

CMST II

Packet 13

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1. **A thinker from this contemporary country snarkily described sound reasoning as “having both eyes,” and recounted lessons from a Beatrice-like daughter of a foreign scholar in an absurdly long memoir. Riffing on another thinker, a philosopher born in this contemporary country argued that, since the wise are like “weeds” in non-ideal politics, philosophers require a “regime of the solitary.” Šadr al-Dīn Qūnawī (“SAH-druh-DEEN KOO-nuh-wee”), the foreign student of a thinker born in this contemporary country, popularized that thinker’s path to a “station of no station” with a commentary on (*) *The Bezels of Wisdom*. The author of *Meccan Revelations*, Ibn ‘Arabī, was from this home country of Avempace and another thinker who argued that individual cognition is the means for an eternal “material intellect” to interact with particulars. That author of *The Decisive Treatise*, who proposed the “unity of the intellect” and “double truth” doctrines, was dubbed “the Commentator” by Aquinas. For 10 points, name this modern-day home country of Ibn Rushd, or Averroes. ANSWER: Spain [accept al-Andalus or Andalusia; reject “Portugal” or “Andorra” as Ibn ‘Arabī and Ibn Rushd were definitely born in what is now Spain]**
- <JG - Thought: Other Philosophy>

At the beginning of one play, a reporter named Knowles confesses that his passion for poetry was inspired by this character before persuading Ann and Ted to show him her study room. For 10 points each:

[10h] Name this fictional poet whose house is being sold after her death in a 1930 play that won the Pulitzer Prize for Drama. This character was loosely inspired by Emily Dickinson.

ANSWER: Alison Stanhope [accept *Alison’s House*; prompt on Stanhope]

[10m] *Alison’s House* is a play by this author, who also wrote about Mrs. Hale and Mrs. Peters hiding a strangled canary to cover up Minnie’s crimes in her one-act play *Trifles*.

ANSWER: Susan (Keating) Glaspell

[10e] Glaspell founded the Provincetown Players, a theater collective that gave voice to many women artists and writers such as this poet, who would later go on to win the 1923 Pulitzer Prize for Poetry for her poem “Ballad of the Harp-Weaver.”

ANSWER: Edna St. Vincent Millay [or Nancy Boyd]

<WJ - Literature: American>

2. **Historians continue to debate three possible statuses of a component of this kingdom due to a treaty’s use of the intentionally vague term “*applicare*” (“app-lih-CAR-ay”). A ruler of this kingdom defeated a rebellion triggered by the Czech bishop Jan Muskata and a German burgher called “Mayor Albert.” The will of a ruler called “the Wry-Mouthed” fragmented this kingdom, and Johannes Longinus described how Henry the Pious’s attempt to reunify it failed when he was tricked by a smokescreen and feigned retreat planned by (*) Subutai. A king called “The Elbow-High” reunited this kingdom in the early 14th century. This kingdom’s medieval rulers legendarily descended from a wheelwright, and its aristocracy could semi-legally rebel with a *rokosz* (“ROH-kosh”). At the Union of Krewo (“KREH-vouh”), a marriage was arranged between this kingdom’s queen and Grand Duke Jogaila (“yo-GAI-luh”), who then defeated the Teutonic Knights at the Battle of Grunwald. For 10 points, name this country that Jadwiga (“yah-DVEE-guh”) united with its neighboring Lithuania. ANSWER: (Kingdom of) Poland [or *Królestwo Polskie*; or *Regnum Poloniae*; or *Königreich Polen*; accept the contemporary titles Republic of Poland or *Rzeczpospolita Polska*; accept Poland-Lithuania but do NOT accept or prompt on “Lithuania” alone]**
- <JM - History: European>

This artist depicted a female orisha of love with equine characteristics in *Eternal Presence*, a painting dedicated to composer Alejandro García Caturla. For 10 points each:

[10h] Name this artist who also depicted a female-equine hybrid in *Horse-Headed Woman*. The elongated legs, rounded buttocks, and masks in a well-known painting by this artist drew on African influences in his home country.

ANSWER: Wifredo (Óscar de la Concepción) **Lam** (y Castilla)

[10e] Lam was born to an Afro-Cuban mother and a father of this ethnicity. Lam's work reportedly drew inspiration from concepts like *Yin* and *Yang* and texts like the *Yijing*, which he sought out on account of this heritage.

ANSWER: **Chinese**-Cuban [or **chino**-cubano; accept **Zhōngguó rén**; accept **Han** Chinese Cubans or **Hàn rén**]

[10m] Like Lam, this Cuban-American artist drew from Santería for a performance piece in which she poured blood down her body. This artist's husband Carl Andre remains free despite evidence that he murdered her.

ANSWER: Ana **Mendieta**

<VA - Arts: Painting and Sculpture>

3. **The set of states of this entity forms a five-dimensional representation of SO(3) (“s o three”). Tensors of different forms of this entity have elements proportional to “3 (r sub i) (r sub j) minus (r squared times the Kronecker delta of i and j).” Unlike its temperature spectrum, the polarization spectrum of the CMB only reflects anisotropies of this name. The square of the third time derivative of one entity with this name is proportional to the radiated power of (*) gravitational waves. Accelerators transport particle beams over long distances using a configuration of magnets with this name, which can be created by reversing the current flow in one Helmholtz coil. The potential due to a group of charges in this configuration falls off as $1/r^3$ (“one over r cubed”).** For 10 points, name this third term of the multipole expansion, which can be obtained by putting positive and negative charges at opposite corners of a square.

