use the barometer to determine the height of the building.] <Joseph Krol, Science - Physics>

13. A business owner from this community unsuccessfully sued for a tax refund in *United States v. Lee.* Justice William Douglass pushed the court to acknowledge feelings of the whole family for a case that acknowledged the vocational background this community provided. The refusal of any form of insurance among this community exempts them from paying social security taxes. *Wisconsin v. Yoder* ruled that children from this community did not have to attend compulsory education past eighth grade. The *Ordnung* lays out the strict rules this community abides by, which can include required use of home-sewn clothing and a ban on rubber tires. For 10 points, name this Mennonite offshoot community in the United States known for their simple life and apprehension to modern technology.

ANSWER: <u>Amish</u> community [or <u>Amish</u> Mennonites; accept <u>Pennsylvania Dutch</u> or <u>Pennsylvania German</u>s; prompt on <u>Mennonites</u> or <u>Anabaptists</u>] < Lalit Maharjan, Social Science>

14. Rights to one of these locations were negotiated as part of a 1435 treaty that first united the Duchy of Schleswig with Holstein. The engineer Erik Dahlbergh assisted in a risky 1658 campaign to "march across" one of these locations en route to a southern capital. Foreign policy regarding a location of this type was the main casus belli for the Tortensen War. Sweden's exemption from an ad valorem tax at one of these locations was rescinded by the Treaty of Frederiksborg. Along with the Scanian Kärnan (shair-NAN), Kronborg was a Renaissance-era castle built to guard one of these locations. After first being introduced by Eric of Pomerania, that location's namesake "dues" were a historic source of income for the Danish crown. For 10 points, the Øresund (oo-ES-und) is what kind of pass that connects the Baltic Sea to the Atlantic Ocean? ANSWER: Danish straits [or channels; or March Across the Belts; or Øresund or the Sound Dues until "Øresund" is read; prompt on sounds after "Øresund" is read; prompt on pass until it is read]

Sean Farrell, History - Post-Classical European>

15. Paul Roberts runs a Substack devoted to passing these types of laws, which featured an interview with Alison Eggers on Massachusetts's Question 1 from 2021. Aaron Perzanowski cited a 2019 class-action lawsuit against Nintendo in support of these types of laws. A network of cafés that support these types of laws was founded by Martine Postama. Kyle Wiens has argued that the FTC should approach these types of laws with the "eyeglass rule" based on a 2021 "Nixing" Workshop. In 2012, Massachusetts became the first in the nation to pass one of these laws which forced automakers to allow independent mechanics access to diagnostics. Louis Rossman supports these types of laws to limit planned obsolescence and part pairing on iPhones. For 10 points, name these type of laws that make it easier to fix broken products.

ANSWER: right to **repair** bills [or **R2R**] <Michael Bentley, Current Events>

16. This theatrical character first appeared in a story in which her love for a Gene Stratton-Potter book causes her to be fascinated by a man's freckles. This character's mother uses a slur for Black people in responding to her offer to bring in the blancmange. This character was inspired by the author's lobotomized sister Rose, who received half the profits from the later play *Summer and Smoke*. This character, who fails a secretarial exam, spends most of her time viewing penguins at the zoo after quitting Rubicam's Business College. The instruction to "blow out the candles" is given to this character by her brother in a "memory play." This character is nicknamed "Blue Roses" and gives the "gentleman caller" Jim O'Connor a unicorn from her set of fragile animals. For 10 points, name this sister of Tom Wingfield in *The Glass Menagerie*. ANSWER: <u>Laura</u> Wingfield [prompt on <u>Wingfield</u>]

17. Members of this group of people were forced out of their homes in an area renamed to Coofor at the beginning of the Tiguex (TEE-gweks) War. After defending themselves from an envoy raiding their village, these people were slaughtered in the Acoma Massacre. Runners from these non-Inca people untied knots from a cord to count down the days until an event involving a siege of the Palace of the Governors. Catholic images were smashed by these people under the leadership of Popay in a rebellion that forced 2,000 settlers to flee towards Mexico. This group of people, which include the Hopi and Zuni, were named for their compact communities of stone and adobe (uh-DOH-bee) dwellings. For 10 points, identify these indigenous people of present-day Arizona and New Mexico who are known by the Spanish word for "town."

