

CMST II

Packet 10

Written and Edited by: John Marvin, Adam Fine, Jason Golfinos, Wonyoung Jang, Clark Smith, Tim Morrison, Davis Everson-Rose, Vikshar Athreya, Caleb Kendrick, Connor Mayers, Eddy Liu, Shan Kothari, Shahar Schwartz, and James Lasker

1. **In the majority opinion of a 1984 Supreme Court case, John Paul Stevens argued that this organization could not have violated antitrust laws because its competitors were “non-existent.” This organization imposed a 10-year penalty after Abar Rouse recorded a man instructing subordinates to lie about a 2003 murder near Waco, Texas. Economists like Allen Sanderson have called this organization a cartel due to its rent-seeking tactics, which were scrutinized in two class-action lawsuits filed by Ed (*) O’Bannon and Shawne Alston. This organization’s first head, Walter Byers, claimed that it had a “neo-plantation mentality.” After whistleblowing by Sean Stopperich and David Stanley, this organization enacted its so-called “death penalty” in 1987. After a car accident involving Maurice Taylor and Mateen Cleaves, this organization cracked down on an underground gambling operation led by “booster” Ed Martin, tarnishing the legacy of the “Fab Five” at the University of Michigan. For 10 points, name this American organization that regulates student athletes and sports programs. ANSWER: NCAA [or National Collegiate Athletic Association; accept “N C double-A”] (The second sentence describes Dave Bliss’s actions at Baylor after the murder of Patrick Dennehy)**
- <WJ - History: American>

In *The Rings of Saturn*, W. G. Sebald’s narrator reflects on this author’s works while meditating upon his skull, incorporating his quincunx diagram and speculating he witnessed Dr. Tulp’s anatomy lesson. For 10 points each: [10m] Name this 17th-century British author who wrote on a number of often esoteric topics in works like *Hydriotaphia*, a treatise on urn burials.

ANSWER: Sir Thomas Browne

[10h] In the final sections of the book, reflections on a Persian friar’s cane in Browne’s *Museum Clausum* lead Sebald’s narrator into a long discussion of this industry’s history, noting that Browne’s father worked in it.

ANSWER: sericulture [accept any answer involving the production of silk or the rearing of silkworms]

[10e] Throughout *The Rings of Saturn*, Sebald repeatedly refers to this author’s story *Tlön, Uqbar, Orbis Tertius*, which ends with a postscript where this author begins a translation of Browne’s *Urn Burial* into Spanish.

ANSWER: Jorge (Francisco Isidoro Luis) Borges (Acevedo)

<JM - Literature: British>

2. **In a variant of a myth unique to this island, a talking skull teaches a man how to cheat death. In this island’s creation myth, a flower competition between two twins decided who would rule after destroying the doubled sun and moon. In the mythology of this island, its inhabitants’ ancestors climbed out of “three clans’ holes” found in its capital. This island features a bizarre park featuring explicit sexual sculptures called Loveland. This island’s myths are preserved in *bon-puri* poems, and this non-Easter-Island place’s landscape is dotted with ubiquitous elongated (*) basalt statues called “grandfathers.” This island is home to a tradition of free-diving women who gather shellfish called Haenyeo, and because it is thought to have no beggars, thieves, or gates, this island is nicknamed “the island of three lacks” or *Sammudo*. The Hallasan shield volcano rises at the center of—for 10 points—what largest island in South Korea?**
- ANSWER: Jeju Island [or Jeju; accept answers of Sammudo before mention]
- <JM - Geography (Mythology)>

Frederick Olafson leveraged this thinker's ideas to approach contemporary issues in analytic philosophy in a book titled for this thinker "*and the Philosophy of Mind.*" For 10 points each:

[10e] Name this German author of *Being and Time* whose problematic legacy as an unapologetic Nazi was revealed to be all the worse with the publication of his *Black Notebooks*.

ANSWER: Martin **Heidegger**

[10m] This philosopher advanced a critique of artificial intelligence influenced by Heidegger's ideas, arguing that human intelligence is the result of unconscious processes and isn't reducible to symbol manipulation. His idiosyncratic interpretation of Heidegger is sometimes designated with a portmanteau of their names.

ANSWER: Hubert (Lederer) **Dreyfus** (The portmanteau is "Dreydegger.")

[10h] Dreyfus's analysis of "knowing-how" versus "knowing-that" was influenced by his analysis of *these two* Heideggerian concepts denoting theoretical and practical stances toward objects. Original-language terms or English translations both acceptable.

ANSWER: **present-at-hand** AND **ready-to-hand** [or *Vorhandenheit* AND *Zuhandenheit*]

<JM - Thought: Philosophy>

3. **An author with this first name witheringly asserted that "your back is my favorite part of you, / the part furthest away from your mouth" in a poem about watching the addressee garden while wearing the title "Purple Bathing Suit."** A poem by another author with this first name that is set at a "house in a cave of trees" declares, "This is a dead scene forever now" after describing "bare eyes" and "hissing hair." The poem "Medusa" was written by an author with this first name who declared that the title people "have no (*) wilderness in them" in her poem "Women." An author with this first name described "flowers / lighting the yard" before declaring, "I hate them as I hate sex" in a poem that was included in the collection *The Triumph of Achilles*, which, alongside the later collection *The Wild Iris*, is considered to be a pioneering work in American feminist poetry. "Mock Orange" was written by a 2020 Nobel-winning poet with—for 10 points—what first name shared with two United States Poet Laureates with the surnames Bogan and Glück?

ANSWER: **Louise** [accept **Louise** Bogan; accept **Louise** (Elisabeth) Glück]

<CS/TM/WJ - Literature: American>

Frederic Jameson helped popularize this term, often described in terms of the rejection of grand narratives, with a work that dubbed it *The Cultural Logic of Late Capitalism*. For 10 points each:

[10e] Give this term that also denotes an architectural movement that emphasizes eclecticism and decoration, repudiating the earlier International Style, which an architect summarized with the dictum "less is a bore."