ANSWER: **quadrupole** [accept mass/electric **quadrupole** moment tensor]

<DE - Science: Physics>

Michele Piccione and Ariel Rubinstein studied decision problems where this assumption *fails* in a paper introducing the absent-minded driver's paradox. For 10 points each:

[10h] Identify this assumption, whose name was coined by Harold Kuhn. Often made when studying extensive form games, it requires that no agent ever forgets information they knew about moves made earlier in the game.

ANSWER: **perfect recall**

[10e] Assuming perfect recall, Kuhn's theorem guarantees a strategy described by this adjective that has the same payoff as a given mixed strategy. Psychological effects on decision-making are studied in an economic subfield named for this adjective.

ANSWER: **behavioral** [accept **behavioral** strategy accept **behavioral** economics]

[10m] John Harsanyi introduced his purification theorem to solve the “intuitive problem” that mixed strategy Nash equilibria have this property. If A always gives at least as good of an outcome as B, A has this kind of dominance over B.

ANSWER: **weakness** [accept **weak** Nash equilibrium; accept **weak** dominance; accept word forms, such as that “A **weakly** dominates B”]

<CK - Hard Social Science: Economics>

4. *Description acceptable.* **This character annoys an assailant by elegantly dodging the rocks he throws, but is hit in the forehead after striking that assailant in the calf with a stone the narrator hands her. At the town boogeyman’s door, this character boldly asks for the return of toys he supposedly stuffed into his black bag. This character, whom Maestra Oliviero calls a “pleb,” is thrown through a second-story window when her (*) shoemaking father discovers that she took the middle school entry exam. This character names her daughter Tina after a doll that she throws into Don Achille’s cellar. This woman’s son Rino calls the narrator Elena Greco to tell her of this character’s disappearance at the start of a novel followed by *The Story of a New Name* in a four-part series completed in 2015. For 10 points, identify this character referred to by the title of the first entry in the *Neapolitan Novels* of Elena Ferrante.**

ANSWER: Lila Cerullo [or Lina Cerullo; accept Rafaella Cerullo; accept *My Brilliant Friend* or *L’amica geniale*; accept answers describing the friend of the narrator from the *Neapolitan Novels* before “*Neapolitan Novels*” is read; prompt on Cerullo]

<CS - Literature: European>

The Eastern Christian feast of the Dormition celebrates this figure’s “falling asleep” before being taken up to heaven, whereas Western Christian teaching leaves it ambiguous whether she died beforehand or not. For 10 points each:

[10e] Name this figure whose status as the biological parent of Jesus has been the subject of much Christian theological debate and analysis. Catholic dogmas insist upon her Immaculate Conception and eventual Assumption.

ANSWER: (holy/blessed/Virgin/Saint/Our Lady) Mary (mother of Christ/Jesus/God/etc.) [or Maryam; or Maria; prompt on only titles like Mother of God, Theotokos, etc.]

[10m] This third ecumenical council approved Mary’s disputed title *Theotokos*, or “God-bearer,” thus repudiating Nestorius’s insistence on *Christotokos* and related claims, causing the first major schism.

ANSWER: (First) Council of Ephesus [reject Second or Third Council of Ephesus]

[10h] Nestorius rejected the idea of “hypostatic union”—that Christ’s two distinct natures are united in one *entity*—instead favoring *this* kind of union, in which Christ’s natures are separately expressed in one united *person*.

ANSWER: (mono-) prosopic union [accept prosopon; reject answers involving “dyoprosopic”]

<JM - Religion>

5. **This composer based the B section of a piece’s third movement on his song “The Two Blue Eyes of My Beloved.” Leonard Bernstein restored one of five notes for a non-standard percussion instrument this composer initially included in a symphony. The second movement trio section of a symphony by this composer alternates between 3/8 and 4/8 time and is marked “old-fashioned.” The theme (read slowly) “ascending A, B flat, C, long D, descending C, B flat, G, E, D, D, C” is named for this composer’s (*) wife, and appears in that sixth symphony. This composer incorporated materials from his *Songs of a Wayfarer* into his first symphony, which opens with a double-bass solo, includes a canon on “Frere Jacques,” and is nicknamed “Titan.” For 10 points, name this composer whose eighth Symphony is nicknamed for its enormous ensemble.**

ANSWER: Gustav Mahler (The unusual percussion instrument restored by Leonard Bernstein is the hammer used in the sixth symphony.)

<JM - Arts: Classical Music>

Answer some questions about the Caribbean Legion, a group of Latin American leaders and exiles in the 40s and 50s, including a young Fidel Castro, that aimed to eliminate dictatorships in the region. For 10 points each:
[10e] The Legion ultimately failed at one of its founding goals of ousting this country's U.S.-backed dictator. For example, that dictator, Rafael Trujillo, easily fended off an inept invasion of this country in the Cayo Confites Affair.

ANSWER: **Dominican Republic** [or La **República Dominicana**]

[10h] One of the Legion's biggest successes was this leader's overthrow of Teodoro Picado in the Costa Rican Civil War. He then abolished Costa Rica's armed forces and granted women and Afro-Costa Ricans the right to vote.

ANSWER: José **Figueres Ferrer** [accept either underlined portion; accept "**Don Pepe**;" reject "José María Figueres," as that's his son who was president from 1994–98]

[10m] Another of the Legion's supporters was Juan José Arévalo, who was succeeded by this leader. The period from Arévalo's presidency to Carlos Castillo Armas's coup against this man is called the "Ten Years of Spring."