ANSWER: <u>Pueblo</u> [or <u>Pueblo</u>ans; accept any specific tribes among the Pueblo including the <u>Acoma</u>, <u>Hopi</u>, or <u>Zuni</u> before their names are read, prompt on <u>Native Americans</u> or American <u>Indians</u>]

<Lalit Maharjan, History - American>

18. (Note to players: the surname in question has variant spellings; any correct spelling or pronunciation is acceptable.) A Cherokee entertainer with this surname, who titles a Cy Coleman musical with lyrics by Comden and Green, quipped that he never met a man he didn't like. With her husband who adopted this surname, Dale Evans wrote the theme song "Happy Trails." This adopted surname of the "King of the Cowboys" was shared by the leader of The First Edition, who dueted with Dolly Parton on "Islands in the Stream." Lyricist Lorenz Hart abandoned a composer with this surname on a musical adaptation of Lynn Riggs's *Green Grow The Lilacs*. The "Father of Country Music" with this surname wrote a series of 13 "blue yodels." A Kenny with this surname's signature was "The Gambler." For 10 points, a composer with what surname co-created "People Will Say We're in Love" and "Oh, What a Beautiful Mornin" for the musical *Oklahoma!* with lyricist Oscar Hammerstein? ANSWER: Rodgers [or Rogers; or Will Rogers; or Roy Rogers; or Kenny Rogers; or Richard Rodgers; or Jimmie Rodgers]

<Clark Smith, Other Auditory Arts>

19. Istanbul's Sunnet Sarayi is a "Palace" for this action that joins a haircut, almsgiving, animal sacrifice, and naming among the traditional fixtures of an *aqiqah*. Per a minority tradition, prophets such as Muhammad "naturally" fulfilled an obligation regarding this action through their aposthia. Aisha transmitted a hadith prescribing *ghusl* after contact between two things that have undergone this action, as discussed in *The Hidden Face of Eve* by Nawal El Saadawi. Against consensus, Ibn Hanbal says converts should perform this action as the 80-year old Ibrahim did. Although this rite is usually called *khitan*, the broad term *taharah* motivates controversy over whether infibulation and clitoridectomy qualify as forms of this rite for women. For 10 points, name this practice that *mohels* perform on Jewish male infants to remove their foreskins.

ANSWER: <u>circumcision</u> [or word forms such as being <u>circumcised</u>; accept <u>khitan</u> or <u>taharah</u> before respective mention; accept male or female <u>circumcision</u> as both are clued; accept female <u>genital mutilation</u> or <u>FGM</u>; accept descriptions of <u>removing</u> the <u>foreskin</u> before the end]

<Clark Smith, Religion – Islam / Associated Traditions>

20. A "pure" subtype of these systems probably caused the Nevada Test Site's observed long-range motion of plutonium. One model for these systems, which uses a screened Yukawa potential which is proportional to their Bjerrum ("B'YEH-rum") length, gives similar predictions to the Schulze-Hardy rule. A formula developed by Marian Smoluchowski ("smol-oo-CHOV-ski") can be used to find a quantity that describes these systems, which is measured at their slipping planes and in volts. D·L·V·O theory describes the electrical double layers within these systems, which is where their zeta potential is measured. Adding clarifying agents to these systems can lead particles within them to destabilize in a phenomenon called flocculation. For 10 points, aerosols, gels and emulsions exemplify what systems, in which an insoluble substance is suspended throughout another substance?

ANSWER: **colloid**s [or **colloid** suspensions; or eigen**colloid**s; or aero**sol**s or **gel**s or **emulsion**s before mentioned; prompt on <u>suspensions</u> or <u>dispersions</u> or <u>mixtures</u>] <Joseph Krol, Science - Chemistry>

21. In Second Chronicles, Hanani the seer reminds king Asa of a battle at which these people and the Lubims, who were led by Zerah and numbered over a "thousand thousand," were smitten by the Lord. A man of this ethnicity in the court of king Zedekiah leads a group that pulls the prophet Jeremiah out of the mire. This ethnicity of Ebedmelech is shared by a wife of Moses that Aaron and Miriam attack Moses for, after which Miriam is cursed with leprosy. In Jeremiah, God pairs a rhetorical question about this ethnicity with one about the spots of the leopard. A man of this ethnicity invites an evangelist to sit with him in his chariot to explain Isaiah 53 to him. In the eighth chapter of Acts, Philip the Evangelist baptizes a eunuch of this ethnicity. For 10 points, Jeremiah asks whether a man of what ethnicity can change his black skin?