ANSWER: **postmodernism**

[10m] The originator of said dictum, Robert Venturi, co-wrote this 1972 postmodernist book with Denise Scott Brown and Steven Izenour, reflecting on the exuberant and anachronistic buildings of the title American city.

ANSWER: *A Significance for A&P Parking Lots, or **Learning from Las Vegas***

[10h] Following disagreements in the 1970s, *these two colors* were used to name the camps of postmodern architects who either followed *Learning from Las Vegas*'s principles or, like the New York Five architects Richard Meier and Michael Graves, dissented.

ANSWER: the **greys** AND the **whites** [prompt on partial answers by asking "who were opposed by what other group?"]

<JM - Arts: Architecture>

4. Among nine other cases *against* this position, the Nyāya school thinker Udayana uniquely argued against this position from the ability to perceive numbers greater than one. It doesn't concern language, but members of the Mīmāṃsā school argued *for* this position by appealing to the unknowable origins, purpose, and *a priori* authority of the Vedas. Vasubandhu argued that *denying* this position contradicts the diversity of causes seen in the world. Better translated as “heterodox,” the term (*) “*nāstika*” is often incorrectly rendered as this position. In the *Mahāpurāna*, Jinasena argues *for* this position by noting that effects must be alike in kind to their causes, so positing an immaterial cause for matter is nonsensical, concurring with the Jain doctrine that the universe has eternally existed. For 10 points, give this position formulated in Western thought as denial of a supreme being. ANSWER: **atheism** [accept anything indicating **nonexistence of** (a creator) **God/supreme being/deity** or the plurals thereof; prompt on the **eternal/uncreated existence of the universe** and equivalents before mention by asking “which is accompanied by what related negative position?”; prompt on answers like **materialism** or **denial of the supernatural** by asking “which includes denial of which more specific concept?”]
- <JM - Thought: Other Philosophy>

The Lorentz force law implies that the magnetic field is this kind of quantity. For 10 points each:

[10m] Name these mathematical objects which are invariant under translations and rotations of the coordinate system, but not under reflections.

ANSWER: **pseudovectors** [or **axial vectors**]

[10h] In geometric algebra in three dimensions, pseudovectors can be formed by applying this operation to two vectors. The cross product can be viewed as the composition of this operation with the Hodge star.

ANSWER: **exterior product** [or **wedge product**]

[10e] Because momentum is a vector while this quantity is a pseudovector, correlation between this quantity for a cobalt-60 nucleus and the momentum of decay products in the Wu experiment showed that parity is not conserved. This quantity is a quantized, intrinsic form of another pseudovector.

ANSWER: nuclear **spin** [prompt on **S**]

<DE - Science: Physics>

5. *Description acceptable.* This phenomenon induces the degradation of evofosfamide into the active drug bromo-IPM. Mutations near the prolyl-sensing region of a protein named for this phenomenon cause Pacak–Zhuang syndrome. An inhibitor of a heterodimer named for this phenomenon, belzutifan, is the first drug to receive an “innovation passport” from the UK MHRA and is used to treat von Hippel–Lindau disease. Kaelin, Ratcliffe, and Semenza won the 2019 Biology Nobel for studying (*) cellular sensing of this state, including discovering a transcription factor named for being induced by this state called HIF1. Solid tumor cells in this state produce high amounts of an antioxidant scrubber, thereby making them resistant to radiotherapy. Cells in this state produce VEGF, leading to the growth of new blood vessels. Oddly, tumors primarily produce energy via the lactate-producing pathway associated with this state called glycolysis. For 10 points, name this state in which oxygen levels are low.
- ANSWER: **hypoxia** [accept answers indicating that **oxygen** is **low/depleted** until “oxygen” and prompt thereafter; accept **anaerobic** conditions; prompt on answers like **nutrient-poor** with “what specific resource is depleted?”]
- <AF - Science: Biology>

This city is the origin of the “gatsby,” a sub-style sandwich primarily filled with French fries, which tourists can sample at its popular suburb of Clifton Beach. For 10 points each:

[10e] Name this South African city situated in the “City Bowl” valley, surrounded by scenic peaks including Lion’s Head and Table Mountain. Home of the legislature, this city shares capital status with Pretoria and Bloemfontein.

ANSWER: **Cape Town** [or *Kaapstad*; or *iKapa*]

[10m] The Cape Town area features this unique heathland biome with an Afrikaans name. This ecoregion’s striking flowers and shrubs are members of a distinct Cape floral kingdom, one of only six in the world.

ANSWER: **fynbos** (“FAYN-boss”)

[10h] This Muslim minority group with varied origins, named for their original lingua franca, is concentrated in Cape Town’s Bo-Kaap neighborhood, known for pastel-colored houses and sometimes called their “Quarter.”

ANSWER: Cape **Malays** [or *Kaapse Maleiers*; prompt on Cape Muslims]

<JM - Geography>

6. **Vincent van Gogh rebuked Charles Baudelaire in his interpretation of a painting of this stuff, according to which it symbolically represents the hard-working Saint Luke. While his friend was painting a series of ten works depicting this stuff, Chaim Soutine’s unhygienic practices led Marc Chagall to run out screaming that Soutine was dead. Joachim Beucklaer’s work preceded a painting of this stuff that inspired that series, as did a painting in which this stuff fills the foreground in front of the Holy Family giving alms by Pieter (*) Aertsen.** That Rembrandt still life may reference a detail of the Prodigal Son story with some of this stuff that hangs off a wooden crossbeam. This stuff surrounds a screaming Pope in a Francis Bacon painting titled *Figure with this stuff*. For 10 points, name this stuff that hangs off of hooks in Annibale Carracci’s *Butcher Shop* paintings.