ANSWER: Juan Jacobo **Árbenz** Guzmán

<JG - History: World>

6. **In a 2002 paper, Joanne Entwistle argued that members of this profession undergo a unique valorization process due to "circuits of value" that paradoxically disincentivize conventional economic incentives. Marshall McLuhan's comparison of a member of this profession to a T. S. Eliot poem inadvertently popularized a controversial slogan imploring everyone to "Forget Oxfam." The role of "cultural intermediaries" in organizing "requests" and "cattle calls" for this profession was detailed in a 2011 ethnography by Ashley Mears about "pricing" a certain trait. (*) Oscar de la Renta contended that America became seen as a global cultural force in part by inviting pioneering Black members of this profession to the 1973 "Battle of Versailles" fundraiser. This profession underwent a boom in 1960s London with the success of Jean Shrimpton and the androgynous "Face of 1966," Twiggy. "Heroin chic" was popularized by Kate Moss, a member of—for 10 points—what profession that walks the runway at fashion shows?**

ANSWER: **models** [or super**models**]

<WJ - Thought: Soft Social Science>

When melted together, this element and caesium surprisingly form a stable transparent yellow salt that behaves as a semiconductor, unlike almost all other bimetallic compounds. For 10 points each:

[10m] Name this element, a transition metal whose complexes form unique aggregations with metallophilic bonds comparable in strength to hydrogen bonds, which can be used for self-assembly applications.

ANSWER: **gold** [or **Au**; accept caesium **auride**]

[10e] The unusual stability of caesium auride is explained as a consequence of this theory. Gold's unique color occurs due to the contraction of its d-orbitals in accordance with this theory.

ANSWER: **special relativity** [or **SR**; prompt on **relativity** or word forms; reject "general relativity"]

[10h] Relativistic effects also explain gold(I)'s ability to stereoselectively catalyze a reaction of this type discovered by the Toste lab. A two-step reaction of this type pioneered by Eduard Buchner forms cycloheptatrienes.

ANSWER: **ring expansion** [prompt on **rearrangement** reactions; prompt on **ring formation** reactions]

<JM - Science: Chemistry>

7. **In a film by this director, the camera pans out on a masked guitarist sitting in a tunnel and suddenly cuts to a desolate parking garage. Julie Dash’s *Daughters of the Dust* inspired this director to depict herself being pulled into the ocean by a procession of white-robed women. Earlier in that film, this director narrates how she “tried to change, closed my mouth more, tried to be soft” as she strips while drowning underwater in front of a bedridden clone as the word “denial” flashes on screen. A film by this director includes a black-and-white scene in which (*) Serena Williams dances in a Southern mansion repeating “Middle fingers up, put them hands high.” This director, who included Chimamanda Adichie’s speech “We Should All Be Feminists” in a self-titled visual album from 2013, faced police union boycotts after wearing a Black Panther-influenced costume for her Super Bowl halftime performance of “Formation.” For 10 points, name this director whose husband’s infidelity inspired the visual album *Lemonade*.**

ANSWER: **Beyoncé** (Giselle) Knowles(-Carter) [or **Knowles, Carter**, or **Knowles-Carter**]

<WJ - Arts: Film>

One character in this novel is guided to a shipwreck inhabited by the half-spirit Farida, where he accepts a quest to look for her lost son. For 10 points each:

[10h] Name this novel that follows Muidinga and Tuahir at the end of a civil war. While wandering in an abandoned school bus, this novel’s protagonists find the notebooks of a man named Kindzu.

ANSWER: ***Sleepwalking Land*** [or ***Terra Sonâmbula***]

[10m] *Sleepwalking Land* was written by this Mozambican author who won the Neustadt International Prize for Literature in 2014.

ANSWER: Mia **Couto** [or António Emílio Leite **Couto**]

[10e] In 2013, Couto also won the most prestigious award for Portuguese-language literature, which is named after this author of *The Lusíads*.

ANSWER: Luís Vaz de **Camões** [accept the **Camões** Prize or *Prémio Camões*]

<EL/WJ - Literature: World>

8. **This novel may have taken its plot from an earlier, anonymous Irish novel in which Marinda is courted by a prince from William of Orange’s army, which shares its title with this later novel’s subtitle. A man in this novel disguises himself as the housemaid Nan in an attempt to molest this novel’s protagonist. In response to unofficial sequels, the author wrote a sequel to this novel partly titled for the protagonist’s “Exalted Condition.” This book was published just before a collection commissioned by the author’s publishers (*) Rivington and Osborn, which was a “conduct book” that inspired this novel’s writing. This novel’s heroine declines the chaplain Mr Williams’s proposal, instead waiting for both Mrs. Jewkes and her employer Mr. B to reform their wicked ways before the latter marries that heroine. For 10 points, “Virtue Rewarded” is the subtitle of what first epistolary novel by Samuel Richardson?**

ANSWER: **Pamela**, or *Virtue Rewarded* (The first line refers to *Vertue Rewarded*.)

<CS - Literature: British>

This country was the westernmost signatory of the armistice that made the diplomat and civil rights activist Ralph Bunche the first Black winner of the Nobel Peace Prize. For 10 points each:

[10m] Name this country that inspired the Eisenhower Doctrine. The US threatened to sell its pound sterling bonds during an event this country caused after the US withdrew its funding for hydroelectric projects in it.

ANSWER: (Arab Republic of) **Egypt** [or *Jumhūrīyyat Misr al-‘Arabī*] (The “event” was the Suez Crisis.)

[10e] Ralph Bunche served as director of this intergovernmental organization’s Trusteeship Council and helped draft its Universal Declaration of Human Rights with Eleanor Roosevelt

ANSWER: **United Nations**

[10h] Bunche criticized this 1967 speech in Harlem for alienating possible supporters of the civil rights movement. It described the US as “approaching spiritual death” by funding the military over “programs of social uplift.”

ANSWER: “**Beyond Vietnam: A Time to Break the Silence**”[accept either underlined portion; accept the **Riverside Church** Speech; prompt on descriptions of MLK publicly announcing his opposition to the Vietnam War] (by Martin Luther King, Jr.)