ANSWER: <u>Ethiopian</u>s [accept <u>Ethiop</u>s; accept <u>Cush</u>ites; prompt on <u>Black</u>] <Clark Smith, Religion - Christianity / Associated Traditions>

2022 National All-Star Academic Tournament Round 16 – Bonuses

1. An 1820 law that affected this city specified that rental contracts expired on May 1 each year. For 10 points each:

[10] Name this American city that held Moving Day, an unofficial holiday where renters changed residences, until the start of World War II.

ANSWER: **New York**, New York [or **New York** City; or **NYC**]

[10] A shrinking percentage of rental properties in New York City fall under this policy in which the Maximum Base system, rather than market forces, determines rates.

ANSWER: rent control

[10] About 85,000 renters in New York, the most of any city, are part of this program, named for its position in the Housing Act of 1937, that provides rent assistance to low-income tenants.

ANSWER: Section 8

<Fredrick Morlan, History - American>

2. In 2019, a painting by this artist depicting three Native Americans watching railroad construction was exhibited with artworks by indigenous artists like Jaune Quick-to-See Smith. For 10 points each:

[10] Name this artist of *Progress*. Jonathan Sturges commissioned a painting by this artist depicting a recently deceased man and referencing a eulogy based on John Keats's sonnet "O Solitude."

ANSWER: Asher (Brown) **Durand**

[10] In 2005, Alice Walton purchased this Asher Durand painting depicting another painter and the poet William Cullen Bryant standing on a ledge in the Catskill Mountains.

ANSWER: **Kindred Spirits**

[10] Durand wrote that "if there be a man on earth whose location I envy... it is" this Catskills native who appears with Bryant in *Kindred Spirits*. This founder of the Hudson River School painted *The Oxbow*.

ANSWER: Thomas Cole

<Amogh Kulkarni, Painting and Sculpture>

- 3. A work by this philosopher rails against positivism, instead promoting the idea of a "great refusal." For 10 points each:
- [10] Name this philosopher, who described people with "democratic unfreedom" in a work that claims that capitalism has "flattened out" art through "repressive desublimation."

ANSWER: Herbert **Marcuse** (that work is *One-Dimensional Man*)

[10] Marcuse states that capitalist "repression" caused the desires of individuals to become incorporated into this concept. Theodor Adorno and Max Horkheimer's book *Dialectic of Enlightenment* describes how this concept leads to a society's media being produced in a factory-like way.

ANSWER: **culture industry** [or **Kulturindustrie**]

[10] This philosopher stated that "hyper-repressive desublimation" was insufficient to explain the discourses that emerged from the sexual revolution. This French philosopher also wrote *Discipline and Punish*.

ANSWER: Michel <u>Foucault</u> (FOO-koh) [Paul-Michel <u>Foucault</u>] <Amogh Kulkarni, Philosophy>

- 4. This effect sometimes lends its names to nano-rings that were produced accidentally while trying to make quantum dots. For 10 points each:
- [10] Name this effect. In one form of it, a particle's wavefunction gains a phase shift as it moves around a solenoid, despite the electromagnetic fields being negligible, demonstrating the physicality of electromagnetic potentials.

ANSWER: Aharonov-Bohm ("a-HA-ron-ov-BOME") effect [or Ehrenberg-Siday-

Aharonov-Bohm effect or **Aharonov-Bohm** solenoid effect]

[10] The Aharanov-Bohm effect is often visualized using a variant of this experiment, which Thomas Young used in 1801 to demonstrate interference and thus the wave nature of light.

ANSWER: Young's double slit experiment

[10] Quantum eraser experiments, which also use a variant of the double-slit experimental setup, give evidence for this phenomenon. This phenomenon's incompatibility with local realism prompted the EPR paradox.