ANSWER: **meat** [or animal **carcass**; or **beef**; accept **ox**; accept **calf**; accept **cow**]

<CS - Arts: Painting and Sculpture>

Answer some questions about the political career of François Guizot (“gee-ZOH”), for 10 points each:

[10e] Guizot and the Duc de Broglie (“duh BROY”) led the Doctrinaires that came to dominate politics under this “Citizen King.” This king took power after the overthrow of Charles X in the July Revolution.

ANSWER: **Louis-Philippe I** [prompt on partial answers]

[10m] Guizot’s arch-rival was this former editor of the anti-Charles X newspaper *Le National*. De Broglie later had him removed as President in a vote of no confidence that replaced him with Patrice de MacMahon.

ANSWER: Adolphe **Thiers** (“TYAY”)

[10h] Guizot’s allegiance to bourgeois interests is often encapsulated by this rejoinder he allegedly gave to critics of his opposition to lowering the *cens*, or the minimum amount of tax one needed to pay before being allowed to vote.

ANSWER: “**Enrichissez-vous**” (“on-REE-shee-say VOO”) [accept any translation that reasonably gets across the idea of “**get rich** (by hard work and thrift and then you will have a vote)” or “**make (more) money**”]

<JG - History: European>

7. **A minimax estimator can be obtained by constructing one of these objects that is “least favorable.” Rather than being fixed, one of these objects is estimated from the data in an approach described as “empirical” developed by Herbert Robbins. One of these objects that consists of a mixture of a point mass and a smooth component is called a “spike and slab.” When one of these objects does not have a finite integral but still yields useful results, it is called “improper.” These objects can represent “pseudo-observations” when chosen to exploit (*) conjugacy, as in the case of a beta-binomial. A related object is proportional to the product of this object and the likelihood function. The fact that one of these objects must be chosen leads to the common critique that a certain framework is “subjective,” in contrast to frequentism. For 10 points, give this distribution in Bayesian statistics that reflects the knowledge one has before analyzing the data, contrasted with the posterior.**

ANSWER: **prior** distribution [or **prior** probability; prompt on probability distribution; prompt on probability] (The approach in the second sentence is empirical Bayes.)

<TM - Science: Other>

After a woman asks for him to extemporize on these two concepts in a poem, the speaker replies that they are “inseparable,” and that “[v]erily you are suspended like scales between” these two things. For 10 points each:

[10h] Name these two concepts that the title character discusses in a collection of prose poetry with examples like the potter’s cup and the knife-carved lute. That speaker claims the first of these concepts is the other “unmasked.”

ANSWER: **joy** and **sorrow** [accept “On **Joy** and **Sorrow**,” accept “**joy** is **sorrow** unmasked”]

[10e] “On Joy and Sorrow” is one of the discourses from this Kahlil Gibran book, which follows the title character Al Mustafa as he discusses various topics about life with strangers in Orphalese.

ANSWER: *The **Prophet***

[10m] *The Prophet* begins with a section titled for “The Coming of” one of these things. At the end of the work, the priestess Almitra follows one of these things until she can no longer see it.

ANSWER: **ship** [accept “The Coming of the **Ship**,” accept equivalents like “**boats**”]

<JM - Literature: World>

8. *Description acceptable.* **Officials justified wealth concentration during this period with the motto “let the cake grow before sharing it.” The journalist Elio Gaspari’s accounts of this period are often considered definitive. A torture called the “macaw’s perch” symbolizes this period, in which torture induced the priest “Friar Tito” to commit suicide. Operation Brother Sam backed the event that began this period, which was triggered in part by an unpopular set of “Base Reforms” and by Cabo Anselmo’s sailor revolt. The Direct (*) Elections Now! movement helped end this period after a program of “decompression” in which Ernesto Geisel repealed Institutional Act 5. This period began when Humberto Castelo Branco took power in a U.S.-backed coup against the Goulart administration. A politician known for his nostalgia for this period recently lost an election against the Workers’ Party. Jair Bolsonaro openly pined for —for 10 points— what period from 1964 to 1985 of repressive anti-Communist rule by a certain South American country’s generals?**

ANSWER: the military **dictatorship of Brazil** [accept any answer that mentions both **Brazil** and either **military government** or **authoritarian rule** of some kind; accept clear knowledge equivalents; prompt on partial answer; anti-prompt on the **Brazilian** (economic) **Miracle**]

<JG - History: World>

This composer claimed his fourth piano sonata was about a “flight toward a star, as in the experience of astral projection.” For 10 points each:

[10m] Name this composer whose other Theosophy-inspired works include an unfinished composition meant to be performed at the foothills of the Himalayas, *Mysterium*, and a tone poem about a “bringer of light.”

ANSWER: Alexander (Nikolayevich) **Scriabin** (The tone poem is *Prometheus: Poem of Fire*.)

[10h] This Theosophist English composer studied the influence of the occult on music in his work *Music: Its Secret Influence Through the Ages*. This Impressionist composer’s Asian-inspired works include *Lotus Land*.

ANSWER: Cyril (Meir) **Scott**

[10e] Helena Blavatsky, a founder of the Theosophist movement, performed with this pianist in London. Brahms composed “Four Serious Songs” after the death of this pianist, who often played pieces by her husband Robert.