<VA - History: American>

9. **A man from this state named Ken Nelson misinterpreted an archaeology paper, smoked the psychedelic venom of a toad from another state, and published a pamphlet under the pseudonym Albert Most. The “Silent Wings” museum in this state honors WWII glider pilots. Businessman Stanley Marsh—who used the Arabic numeral “3” instead of the “pretentious” Roman numeral for “the third”—paid the group Ant Farm to construct art installations in this state. This state’s Loving County is the (*) least populous in the US.**

Pantex, the only nuclear weapons producer in the US, is in this state’s panhandle in a city along Route 66. This state’s petroleum industries are regulated by its Railroad Commission. The Cañón de Santa Elena is found on an international border in this state’s Big Bend National Park. For 10 points, name this state home to Cadillac Ranch and cities including Denton, Lubbock, and Amarillo.

ANSWER: **Texas** (The toad is the Sonoran Desert Toad and its venom contains 5-MeO-DMT.)

<JM - Geography>

In 2022, the DART mission landed on one of these entities in a successful planetary defense test. For 10 points each:

[10e] Name these entities that include the quasi-satellites and the only confirmed Earth Trojan, 2010 TK₇. These entities are defined as having orbits that are close to intersecting with Earth’s.

ANSWER: **near-Earth objects** [or **near-Earth asteroids**; accept **NEOs** or **NEAs**; prompt on **asteroids**]

[10h] Some near-Earth asteroids, such as 3753 Cruithne, have this unusual type of co-orbit. From Earth’s perspective, asteroids in these orbits appear to reverse direction at either end of their trajectories.

ANSWER: **horseshoe** orbits

[10m] This planet’s two moons Janus and Epimetheus have a horseshoe co-orbit that results in them switching their semi-major axis of orbit every four years. Two other moons of this planet themselves have Trojan moons orbiting at their Lagrange points.

ANSWER: **Saturn**

<DE - Science: Astronomy>

10. *Description acceptable.* Since 1970, Eddie Carvery has led an unbroken protest of the demolition of a town settled by *these people*. These people's communities mocked their birthplace with dances called "Koonkings." Some of these people settled in Trinidad's Naparima Plain and created folk religions targeted by "Anti-Shouter" laws. Thomas Potters and David George led these people in prayers under a *kepok* tree to found a town bought from "King Tom" of the Temne. Descendants of this group's community in Birchtown, (*) Nova Scotia include the activist Viola Desmond. Alexander Cochrane's Corps of Colonial Marines in the War of 1812 mainly consisted of these *non-indigenous* people and later defended a namesake Florida fort against Andrew Jackson. After Lord Dunmore's Proclamation, many of these people became refugees and moved to Halifax's Africville neighborhood. For 10 points, give these people who settled Sierra Leone after siding against their pro-slavery birthplace in the Revolutionary War.

ANSWER: **Black Loyalists** [accept **Black Refugees** until "refugee" is read; accept answers conveying both **Black/African-American/formerly enslaved people** and **siding with the British**; prompt on partial answers like **siding against the US** alone; prompt on specific communities like **Black Canadians** or **Black Nova Scotians** by asking "who were refugees after allying with what side?"]

<JG - History: Ancient/Other>

This thinker considered materialist explanations for the unity of multicellular organisms in the dialogue *D'Alembert's Dream*. For 10 points each:

[10m] Name this writer who was imprisoned after revealing his atheism in the 1749 *Letter on the Blind*. This thinker may have contributed to Baron d'Holbach's *The System of Nature*.

ANSWER: Denis **Diderot** ("day-NEE dee-duh-ROH")

[10e] Diderot and D'Alembert co-edited this work, which aimed to collect all human knowledge.

ANSWER: **Encyclopédie** [or **Encyclopedia**]

[10h] This most prolific of the *encyclopédistes* contributed 17,266 articles, averaging eight per day. Despite his nickname "the slave of the *Encyclopedia*," this author passionately denounced slavery in a number of his articles.

ANSWER: (Chevalier) Louis de **Jaucourt** ("zhoe-KOR")

<DE - Thought: Philosophy>

11. **An enzyme that converts between two derivatives of this compound has a biologically unique mechanism involving O-alkyl cleavage and water addition, as opposed to the S_N2 reaction typical of ester hydrolases. It's not bile, but ultraspiracle protein, a component of the ecdysone receptor, is a homolog to a receptor for a derivative of this compound. A 15:17 translocation that can result in RARA/PLZF fusion causes a variant of AML that is treated with arsenic trioxide and a derivative of this compound. In chordates, a derivative of this molecule directly binds (*) Hox genes during embryonic axis formation, which explains the high teratogenicity of a related compound, the acne drug accutane. In the body, this compound is primarily stored as an ester in hepatic stellate cells. Bakuchiol is an alternative to this compound in topical formulations, which is mistakenly thought to cause photosensitivity. The 11-cis form of this compound makes up part of the purple pigment complex rhodopsin. For 10 points, name this vitamin that beta-carotene is a form of.**

ANSWER: vitamin **A** [or **retinal**; or **retinol**; or (beta)-**carotene** before mentioned; or all-trans **retinoic acid**; accept **ATRA**]

<AF - Science: Biology>

Post-bop pianist Don Friedman played one of this composer's songs, "So in Love," with a flurry of arpeggios in a solo rendition on his trio album *Circle Waltz*. For 10 points each:

[10m] Name this American Broadway and Hollywood composer. Many of his songs, including "I Love You," "Get Out of Town," and "You'd Be So Easy to Love," are canonical jazz standards.