ANSWER: quantum **entanglement** [or **entangle**d or other word forms] <Joseph Krol, Science - Physics>

- 5. This writer used "décalage," a French word for "jetlag," to describe the different space and time experienced by Black Africans and Black Americans. For 10 points each:
- [10] Name this author whose collections include *Shadow Songs*, *Éthiopiques*, and *Nocturnes*. As a statesman, this author appointed Yande Codou as his official griot. ANSWER: Léopold Sédar **Senghor**
- [10] Senghor was the first African member of this institution, which serves as an official authority on the French language.

ANSWER: **Académie** française [or French **Academy**]

[10] Despite the contributions of Adboulaye Sadji and the sisters Paulette and Jeanne Nardal, Senghor is counted as one of the "Three Fathers" of Negritude alongside Aimé Cesaire and this French Guianan poet, whose book *Pigments* is credited with preceding Frantz Fanon's ideas by twenty years.

ANSWER: Léon <u>**Damas**</u> [Léon-Gontran <u>**Damas**</u>] <Clark Smith, Literature - World and Misc.>

- 6. The Angers Fragment is the only surviving portion of a text by this historian that is confirmed to be written in his handwriting. For 10 points each:
- [10] Name this historian who received the patronage of Absalon. In the 12th century, this historian wrote about the legendary warrior Starkad and the king Amleth.

ANSWER: Saxo **Grammaticus** [or Saxo **Longus**]

[10] Saxo Grammaticus wrote about the "deeds" of people from this modern-day country. The story of Amleth in the *Gesta* inspired William Shakespeare's character of Hamlet, a prince from this country.

ANSWER: **<u>Denmark</u>** [or **<u>Danmark</u>**; or Kingdom of **<u>Denmark</u>**; or **<u>Danish Realm</u>**; or **<u>Danmarks</u>** Rige]

[10] The structure of Saxo Grammaticus's *Gesta Danorum* resembles the history of the Norwegian kingship, the *Heimskringla*, by this contemporary of Saxo Grammaticus. High, Just-As-High, and Third are questioned by a disguised king in the *Gylfaginning* (**GEEL-wahg-in-ig**), a section of a longer text by this author.

ANSWER: **Snorri** Sturluson [or Snorri **Sturluson**] the longer text is the *Prose Edda*] <Amogh Kulkarni, History - Post-Classical European>

- 7. In 1969, anti-Vietnam War activists held "folk guerrilla concerts" at this railway station. For 10 points each:
- [10] Name this busiest railway station in the world. 3.5 million passengers pass through it every day, making it about five times as Europe's busiest, Paris's Gare du Nord ("GAR doo NOR").

ANSWER: **Shinjuku** Station [or **Shinjuku**-eki]

[10] Shinjuku Station serves this most populous metropolitan area in the world that sits in the shadow of Mount Fuji.

ANSWER: Tokyo

[10] Despite it being planned since 1973, Shinjuku has yet to be connected to this Japanese high-speed railway network on which "bullet trains" run. There has yet to be a single fatality on this network, whose name literally means "new main line."

ANSWER: <u>Shinkansen</u> <Joseph Krol, Geography>

- 8. Quadruple bonds most commonly occur among elements from this block, as seen in Chinese lantern structures. For 10 points each:
- [10] Name this block of the periodic table that includes the transition metals. This block is named for the third largest atomic subshell, which comprises five orbitals.

ANSWER: **d** block

[10] Colorful dyes like Prussian blue and molybdenum blue include elements with multiple oxidation states, making them these types of complexes. Redox reactions are often studied using one of these coordination complexes named for Creutz ("croits") and Taube ("TAU-buh").

ANSWER: **mixed-valence** complexes

[10] Molybdenum and this other transition metal are the only elements able to form stable sextuple bonds. This element's carbide has a hardness comparable to corundum, and is used in cemented carbides alongside titanium and tantalum.

ANSWER: <u>tungsten</u> [prompt on <u>W</u>] <Sean Farrell, Science - Chemistry>

- 9. The last paragraph of this story laments "dear loyalty, that could have served and followed him and loved him as a dog loves!" For 10 points each:
- [10] Name this story, in which Sylvy discovers the title creature's nest while atop an oak in the Maine forest but decides not to tell a wandering hunter.

ANSWER: "A White Heron"

[10] While in a "Boston marriage" with Annie Adams Fields, this local colorist published "A White Heron" and *The Country of the Pointed Firs*.