ANSWER: **Clara** (Josephine) **Schumann** [or Clara (Josephine) **Wieck**]

<VA - Arts: Classical Music>

9. **Robert Glasper’s version of a song partly titled for these things, which vamps the middle section of the melody over reharmonized, chromatically descending changes, is the only standard on his 2015 album *Covered*. That song named in part for these objects has a through-composed form that, in jazz, traditionally begins (read slowly) E diminished, A7, C minor 7, F7, and originates as Victor Young’s instrumental theme to the 1944 ghost film *The Uninvited*. The lyrics to another standard titled in part for these things begin “We lived our little drama, we kissed in a field of white.” That song is titled for these things that (*) “Fell on Alabama.” Another song titled in part for these objects, with lyrics like “if your heart is in your dream, no request is too extreme,” became a popular jazz waltz after Jiminy Cricket sang it in *Pinocchio* and it became Disney’s iconic theme. For 10 points, name these objects which “You Wish Upon” in that jazz standard.**
ANSWER: **stars** [accept **star**light; accept “Stella by **Star**light;” accept “When You Wish Upon a **Star**,” accept “**Stars** Fell on Alabama;” prompt on **light** by asking “light from what objects?”]
<JM - Arts: Jazz>

Psychoanalytic therapists are trained to be cognizant of the “counter-” form of this phenomenon, in which the analyst’s own feelings are problematically misattributed to the case of the patient. For 10 points each:
[10h] Name this concept that refers to the unconscious entanglement of emotions about past experiences with the present situation. Psychoanalysts typically try to redirect this phenomenon onto themselves so it can be managed.
ANSWER: **transference** [or **Übertragung**; accept counter**transference** or **Gegenübertragung**]
[10e] In *The Psychology of the Transference*, this theorist averred that it is characterized by the tension of dyadic oppositions. This thinker introduced concepts like synchronicity and the collective unconscious.
ANSWER: Carl (Gustav) **Jung** (“YEWNG”)
[10m] This theorist disagreed with her followers’ idea that countertransference is a vital part of therapeutic practice rather than a problem. She developed object relations theory through her work on the psychoanalysis of children.
ANSWER: Melanie **Klein** [or Melanie **Reizes**]
<JM - Thought: Soft Social Science>

10. *Description Acceptable*. **The *tutela* accelerates this task in Latin America. Canada’s influential *Oakes Test* exemplifies the 3 or 4-step approach to this task typically used outside the US, the controlling last step of which assesses “proportionality as such.” The US’s “diffuse” or “concrete” model of this task also contrasts with the “abstract” model used in most of Europe and devised for Austria by Hans Kelsen. The *Ashwander Rules* guide a namesake “avoidance” of this task, which is sometimes done on the basis of (*) “vagueness” or “overbreadth.” The U.S. distinguishes between “facial” and “as-applied challenges” in this task, for which it requires “ripeness.” An analysis of this task applied the maxim “where there is a legal right, there is also a legal remedy” to the *mandamus* writ. Many European systems forego “standing” requirements and let legislators request this task directly. For 10 points, describe this task, begun in the U.S. by *Marbury v. Madison*, in which courts determine comportment with basic governing documents.**
ANSWER: **constitutional review** [accept **judicial review**; accept any answer that describes assessing the **constitutionality** of a law or determining or declaring if/that there was a **violation of a constitution**; accept descriptions of **striking down a law or statute**; accept descriptions of determining constitutional **rights** or of determining or declaring if/that there was a **violation of rights**; prompt on determining **standing** until mentioned; prompt on judges **reviewing/ ruling** on a case generally; prompt on ruling on the **merits** with “what sort of merits?”]
<JG - Hard Social Science: Law>

This protease is produced alongside staphopain B and staphostatin B during transcription of the *ssp* operon. For 10 points each:

[10h] Name this serine protease isolated from *S. aureus* that can be used in protein sequencing experiments due to its ability to cleave peptides at the carboxyl end of glutamate and aspartate residues.

ANSWER: **V8** protease [accept Glu**V8** or **glutamyl endopeptidase** or **endoproteinase Glu-C**]

[10m] V8 protease's ability to perform this process makes it accumulate in the presence of existing V8 proteases. Trypsin's formation from trypsinogen is a positive feedback loop due to trypsin's ability to perform this process.

ANSWER: **autocatalysis** [accept **autolysis**, prompt on answers that indicate a product is catalyzing its own formation]

[10e] The ability of this molecule to mediate autocatalysis has led many to believe this molecule was the first genetic material present on Earth. That hypothesis is this single-stranded molecule's "world hypothesis."

ANSWER: **RNA** [accept specific forms of RNA such as **mRNA** and **tRNA**]

<SS - Science: Chemistry>

11. **A novel quotes a character's remark that "we must get inside" this field "completely, or not at all," and recalls that character chopping a tree that was "inhibiting" his work in this field before realizing he could've used the blinds. That book's narrator, who quit this field, insults his own use of the word "essayistic" and says he will destroy the book during a 115-page scene in which he stands thinking in an inn. In that novel, two characters quit this field for "the human sciences" because they will never be as good as a classmate who drives one of them to eventual suicide with the title (*) insult. A character in this profession becomes obsessed with the Last Judgment after contracting syphilis in a novel narrated by Serenus Zeitblom. The narrator and Wertheimer ("VURT-high-muh") study this field alongside real-life masters in a Thomas Bernhard novel. For 10 points, name this field for which Adrian Leverkühn trades love for genius in Thomas Mann's *Doktor Faustus*, practiced by Glenn Gould in *The Loser*.**

ANSWER: **music** [accept **musicians**, **composers**, (musical) **composition**, **pianists**, **piano players**, **playing the piano** or **piano playing**, **musical performance** or **performers**, etc.]

<JM - Literature: European>

In *The Geometry of Love*, historian Margaret Visser used the renovations of the Church of St. Agnes named for being "Outside the Walls" of this emperor to illustrate the evolution of liturgical architecture. For 10 points each:

[10m] Name this emperor, who built those walls while struggling to expel the Alamanni and Juthungi from Italy. He was called "Restitutor Orbis" for subjugating two breakaway states founded by Postumus and Odaenathus.