ANSWER: Cole (Albert) **Porter**

[10h] This Porter standard begins with the melody on the major seventh of the flat-six chord, resolving as a tritone substitution to the five seven chord. It was first performed by Fred Astaire in *The Gay Divorcee*.

ANSWER: "**Night and Day**"

[10e] This legendary jazz singer and "First Lady of Song," known for her virtuosic scat improvisation, recorded a double album where she *Sings the Cole Porter Songbook*.

ANSWER: Ella (Jane) **Fitzgerald**

<JM - Arts: Jazz>

- HALFTIME -

12. In Lunenburg English, some word pairs are distinguished by only this feature because of extreme non-rhoticity. A.J. Aitken names a linguistic rule in Scottish languages relating this feature to its context. Three categories of this phonemic quality are distinguished in Luiseño, Mixe, Dinka, and Estonian. Two adjacent sounds switch their values for this feature in the phenomenon of "quantitative metathesis." A shift in early Proto-Indo-European where this feature changes after the deletion of fricatives or laryngeals is named Szemerényi's ("SEH-mer-AY-nyi's") law, and it is similarly modified in Stang's law. Those changes to this quality following a consonant deletion are called (*) "compensatory." Increase in this quality for a consonant is called "gemination," and it is measured by units called "morae." Many languages indicate this phonological quality by doubling letters. For 10 points, name this linguistic feature which English phonics classes distinguish by placing a straight or curved line over a vowel.

ANSWER: **length** [accept answers of **length** prefaced by any of the following words: phonological, phonetic, phoneme, vowel, consonant, syllable, temporal, sound, temporal, or chronological; prompt on duration or time]
<JM - Hard Social Science: Linguistics>

Artificially adding an analog to this type of process to a differential equation can improve the stability of numerical solutions. For 10 points each:

[10m] Name this type of process represented by the Q_j term in classical Lagrangians. Rayleigh proposed a function named for this process whose gradient represents a force of minus $k \cdot v$.

ANSWER: **dissipation** [or **dissipative** process; or **non-conservative** process; prompt on friction with "what type of process is that?"]

[10h] The basins of attraction of dissipative systems often satisfy a property named for this Japanese mathematician. This mathematician's namesake lakes are three connected open sets which all have the same boundary.

ANSWER: Takeo **Wada** [accept **Wada** property, **Wada** basins, or lakes of **Wada**]

[10e] Exit basins of systems exhibiting this behavior frequently possess the Wada property. The motion of a double pendulum exhibits this behavior characterized by sensitivity to initial conditions.

ANSWER: **chaos** [accept word forms]

<DE - Science: Physics>

13. **The polygenist bishop John Colenso condemned this conflict, for which Bartle Frere manufactured a *casus belli* to smooth the way for a federation modeled on an 1867 Act. A lack of screwdrivers to open ammo boxes and a standing order not to open any new boxes until the previous one was empty contributed to the result of a battle named for a solar eclipse during it. This conflict's winner fought off the two-month Siege of Eshowe, and its soldiers used (*) pickaxes to hack through hospital walls during a successful defense against a force ten times larger. That winner of this war adopted infantry square tactics after a defeat during which enemy reserves attacked Rorke's Drift. This war ended with the sack of Ulundi, the capital of a kingdom that won the Battle of Isandlwana, and was followed by the First Boer War. For 10 points, name this conflict that deposed Cetshwayo, who ruled a kingdom unified by King Shaka.**

ANSWER: Anglo-**Zulu** War

<DE - History: World>

Sharing the same falcon-headed form, this deity was sometimes syncretized with Horus, and according to some legends he created humans from his tears and sweat. For 10 points each:

[10e] Name this ancient Egyptian deity. Before Akhenaten instituted a henotheistic cult system around it, the deified solar disc Aten was considered an aspect of this god, which was later syncretized with Amun.

ANSWER: (Amun-)Ra [or **Re**; or **Re/Ra**-Horakhty]

[10m] The temple of Ra-Aten at Heliopolis venerated him in the form of this bull deity, which Plutarch reported was second only in importance to the Apis bull.

ANSWER: **Mnevis** [or **Mer-wer**; or **Nem-wer**]

[10h] Auguste Mariette's excavation of this site's Serapeum found the burial sites of 60 former Apis bulls, which were sacrificed and "reborn" into another bull to be worshiped. Along with a Necropolis, this site is the location of the Pyramid of Djoser.

ANSWER: **Saqqara** [accept Serapeum of **Saqqara** and **Saqqara** Necropolis]

<JM - Geography (Mythology)>

14. **Art historian Józef Grabski argued that this painting subtly depicts the Colonna family's coat of arms. A Rona Goffen book titled for the "*Women*" of this painting's artist argues that, since female orgasm was then thought to be necessary for conception, this work depicts a post-coital scene. A man in a chair gestures toward this painting while another holds it up for onlookers in the foreground of Johan Zoffany's (*) *Tribuna of the Uffizi*. A later painter's "derivation" of this work is discussed in an essay from T.J. Clark's *Painting of Modern Life* titled for the later work's "Choice." In the background of this painting, a potted myrtle plant sits above a woman in white bent over to search deep in a chest. Edouard Manet's *Olympia* presented a prostitute modeled by Victorine Meurent in the pose used in this painting. For 10 points, name this painting of a reclining nude woman with a dog by Titian.**

ANSWER: **Venus of Urbino**

<JM - Arts: Painting and Sculpture>

This writer lends his name to a term for shoe fetishism on account of his lascivious novel *Fanchette's Foot*. For 10 points each:

[10h] Name this 18th century French novelist, an early self-identified “communist” thought to have coined the word “pornographer” in a book of the same title.