ANSWER: Sarah Orne **Jewett**

[10] Jewett was led to write of her native Maine by this author's local color novel *The Pearl of Orr's Island*. The unrelated John P. Jewett published this author's novel *Uncle Tom's Cabin*.

ANSWER: Harriet Beecher **Stowe** < Clark Smith, Literature - American>

- 10. Hans von Bulow decided to perform this piece as an epilogue, since Wagner dubbed it "the most perfect drama in itself." For 10 points each:
- [10] Identify this last of three pieces created for the same opera, which was itself replaced by one named for the opera. Mahler did not really originate the popular tradition of playing this piece between the first and second scenes of Act II.

ANSWER: **<u>Leonore</u>** Overture No. 3 [or the third **<u>Leonore</u>** Overture; prompt on descriptions of <u>overture</u>s for <u>Fidelio</u> but do not accept "Fidelio Overture"]

[10] Another highlight of Beethoven's *Fidelio* is the quartet "Mir ist so wunderbar," which is nicknamed for this technique. This contrapuntal technique names a D major Pachelbel piece paired with a *gigue* (zeeg).

ANSWER: **canon**s [accept **Canon Quartet**]

[10] This co-founder of the German music journal *NZM* ironically praised the Viennese for rejecting *Fidelio* since it made Beethoven write his overtures. This critic often wrote under the pseudonyms Florestan and Eusebius.

ANSWER: Robert **Schumann** [Florestan is named after the character in *Fidelio*] <Clark Smith, Classical Music>

- 11. Vector fields with this property have zero curl. For 10 points each:
- [10] Name this property of vector fields for which the line integral over any closed curve is zero. These vector fields can be written as the gradient of a potential function.

ANSWER: **conservative** vector fields [prompt on gradient fields]

[10] This theorem, also known as the fundamental theorem of vector calculus, states that any smooth and rapidly decaying vector field can be written as the sum of a conservative vector field and a solenoidal vector field.

ANSWER: <u>Helmholtz</u>'s theorem [or <u>Helmholtz</u> decomposition or <u>Helmholtz</u> representation]

[10] Each component of a conservative vector field can be found by applying a "partial" version of this operation to the aforementioned potential. An indefinite integral is also known as the "anti-" form of this basic calculus operation.

ANSWER: <u>differentiation</u> [or <u>derivative</u> or partial <u>differentiation</u> or antiderivative]

<Amogh Kulkarni, Science - Other>

- 12. Because he found hunting cruel, the director of this film did not direct a rapidly cutting sequence in which its main cast shoot rifles at rabbits and birds. For 10 points each:
- [10] Name this 1939 comedy-drama set on the eve of World War II. At its end, the gamekeeper Schumacher mistakenly kills the aviator Andre Jurieux **(JOO-rue)** instead of Octave.

ANSWER: The **Rules of the Game** [or Le **regle du jeu**]

[10] Jean Renoir's *Rules of the Game* exemplifies poetic realism, though his earliest films are classified under a movement of this name. A movement in painting with this name is exemplified by the works of his father, Auguste Renoir.

ANSWER: French impressionism

[10] This director, who praised *The Rules of the Game* for refusing to "wear its innovations on its sleeve," was the assistant director for Renoir's *The River*. This director's own films include *Charulata* and the *Apu* Trilogy.

ANSWER: Satyajit Ray

<Clark Smith, Other Visual Arts>

13. One of these pictographic systems is used to write the name of Ramesses II via the following features of a statue: "Ra," the sun, behind a child, "Mes," holding a sedge stalk, "Su." For 10 points each:

[10] Identify these systems used in puzzles in which the sound of a symbol like a human eye represents a different word, such as the pronoun "I." Their name comes from a Latin ablative plural meaning "by things."

ANSWER: rebuses

[10] The rebus principle was likely used to create Egyptian hieroglyphics and this logosyllabic system in which Hakka, Yue, and Mandarin are written.

ANSWER: Written **Chinese** [or **Chinese** characters; or **hànzì**; or **báihuà**wén]

[10] Peter T. Daniels coined the name for abugidas and these writing systems that only represent consonants with basic graphemes. West Semitic languages often use these systems, named after the first four letters in the Arabic script's original order.