ANSWER: **Aurelian** [or Lucius Domitius **Aurelianus**]

[10e] The namesake of St. Agnes Outside the Walls, Agnes of Rome, was martyred under this emperor. This emperor definitively ended the Crisis of the Third Century and created the Tetrarchy system.

ANSWER: **Diocletian** [or Gaius Aurelius Valerius **Diocletianus**; accept **Diocles** or **Iovius**]

[10h] St. Agnes Outside the Walls was originally part of the mausoleum of Saint Constance, who spurred her brother Constantius II against this usurper. This killer of Constans committed suicide after the 353 Battle of Mons Seleucus.

ANSWER: Magnus **Magnentius**

<JM - History: Ancient/Other>

- HALFTIME -

12. A *Miserere* by a composer from *this contemporary country* begins on a G chord before moving to a striking E major chord resolving to A in the third bar on the word “*Deus*,” which appears in a collection of nine pieces for the days of Holy Week, his *Tenebrae Responsoria*. For his 400th birthday, Igor Stravinsky and George Balanchine adapted works by that composer from this country into a ballet titled *Momentum pro him*. Another composer from this country wrote a 29-motet cycle set to the (*) Song of Songs and wrote an *Improperia* performed on Good Friday in the Sistine Chapel. A composer of complex chromatic madrigals and sacred choral music from this country infamously murdered his wife and her lover. A composer from this country’s *Missa sin Nomine* apocryphally convinced the church to allow polyphonic liturgical music. For 10 points, give this country where Carlo Gesualdo and Giovanni da Palestrina worked.

ANSWER: (Republic of) Italy [or Italian Republic; or Italia; or Repubblica Italiana]

<JM - Arts: Classical Music>

This city was the location where Oduduwa and Obatala created land from the primordial ocean at the behest of Olodumare, especially after Obatala got distracted by getting drunk on palm wine. For 10 points each:

[10m] Name this holy city in Nigeria currently ruled by the 51st Ooni, Ojala II. Most Yoruba rulers claim descent from Oduduwa’s dynasty in this religious center.

ANSWER: Ilé-Ifẹ

[10e] Edo oral tradition credits Oduduwa with providing law to this kingdom, which shares its name with the country west of Nigeria and lost many of its namesake “Bronzes” to Henry Rawson’s 1893 “punitive expedition.”

ANSWER: Benin [accept Ilé-Ibinu or Ubini; also accept Igodomigodo]

[10h] Benin’s *obas* specifically claim descent from this two-toned son of Oduduwa and Ogun. The Edo claim that this legendary founder of the Oyo Empire returned to Ifẹ after declaring the Edo too annoying to rule over.

ANSWER: Òrànmiyan [or Oranyan]

<JG - History: World (Mythology)>

13. In a 19th century short story, a lone prisoner implies he is being transported on the title riverboat because he helped his brother with one of these events. In a text written about one of these events, the author said he only omitted “the shadow of feudalism” from a story that otherwise conveyed his thoughts. In a short story, the narrator recounts one of “three omens” behind his migraines where his brother wore a raincoat during one of these events. In his Nobel lecture, Yasunari Kawabata said this sort of event “is not a form of (*) enlightenment” while discussing a piece mentioning “Empedocles at Etna” written by the author of “Cogwheels” to “a Certain Old Friend,” Masao Kume. In a story by that author, Ryonosuke Akutagawa’s “In a Grove,” Takehiro’s ghost contradicts the other accounts and reveals his case was one of these events. For 10 points, give this event performed by the protagonist of “Patriotism” after a failed coup, much like its author Yukio Mishima eventually did.

ANSWER: suicide [accept clear equivalents like killing yourself and specific methods like jumping in front of a train or seppuku, etc.; prompt on answers of death, killing, stabbing, murder, etc.] (The lead-in is about Mori Ōgai’s “*Takasebune*.”)

<JM - Literature: World>

The cleric and musicologist Komitas Vardapet played a crucial role in the history of this country's musical traditions. For 10 points each:

[10e] Name this country in the Caucasus whose folk music is closely intertwined with the liturgical music of its ancient Oriental Orthodox Christian heritage.

ANSWER: Republic of **Armenia** [or *Hayastani Hanrapetut'yun*]

[10m] Among the most widely heard Armenian instruments is this oboe-like woodwind, traditionally made of apricot wood, whose distinctive sound is often used in Western film and TV soundtracks.

ANSWER: **duduk** [or **tsiranapogh**]

[10h] Hundreds of traditional Armenian songs are attributed to this 18th century priest and *ashugh* bard. Sergei Parajanov's ("par-uh-DZHAH-nuhv's") 1969 art film *The Color of Pomegranates* depicts this musician's life.

ANSWER: **Sayat-Nova** [or Harutyun **Sayatyan**]

<JM - Arts: Other Music>

14. **Several people refused this title by pointing to a mountain and saying it "does not move easily." Followers of people with this title moved to peaceful resistance after a battle where the warlord Rewi declared "Friend, we will fight on forever and ever and ever." Possibly surprised by allies of a person with this title appearing from underground bunkers with double-barrelled shotguns, soldiers under Duncan Cameron stampeded out of a fort in a humiliating defeat. Its holders warily granted sanctuary to the (*) Ringatū religion's founder. Sir George Grey targeted this title's holder in the illegal Waikato Invasion. The holder of this title received a personal apology from Elizabeth II in 1995 for 1860s land confiscations that targeted it in retaliation for actions like its holder Tawhiao's annual tour of *marae* ("mah-RAH-eh") and creation of the Kauhanganui parliament on the North Island. For 10 points, Tuheitia currently holds what title, created by a namesake "movement" centered on giving New Zealand's indigenous people a unifying monarch?**

ANSWER: **Māori King** [or *Kīngi*; accept any answer that describes some kind of **Māori monarch** and prompt on **Māori chief** or **rangatira**]

<JG - History: Ancient/Other>

The expected number of clicks on a typewriter that it takes a monkey to type the string "ABRACADABRA" is "26 to the 11th plus 26 to the 4th plus 26," a fact proven using a theorem about these objects. For 10 points each:

[10h] Name these random variables usually symbolized tau. Given a filtration F , one of these objects has the property that the event "tau equals n " is in the sigma-algebra F -sub- n for all n .