ANSWER: Nicolas **Restif** (de la Bretonne) (“rheh-TEEF”) [or Nicolas-Edme **Rétif**] (The term for shoe fetishism is “retifism.”)

[10m] Restif tried to counter the ideology of this novel with an *Anti-* novel of his own. In this scandalous novel, the title 12-year-old maiden is enslaved and horrifically abused after heading to a monastery to confess.

ANSWER: **Justine** [accept *Anti-Justine*]

[10e] *Justine* was written by this libertine author of erotic novels like *The 120 Days of Sodom*, a revolutionary nobleman who lends his name to the term for deriving sexual pleasure from inflicting pain.

ANSWER: Marquis de **Sade** [or Donatien Alphonse **François**; prompt on **sadism** and word forms]

<JM - Literature: European>

15. **Sinton and Cuevas developed a technique for determining this quantity by measuring photoconductance of a sample in quasi-steady-state mode. This quantity is given by density times a parameter denoted gamma in Langevin theory, which governs low-mobility systems. Porter and Norrish pioneered a technique for measuring this quantity based on differences in absorption compared to a ground-state measurement. This quantity is decreased by “deathnium” and other traps in the (*) Shockley-Read-Hall model. The reciprocal of this quantity equals the sum of the reciprocals of terms for radiative and non-radiative decay processes. This quantity for electronic transitions is low compared to for nuclear processes by the Frank-Condon principle. Processes with extremely small values of this quantity are studied using “pump-probe” and other ultrafast spectroscopy techniques. For 10 points, name this quantity that measures how long a carrier or an excitation lasts before decaying.**

ANSWER: carrier **lifetime** [accept **recombination rate** or **recombination time** since they’re very related; accept **timescale**; prompt on **time**; prompt on answers indicating **how long** something takes or lasts until “how long” is read in the last sentence]

<AF - Science: Chemistry>

Though it’s not explicitly affirmed, mathematician L.E.J. Brouwer of fixed-point theorem fame is usually thought to have expounded this philosophical position in his book *Life, Art, and Mysticism*. For 10 points each:

[10e] Give this word for the position that only you yourself exist, often used pejoratively in common speech.

ANSWER: **solipsism** [accept word forms like “**solipsistic**”]

[10h] This contemporary Japanese thinker developed his idea of “solipsity” in works like *A Transfer Student and Black Jack*, titling his Wittgenstein-influenced *Philosophical Investigations*’s second volume *The “Solipsitic” Structure of Being*.

ANSWER: **Nagai** Hitoshi [accept both names in either order]

[10m] This non-dualist school of Hindu philosophy is considered solipsistic as it argues that the self is identical with all reality. This school’s thinkers like Adi Shankara were inspired by sayings like “*tat tvam asi*” from the Mahāvākyas (“muh-huh-VAHK-yuhs”) of the Upanishads.

ANSWER: **Advaita** Vedanta [prompt on **Vedanta**]

<JM - Thought: Other Philosophy>

16. **This poet's headstone bears the lines "Greek ecstasy / reclaims forever / one who died / following intricate song's / lost measure," from the poem "Epitaph." This poet warned, "Do not be beguiled / by the geometry of perfection" in a work lamenting that "we have given until we have no more to give; / alas, it was pity, rather than love, we gave." This poet asks, "What is it, / this flower / that in itself had power over the whole earth?" after arguing that "woman is perfect" and rejecting her doctor's "talk of (*) man-strength." This poet reflected on the choice to be an artist or a muse in one of her autobiographical works, *HERmione*, and wrote about her time as a psychiatric patient for bisexuality in *Tribute to Freud* and *The Master*. For 10 points, what American Imagist poet, who retold Greek and Trojan epics from a feminist perspective in *Helen in Egypt*, was known by her initials?**

ANSWER: **H. D.** [or Hilda **Doolittle**]

<JM - Literature: American>

Out of fear that the United States would attempt to assassinate him, this man's name was hidden even from his colleagues, leaving him to be addressed solely as "Chief Designer." For 10 points each:

[10h] Name this man who led the Soviet space program until his death in 1966. He nearly died in a gulag in Kolyma during World War II and spearheaded development of the R-7 Semyorka rocket that launched *Sputnik*.

ANSWER: Sergei **Korolev** [or **Korolyov**]

[10e] In 1946, Korolev went to recover the technology behind this Nazi long-range rocket launched from the Baltic town of Peenemünde. Operation Paperclip brought many of its designers, like Wernher von Braun, to the US.

ANSWER: **V-2** [or *Vergeltungswaffe-2*; also accept **Aggregat 4** or **A4**; accept any answer that includes both the number **2** and a translation along the lines of "**Retaliation** Weapon" or "**Vengeance** Weapon"]

[10m] Korolev's mentor was this aviation designer, who created the Red Army's main World War II frontline bomber. His namesake, non-Mikoyan-Gurevich "design bureau" produced the Concorde airliner's sole competitor.

ANSWER: Andrei **Tupolev**

<DE - History: European>

17. **After the Governor of Pennsylvania was elected representing this party and nobody could agree who controlled the legislature, Joseph Ritner summoned the militia to the capitol in the "Buckshot War." Although he denied it, a founding member of this party allegedly said a random corpse found in the Niagara River would be "good enough" for their propaganda purposes until after the election. That man promoted this party through what later became the Whigs' main newspaper, *The Albany Journal*. This party, which ran the first ever presidential (*) nominating convention, got Silas Jennison elected as Lieutenant Governor of the only state they carried in a presidential election, Vermont. This party emerged in reaction to William Morgan's disappearance, with Thurlow Weed publishing in favor of candidates like William Wirt. For 10 points, name this earliest American third party, formed to oppose a namesake fraternal organization.**

ANSWER: **Anti-Masonic** Party

<JM - History: American>

Johannes Brahms became increasingly obsessed with this rhythmic motif as his career progressed, building his third symphony's first movement around it and later deploying it in *Three Intermezzi for Piano*. For 10 points each: [10m] Give this simple polyrhythm often called "hemiola" in classical theory. A just-intoned perfect fifth is an interval of two pitches with this ratio.