ANSWER: **abjad**s [or **abgad**; accept impure **abjad**s]

<Clark Smith, Social Science>

- 14. A Greek-language polemic against these people only survives in fragments from a partially-preserved response by Cyril of Alexandria. For 10 points each:
- [10] Give the exonymic term for this sect, notably used by a vehement opponent of this group in apocryphal dying words, addressed to this sect's namesake, stating "Thou hast conquered." That enemy of this group died in 363 AD at the Battle of Samarra.

ANSWER: **Galilean**s [prompt on Christians]

[10] This nephew of Constantine's opposition to Christians, whom he called Galileans, resulted in his epithet "the Apostate."

ANSWER: **Julian** the Apostate

[10] In an act probably meant to anger Christians, Julian attempted to rebuild this structure, whose looting is depicted on the Arch of Titus.

ANSWER: <u>Jewish Temple</u> [or <u>Second Temple</u>; or <u>Temple of Jerusalem</u>; or <u>Herod's Temple</u>; or <u>Beit HaMikdash HaSheni</u>; prompt on the <u>Temple</u>; do not accept or prompt on "Temple Mount" or "synagogue" or "First Temple" or "Solomon's Temple"]

<Clark Smith, History - Ancient, Commonwealth, Cross, and Misc.>

15. The answer to Mr. Weston's riddle "What two letters of the alphabet...express perfection?" is a reference to this character's first name. For 10 points each:

[10] Name this character, who copies a different riddle from the vicar Mr. Elton into a collection belonging to Harriet Smith.

ANSWER: **Emma** Woodhouse [or **Emma** Knightley; prompt on <u>Woodhouse</u> or <u>Knightley</u>]

[10] This author of *Northanger Abbey* created the "handsome, clever, and rich" protagonist of *Emma*.

ANSWER: Jane Austen

[10] Emma tries to set Harriet up with Mr. Elton instead of Robert Martin because Martin has this profession.

ANSWER: **farmer** [or equivalents] <Billy Beyer, Literature - British>

16. The realm of this god is inhabited by a giant worm whose boiling saliva and fiery breath aid in the creation of large caverns. For 10 points each:

[10] Name this Aztec rain god whose namesake paradise serves as a posthumous refuge for drowned souls and the physically deformed.

ANSWER: Tlaloc

[10] This "weeping woman" from Mexican folklore is said to have drowned first her children and then herself, and now wanders the afterlife in the hopes of being reunited with them.

ANSWER: La Llorona

[10] Aspects of the Llorona myth may be inspired by this Aztec goddess, who often weeps at the crossroads where she abandoned her son Mixcoatl.

ANSWER: Cihuacoatl

<Cormac Beirne, Mythology>

- 17. Attaullah Abu Ammar Junui's Harakah al-Yaqin, now called this people's "salvation army," asks for fatwas despite its claims of secularism. For 10 points each:
- [10] Name this ethnic group that names Mohammed Ayyub Khan's opposing RSO. This stateless people's majority Muslim status partially motivates a genocide in the Rakhine state of majority Buddhist Myanmar.

ANSWER: **Rohingya** people **("ROW"-hin-juh")** [accept Arakan **Rohingya** Salvation Army; accept **Rohingya** Solidarity Organization]

[10] This community's founder wrote that he was the Maitreya Buddha, who was also Jesus. To receive a Pakistani passport, one must declares its founder is an impostor and all followers of this movement are non-Muslims.

ANSWER: <u>Ahmayida</u> Muslim Community [or <u>Ahmadi</u>s; or Ahmadiyya Muslim <u>Jama'at</u>] (founded by Mirza Ghulam Ahmad)

[10] After listening to foreigners who ignored starving Afghans but wanted to repair the giant statues of Salsal and Shahmama in this valley, Mullah Omar ordered the Taliban's 2001 destruction of its namesake Buddhas.

ANSWER: **Bamiyan** Valley [or **Bamyan**; accept Buddhas of **Bamiyan**] <Clark Smith, Religion – Islam / Associated Traditions>

- 18. These people used *baochao* currency to pay for over 1600 Korean-built ships used in two failed invasions. For 10 points each:
- [10] Name this conquering ethnic group whose second invasion of Japan under Kublai Khan was deterred by a "divine wind", or *kamikaze*.