ANSWER: **stopping time** [or **stopping rule**; prompt on Markov time]

[10m] Stopping times are typically used in conjunction with these stochastic processes, as in the optional stopping theorem. The defining property of these processes is that the conditional expectation of the " n plus first" variable given all previous information equals the n th variable.

ANSWER: **martingale**

[10e] Martingales are named for a class of strategies used in this general activity, which is also the subject of the St. Petersburg paradox. A popular destination for this activity lends its name to the class of Monte Carlo algorithms.

ANSWER: **gambling** [or word forms; accept **betting** or word forms; accept answers mentioning a **casino**; prompt on playing **games** or similar with "what sort of games?"]

<TM - Science: Mathematics>

15. *Specific term required.* Irenaeus developed a theory of this process in which it operates through a performed reversal of Adam's life, the "recapitulation theory" of this concept. Explicating the consensus position on this process, Gregory of Nyssa argued that the purpose of Christ taking human form was akin to that of bait on a fishhook. Anselm sought to supersede that earlier theory of this concept in *Cur Deus Homo*, his "satisfaction theory" replacing the earlier "ransom theory" as the dominant account in Catholicism. In Evangelicalism, the main model of this soteriological concept is the (*) "penal substitution" theory, which holds that Jesus stands in for humans who must otherwise be punished. On a Jewish holiday named for this concept, the whole of the book of Jonah is read, and the Kol Nidre is recited before evening prayers in the synagogue. For 10 points, give this concept concerning the rectification of relations with God, which Yom Kippur is the "Day of." ANSWER: **atonement** [accept (*Yom*) **kippur** before mention; accept **propitiation** or **expiation** as they are also viable translations of **kippur**; prompt on **salvation**, **redemption**, or **forgiveness** before mention by asking "which concept from the theological framework for that process?"; prompt on **christology** or **soteriology** by asking "which specific soteriological/christological concept?" as appropriate]
- <JM - Religion>

In a three-part story, Octave Mirbeau wrote about the "double misunderstanding" of this author's fictional death in Auguste Rodin's ("row-DAHn") studio while his wife cheated on him in the other room with Jean Gigoux. For 10 points each:

[10h] Name this author of "The Red Inn" and a collection of thirty *Droll Stories*. He wrote about a man befriending a big cat during Napoleon's Egyptian campaign in "A Passion in the Desert."

ANSWER: Honoré de **Balzac**

[10m] In this Balzac short story, a young Nicholas Poussin ("poo-SAHn") visits the painter Porbus with the old master Frenhofer, who creates the painting *La Belle Noiseuse* in which only a foot is visible.

ANSWER: "The **Unknown Masterpiece**" [or *Le Chef-d'œuvre inconnu*]

[10e] Balzac included those stories in this massive series that makes up most of his work, which also includes novels like *The Wild Ass's Skin*, *Sarrasine*, and *Pere Goriot*.

ANSWER: *The **Human Comedy*** [or *La **Comédie Humaine***]

<JM - Literature: European>

16. **The discoverer of a class of these complexes was forced to publish his initial findings in a non-peer-reviewed journal due to measuring a redox potential of +300 mV instead of in the -400 range. McCarthy and Booker found that NfuA ("N-F-U-A") and IscU ("I-S-C-U") can regenerate one of these complexes that *E. coli* lipoyl synthase degrades as part of its catalytic mechanism. In the presence of hydrogen peroxide, IRP1 disassembles one of these complexes and instead begins binding to untranslated response elements. These complexes are biochemically useful due to their ability to facilitate (*) single electron transfer reactions in vivo. One class of these complexes is mimicked apart from a molybdenum substitution by the active site of nitrogenase, which has a cubane structure. A 4 atom class of these complexes named for John Rieske ("risky") is structurally similar to a Krebs cycle enzyme containing one named aconitase. For 10 points, name these complexes found in ferredoxins that are named for the metal and chalcogen that comprise them.**
- ANSWER: **iron-sulfur** clusters [accept **iron-sulfur** proteins/complexes, accept **Fe-S** in place of "iron-sulfur," accept **Rieske** complexes before mention, prompt on **iron** or **sulfur** alone]
- <SS - Science: Chemistry>

Alan Krueger and David Card used this type of study to analyze the effect of a New Jersey minimum wage increase on the fast food labor market. For 10 points each:

[10m] Identify this type of observational study which uses factors outside the experimenter's control, such as a historical event, to determine which individuals are exposed to the test and control conditions.

ANSWER: **natural experiment**

[10e] Natural experiments and quasi-experimental techniques like difference in differences are commonly used in this field which studies economic phenomena using statistical methods.

ANSWER: **econometrics**

[10h] Joshua Angrist is famous for a series of natural experiments centering on this historical event, including a 1992 paper with Krueger which uses this event as an instrumental variable to estimate returns on education.