ANSWER: **three** against/over/and **two** [accept in either order; accept **sesquialtera**]

[10e] This Czech composer utilized "horizontal hemiola," where a measure of two beats is followed by a measure of three, in the *Furiant* movements of his *Slavonic Dances*. His ninth symphony is titled *From the New World*.

ANSWER: Antonín (Leopold) **Dvořák** ("duh-VOR-zhak")

[10h] Lewis Lockwood called the Scherzo movement of this Beethoven piece an "explosion of rhythmic eccentricity" for its complex use of both three against two and two against three, in some places at the same time.

This B-flat chamber piece dedicated to Joseph Franz von Lobkowitz opens with an "Allegro con brio" movement.

ANSWER: (Beethoven's) **String Quartet** no. **6** in B-flat major, Op. 18 [prompt on partial answers]

<JM - Arts: Classical Music>

18. **A play from this country where four lumbermen discuss their hopeless situation as a prop representing the title *Raft* disintegrates is a sequel to a work about the impotent Zifa, *Song of a Goat*. In a play from this country, a villager wonders if the world is "adrift in a void" after a character tries to assume his father's ceremonial duties. In another play set in this country, a corrupt (*) surgeon torments and imprisons his father, who is also a doctor. In a play from this home country of J. Pepper Clark, the title dictator receives Segi's father's head after requesting a ceremonial yam for a king's abdication. In another play from this country, the colonial administrator Simon Pilkings arrests Elesin Oba before he can commit ritual suicide. For 10 points, name this country, the setting of *Madmen and Specialists*, *Kongi's Harvest*, and *Death and the King's Horseman* by Wole Soyinka.**

ANSWER: (Federal Republic of) **Nigeria** [or *Jamhuriyar Tarayyar **Najeriya**, Orilè-èdè Olóminiira Àpapò **Nàjíríà**, or Òhànjíkò Òhànézè **Naijíríyà**]*

<JM - Literature: World>

These places originally arose from the *ager publicus*, land seized in conquered provinces and distributed by the Roman government. For 10 points each:

[10m] Specific Latin term required. Name these dominant institutions of the Roman agricultural economy often run from a villa. These estates specializing in large-scale export agriculture relied heavily on slave labor.

ANSWER: **latifundia** [or **latifundium**]

[10e] The crowding out of Roman small farmers by *latifundia* was a major spur of the land reforms advocated by these brothers. Senatorial enemies were able to send mobs or militias to kill both of these tribunes of the plebs.

ANSWER: **Gracchi** brothers [or Tiberius Sempronius and Gaius Sempronius **Gracchus**]

[10h] This classicist argued that Rome's *latifundia* agriculture made it the closest thing to a "genuine slave society" before the trans-Atlantic slave trade in works like *Ancient Slavery and Modern Ideology* and *The Ancient Economy*.

ANSWER: (Sir) Moses (Israel) **Finley** [or Moses (Israel) **Finkelstein**]

<JG - History: Ancient/Other>

19. **An album by a musician from this family opens by affirming that “we all have the need to feel special” which “can bring out the best in us, yet the worst in us” before a track featuring a distorted violin solo by Vanessa-Mae. Another track on that album is followed by a controversial interlude in which that musician from this family masturbates on the phone with her ex-sister-in-law. “Got ’Til It’s Gone” was by a musician from this family, another member of which declares that “every street you walk on I leave (*) tear stains on the ground” in a 1969 song later sampled by Jay-Z on “Izzo (H.O.V.A.).” That song features a call-and-response hook in which a singer from this family implores, “Oh, baby, give me one more chance,” to which his other family members croon back, “To show you that I love you.” For 10 points, name this “First Family of Soul” whose Motown band of five did not include Janet, but did include Michael.**

ANSWER: **Jackson** family [accept Janet (Damita Jo) **Jackson**; accept Michael (Joseph) **Jackson**; accept **Jackson** 5]

<WJ - Arts: Other Music>

In *Critique of Fetish-Capital*, this theorist argued that commodity fetishism is not an ideological phantasm but rather a systemic reflection of the “self-movement” of social creations like finance and products. For 10 points each:

[10h] Name this Canadian historian and sociologist, a late student of the Frankfurt School, who was inspired by the *Grundrisse* to argue that critical theory must be immanent to its historical purpose in works like *Marx Reloaded*.

ANSWER: Moishe **Postone**

[10e] Postone wrote extensively about this ideology, which he thought to be entangled with capitalist society’s separation of the abstract and concrete. Mobilization of this ideology culminated in the Holocaust.

ANSWER: **antisemitism** [or **anti-Judaism**; accept answers indicating prejudice or violence against the Jewish people and religion]

[10m] Postone’s work critiques this capitalist ideological configuration, a phenomenon that Antonio Gramsci (“GRAM-shee”) discussed alongside “Americanism” and “Taylorism” in his *Prison Notebooks*.