ANSWER: **Mongol**s [or **Yuan** dynasty]

[10] Groups of these people arose to take advantage of weak Chinese and Korean coastal fortifications after the Mongol invasions of Japan. After the Ningbo (neeng-BUH) Incident, these bandits launched raids against China during the reign of the Jiajing Emperor.

ANSWER: <u>wokou</u> [or <u>wako</u>; or <u>dwarf pirate</u>s; or Jiajing <u>wokou</u> raids; prompt on Japanese <u>pirate</u>s]

[10] Due to the failed invasions, the Kamakura shogunate had no land to provide as rewards to the *gokenin*, whose significance was supplanted by these feudal landlords that held positions of power during the Muromachi and Edo periods.

ANSWER: **daimyo**

<Amogh Kulkarni, History - World>

- 19. Filamentous members of this phylum help to prevent soil erosion in delicate microbial communities called biocrusts. For 10 points each:
- [10] Name this phylum of photosynthetic bacteria. According to endosymbiotic theory, chloroplasts were preceded by engulfed bacteria from this phylum.

ANSWER: **Cyanobacteria** [or **Cyanophyta**; or **blue-green algae**; do not accept "algae"]

[10] Biocrust communities of cyanobacteria, algae, and fungi typically form in this biome. This biome also contains plants that use the CAM pathway and leaves with waxy cuticles to minimize water loss.

ANSWER: desert

[10] In addition to helping store water, cyanobacteria thrive in desert climates by growing filaments called heterocysts rich in these enzymes. Organisms from the *Fabaceae* family secrete flavonoids to attract bacteria rich in these enzymes.

ANSWER: nitrogenases

<Sean Farrell, Science - Biology>

20. In a novel by this author, Thibault meets a bipedal wolf who grants his wishes to harm others, causing his hairs to grow long and turn red one by one. For 10 points each: [10] Name this author of the werewolf novel *The Wolf-Leader*, who wrote about twins who feel each other's pain in *The Corsican Brothers*. Sadly, this author's version of the Abbé Faria (ah-BAY fa-ri-AH) does not share the real monk's expertise in hypnotism.

ANSWER: Alexandre <u>**Dumas**</u>, père [or Dumas <u>**Davy de la Palleterie**</u>; do not accept or prompt on "Alexandre Dumas, fils"]

[10] Pierre Picaud inspired the vengeful Edmond Dantès, who meets the Abbé Faria while imprisoned in this Dumas novel.

ANSWER: The **Count of Monte Cristo** [or Le **Comte de Monte-Cristo**]

[10] Dumas's novel about this legendary figure, whom he named Isaac Laquedem, was unfinished at his death. This character, whose fate is tied to that of the Rennepont family in a novel by Eugène Sue (uh-ZHEN SOO), appears as Ahasuerus in Jan (yan) Potocki's novel *The Manuscript Found in Saragossa*.

ANSWER: the <u>Wandering Jew</u> [or the <u>Eternal Jew</u>; or Le <u>juif errant</u>] <Clark Smith, Literature - European>

- 21. Two countries both having these things counterintuitively leads to an increase in small conflicts, according to the stability-instability paradox. For 10 points each: [10] Name these objects, which reduce the chance of large conflicts by providing a threat of mutually assured destruction.
- ANSWER: <u>nuclear weapons</u> [or <u>nuclear arm</u>s or <u>weapons of mass destruction</u> or <u>WMD</u>s or <u>atom</u>ic <u>bomb</u>s or <u>ICBM</u>s or similar answers; prompt on "weapons" or "missiles" or "arms"]
- [10] The application of game theory to nuclear strategies was pioneered in this scholar's books *The Strategy of Conflict* and *Arms and Influence*. A 1961 article by this thinker coined the term "collateral damage."

ANSWER: Thomas Crombie **Schelling**

[10] Schelling's game theoretic studies of international conflict also involved this type of strategy, in which a state pushes a situation as close as possible to active conflict in order to secure an advantageous outcome. This type of foreign policy was developed by John Foster Dulles in the mid-1950s.

ANSWER: **brinkmanship** [or **brinksmanship**] <Joseph Krol, Social Science>