ANSWER: **Vietnam** War **draft** lottery [accept clear knowledge equivalents; prompt on just **draft**; prompt on **Vietnam** War]

<CK - Hard Social Science: Economics>

17. **The power structures manifested in the author's experiences doing *this activity* as a child are diagrammed and discussed in "The Tyranny of Taxonomy" from *Discourse and the Construction of Society* by Bruce Lincoln. Mary Douglas analyzed her childhood experiences with this activity in an essay titled "Deciphering" an instance of it. A work titled for rituals around this activity followed two volumes theorizing the "logic behind mythic thought" by arguing that "mythology also conceals an ethical system." Along with death and sexual activity, the most ubiquitous sort of (*) taboos concern this activity. The *Origin* of norms for this activity is the title subject of that third volume of *Mythologiques* ("myth-awe-loh-JEEK") by Claude Levi-Strauss. Early Christian ritual centered around this activity in *agape* ("ah-GAH-pay") meetings which evolved into the modern eucharistic practices. For 10 points, give this practice many families perform together at a designated table, or in restaurants. ANSWER: **eating** food/meals/etc. [accept equivalents like **dining**, **feasting**, **having/sharing a meal**, etc.; accept more specific answers like "**eating** dinner;" accept answers like **table manners** or **dining etiquette**, etc.; accept *The Origin of Table Manners* and "**Deciphering a Meal**;" prompt on answers like **manners** or **etiquette** alone by asking "with respect to what activity?"]**
- <JM - Thought: Soft Social Science>

In a story, Muhammad convinces a group of Christians from Najran of his prophetic status by challenging them to a duel of prayer curses, succeeding because he put *these people* under his cloak as collateral. For 10 points each:

[10m] Give this group sometimes called *Ahl al-Kisa* because of a similar Event of the Cloak. Shi'ites restrict the definition of *Ahl al-Bayt* to these people and the Imams, interpreting the Verse of Mawadda as according them special status.

ANSWER: **Muhammad's family** [accept descriptive answers like "**Muhammad's wives, children, and sons in law**" and so forth, and equivalents like "The Prophet" in place of "Muhammad"]

[10h] The aforementioned incident of the prayer curse duel is referred to as the Event of *this*, which Shi'ites commemorate with an *Eid* of the same name on the 24th of Dhu al-Hijjah.

ANSWER: Event of **Mubāhala** [or *Īd al-Mubāhalah*; or *Ḥadīth al-Mubāhala*, but DO NOT READ "Ḥadīth"]

[10e] The stories of the Events of Mubāhala and the Cloak originate as these texts, sayings of Muhammad which Muslim scholars collect and organize by authenticity. Along with the Quran, these are the central texts of Islam.

ANSWER: (a)**ḥadīth** [or **'Aṭar**]

<JM - Religion>

18. In a visual essay published in *i-D*, this artist said that he was inspired by Karl Lagerfeld and McDonald's Szechuan Sauce to photograph himself wearing fake glasses with an eyeball drooping on a spring. This artist, who redesigned Prada's signature anorak for his luxury brand Homer, brought a green animatronic baby to the 2021 Met Gala and talked to it as if it were real. A work showing this artist building a staircase while playing instrumentals for 140 hours was revealed to be a promotional performance for his (*) visual album *Endless* and its accompanying poetry and photo collection *Boys Don't Cry*. This artist collaborated with Wolfgang Tillmans to create an album cover in which he covers his face with a partially bandaged hand and sports bright green hair. In that album's opening track, this artist laments Trayvon Martin's death, saying "he look just like me," and bemoans how "these bitches want Nikes." For 10 points, name this artist behind *Channel Orange* and *Blonde*.
ANSWER: Frank **Ocean** [or Christopher Francis **Ocean**; accept Christopher Edwin **Breaux** or Lonny **Breaux**]
<WJ - Arts: Misc>

In a novel set during this event, a character recounts a story in which an unnamed man locks him in a dark room belonging to the unsuspecting Thetford family. For 10 points each:

[10h] Name this event. In that novel, this event decimates the farm of Susan Hadwin, before which the title character is saved from this event by Stevens.

ANSWER: 1793 Philadelphia **yellow fever** epidemic

[10m] Philadelphia's yellow fever epidemic serves as the backdrop for *Arthur Mervyn*, a novel by this author of *Wieland*.

ANSWER: Charles Brockden **Brown**

[10e] *Arthur Mervyn* is an early American example of this literary genre concerned with the supernatural that was later adopted by authors such as Edgar Allen Poe and Nathaniel Hawthorne.

ANSWER: **Gothic** literature

<CM - Literature: American>

19. The "scientific objection" to a certain philosopher's problems with *this activity*, presented by Warren Goldfarb and critiqued by John McDowell, rejects arguments that this capacity cannot correspond to brain states. The claim that a philosopher's problems regarding this activity are often misidentified as "Cartesian" problems of epistemology, when they are really "Kantian" problems about its conditions of possibility, appears in James Conant's work. A thinker claimed that no amount of additional information can guarantee that another person is really doing *this* correctly, using the example of a (*) schoolchild writing numbers on a blackboard. Problems with this activity are illustrated by someone who thinks that the plus sign represents an operation that behaves like addition only below 57 called "quus" ("KWOOSE") in a book titled for another philosopher "*On*" this concept "*and Private Language*" by Saul Kripke. For 10 points, a paradox in Wittgenstein's *Philosophical Investigations* concerns what ability to adhere to instructions?
ANSWER: **rule-following** [accept clear equivalents like "**following a rule**" or "**understanding a rule**;" accept the frequent Wittgensteinian synonym "**going on in the same way**;" accept **Regelfolgen**; accept answers of "**rule following** paradox(es);" prompt on less specific answers like **understanding**, **learning**, or **knowing** by asking "understanding/learning/knowing what general sort of things?"]
<JM - Thought: Philosophy>

After this man flogged the husbands of women who refused to comply with his modesty laws, they successfully conspired to assassinate him, seemingly with help from the *U.S.S. Michigan*'s crew. For 10 points each:

[10h] Name this "King" of Beaver Island, which he settled with his followers after declaring himself successor to Joseph Smith. Despite being "King" of his community, he concurrently served in the Michigan legislature.