ANSWER: **Fordism**

<JM - Thought: Soft Social Science>

20. **An influential theorist of this subject divided its failures into “quantitative” and “qualitative” types corresponding to its “grammatical” and “psychological” modes. A scientifically robust or “Objective” version of this subject was advanced in *Objective Knowledge* by Karl Popper. The thinker who popularized the term *Geisteswissenschaft* (“GYST-es-VISS-en-shoft”), or “human sciences,” argued that this subject’s necessary involvement distinguishes human sciences from natural sciences. An influential book theorized that this subject proceeds when constraints on its subject and object align in a (*) “fusion of horizons.” The “intrinsic temporality” and “historicality” of this subject were emphasized by a thinker who influenced *Truth and Method*. In this method studied by Wilhelm Dilthey (“DEEL-tie”), Hans-Georg Gadamer, Paul Ricœur (“rih-CUR”), and Freidrich Schleiermacher (“SHLY-ur-MOCK-ur”), the recursive relationship between a text’s whole and parts is called this subject’s “Circle.” For 10 points, give this term for the theory of interpretation.**

ANSWER: **hermeneutics** (“herm-uh-NEW-tiks”) [prompt on (philosophical or textual) interpretation before mention; prompt on exegesis, understanding, or Verstehen]

<JM - Thought: Philosophy>

Erd2 codes for the receptor involved in retrieval of proteins between these two organelles. For 10 points each:
[10e] Name these two organelles that sit on opposite sides of the vesicular-tubular cluster, also known as their “intermediate compartment.” Proteins are trafficked from one of these two organelles to the other before being packaged into vesicles and transported to their final destination.

ANSWER: **ER** and **Golgi** apparatus/body [accept **endoplasmic reticulum** in place of ER]

[10m] Hardwick and Pelham discovered that Sed5, one of these proteins, is required for ER-Golgi trafficking. NSF unravels complexes of these proteins during vesicle-membrane fusion.

ANSWER: **SNAREs** [or **SNAP receptors**]

[10h] The “bulk flow” model of ER-Golgi trafficking was largely discredited based on studies that used this virus’s G protein, which is secreted from the ER in a highly temperature-dependent manner.

ANSWER: **vesicular stomatitis** virus [or **VSV**; or Indiana **vesiculovirus**; or **vesicular stomatitis Indiana** virus; or **VSIV**]

<AF -Science: Biology>

21. **In a 1969 paper on large scale shock formation, W.W. Roberts built on the work of Ernst Opik to lay the foundation for the discovery of this law. The 2MASS Survey conducted a survey of peculiar velocities using this law. In addition to their use in avoiding dust extinction, redder bandpasses are preferred for measuring this law to mitigate the effect of star formation history. A measure called W_{20} , 20% of the inclination corrected width of the (*) 21 cm line, is commonly used to estimate velocities central to this law. Considering only gas and stellar mass results in a tighter, baryonic form of this law. Using the virial theorem with the assumption of constant surface brightness allows the derivation of a scaling proportional to rotational velocity to the fourth power central to this law. An analogous form of this relationship for elliptical galaxies is named for Sandra Faber and Robert Jackson. For 10 points, name this doubly eponymous relation between luminosity and rotational velocity used to estimate distances to spiral galaxies.**

ANSWER: **Tully-Fisher** relation [prompt on **T-F** relation or **TFR**]

<DE - Science: Astronomy>

At the end of this poem, an officer screams, “O Christ, they’re coming at us!” before he becomes “lost in a blurred confusion of yells and groans” and bleeds to death. For 10 points each:

[10h] Name this poem which begins with the lines “We’d gained our first objective hours before / While dawn broke like a face with blinking eyes.” It ends by stating that its title event “had failed.”

ANSWER: “**Counter-Attack**”

[10m] “Counter-Attack” is a poem by this English war poet of “Suicide in the Trenches.”

ANSWER: Siegfried (Lorraine) **Sassoon**

[10e] Sassoon was a mentor and personal hero to this other English war poet of “Dulce et Decorum Est.”

ANSWER: Wilfred (Edward Salter) **Owen**

<WJ - Literature: British>

22. **In some Balkan traditions, this mythical figure is encountered as a goose floating on the eternal ocean that God asks to dive for mud so God can create the world. The earliest known reference to this figure by name depicts it “going to and fro... walking up and down” on earth as a prosecutor for a deity’s court. While underground, miners venerate statues of a syncretized version of this figure named “*El Tío*” in Potosí. The (*) Yazidi people are persecuted in part because of a story about Melek Taus that reverses the Islamic tale of *this figure*’s refusal to bow down. A new religious movement dedicated to a metaphorical reading of this figure is named for its founder Anton LaVey. For 10 points, name this adversarial figure in the mythology of Abrahamic religions, identified in Christianity as the fallen angel Lucifer.**

ANSWER: (ha-) **Satan** [or the **Devil**, or (ash-) **Shaitan**, or **Iblis**; accept **Lucifer** and **El Tío** before mention] (The earliest known reference mentioned is from Job.)

<JM - Religion (Mythology)>

The Catalan organicist Francisco Javier Sáenz de Oiza designed two iconic buildings in this city, giving the Castellana 81 skyscraper an oxidized façade and the Torres Blancas rounded concrete balconies. For 10 points each: [10m] Name this city whose other modernist landmarks include Minoru Yamasaki's Torre Picasso, Richard Rogers's Barajas Airport Terminal 4, and a pair of leaning towers by Phillip Johnson and John Burgee, the "Gate of Europe."

ANSWER: **Madrid**, Spain

[10e] This other Catalan architect is often lauded for the careful organic forms and themes of works like Parc Güell and the Sagrada Familia basilica, which is famously still under construction in Barcelona.

ANSWER: Antoni **Gaudí** (i Cornet)

[10h] This third Catalan architect is best known for his boldly colored, angular apartment complexes like Walden 7, the Gaudí district, and La Muralla Roja, the latter of which inspired some of *Squid Game*'s experimental set design.

ANSWER: Ricardo **Bofill** (Leví)

<JM - Arts: Architecture>