ANSWER: James (Jesse) **Strang**

[10e] After the Succession Crisis, most LDS faithful ended up following this man, who led the Mormon Pioneers west from Nauvoo to present-day Utah and oversaw their war with the United States.

ANSWER: Brigham **Young**

[10m] Young helped cover up this event, in which California-bound settlers were besieged and murdered under pretense of surrender by Nauvoo Legion militiamen dressed as Native Americans and their actual Paiute allies.

ANSWER: **Mountain Meadows** Massacre

<JM - History: American>

20. Charles Dickens revived one of this author's plays by acting the role of a hard-smoking braggart who is referred to as a "Pauls-man" because he spends his time loitering near the cathedral. This author described his character-writing philosophy in the "Induction" to a play that includes lines such as "Some one peculiar quality / Doth so possess a man, that it doth draw / All his affects ... / In their confluents, all to run one way." This playwright popularized a genre in which characters have exaggerated obsessions corresponding to (*) premodern medical concepts, like Bobodil, the "frank" squire Downright, and the paranoid Kitley. A group of Dutch Anabaptists led by Ananias unknowingly buy goods from Mammon in a play by this author in which Lovewit leaves to avoid a plague, and Dol Common and Subtle help the butler Jeremy run scams as "Captain Face." For 10 points, name this English Renaissance playwright, the author of *Every Man in His Humour* and *The Alchemist*.

ANSWER: Ben **Jonson** [or Benjamin **Jonson**] (The Induction quoted is from *Every Man Out of His Humour*.)

<JM - Literature: British>

This style was inspired by Hassan Massoudy and the *Hurūfiyya* genre's innovations in a traditional art form, but it is not clear where the term for it originated. For 10 points each:

[10h] Name this art form which applies styles like *thulūth* and *naskh* to a modern medium. The Tunisian artist eL Seed used this style to create an optical illusion honoring Cairo's *zabbaleen* trash collectors.

ANSWER: **calligraffiti** [prompt on **calligraphy** or **graffiti**, and prompt on answers of both by asking "what is the specific term for the style?"]

[10e] Key pioneers of calligraphy-inspired *Hurūfiyya* art were part of this capital city's "Modern Art Group." Many beloved works there by "sheikh of sculpture" Moḥammad Ghānī Ḥikmet were damaged in a 2003 invasion.

ANSWER: **Baghdād**, Iraq

[10m] The creator of calligraphic sculptures called "heeches" and the graffiti artists CK1 and Black Hand are from this country. The *nasta'liq* style of calligraphy arose in what is now this country, the birthplace of Shīrīn Neshāt.

ANSWER: (Islamic Republic of) **Iran** [or (*Jomhuri-ye Eslāmi-ye*) **Irān**; prompt on **Persia**] (The unidentified artist is Parviz Tanavoli. "Heech" means "nothing" in Farsi.)

<JG - Arts: Painting and Sculpture>

21. **The novelist B. Traven edited this city’s anarchist magazine *The Brick Burner* under the pseudonym Red Marut. Max Weber (“VAY-bur”) delivered the lecture “Politics as a Vocation” in this city to critique a socialist government that came to power after the Anif declaration. The White Rose anti-Nazi student resistance group was based in this city. Eugen Leviné led a coup in this city that ended the six-day rule of playwright Ernst Toller in a short-lived (*) “Soviet.” A Jewish prime minister was assassinated in this city in 1919 by the aristocrat Anton Arco-Valley, who belonged to its occultist Thule Society. During the November Revolutions, Kurt Eisner founded a socialist republic in this city after the House of Wittelsbach’s rule ended with Ludwig III’s abdication. Two “Honor Temples” were erected in this city to house the sixteen men who died during a failed coup d’etat co-led by Erich Ludendorff. For 10 points, what city was the site of the Beer Hall Putsch?**
ANSWER: **Munich**, Germany
<CK - History: European>

In 2021, this organism lost its record for largest animal genome ever sequenced despite its ridiculous 32 billion base pair long genome. For 10 points each:

[10h] Name this neotenuous organism whose tropomyosin knockout mutants are used to track embryonic development of heart defects within this animal’s transparent eggs. This critically endangered organism is also used in studies of neural tube closure.

ANSWER: **axolotl** [accept **Ambystoma mexicanum**]

[10e] Suppression of macrophages to prevent inflammation is hypothesized to play a role in this ability possessed by axolotls. Geckos and skinks can undergo this process after being forced to undergo caudal autotomy.

ANSWER: limb **regeneration** [accept any description of **growing body parts back** such as tails, eyes, or nerves among other things]

[10m] Unlike most other salamanders, axolotls do not metamorphose due to underproduction of a hormone in this gland. In humans, underproduction of a hormone produced by this organ can lead to myxedema.

ANSWER: **thyroid** gland [accept **thyroid hormone**]

<SS - Science: Biology>

22. **A 2011 paper by Ho and Zhang investigating this effect in Bose-Einstein condensates found that this effect causes a pronounced stripe structure in the density of the gas. A symmetry of central-potential Schrödinger Hamiltonians is broken in the Dirac Hamiltonian because it accounts for this phenomenon. This phenomenon shifts the energy bands of asymmetric crystals in the Dresselhaus and Rashba effects. Maria Goeppert Mayer realized that adding this interaction to a harmonic oscillator potential can accurately predict (*) magic numbers, thereby creating the nuclear shell model. The nonrelativistic perturbative Hamiltonian for this effect is wrong by a factor of two, which can be explained semiclassically using the Thomas precession. . Relativistic corrections, the Darwin term, and this interaction contribute to fine structure. The Hamiltonian for this interaction arises from a “negative mu dot B” term, and is proportional to $\mathbf{S} \cdot \mathbf{L}$ (“S dot L”). For 10 points, name this coupling between the magnetic field of a nucleus and an electron’s magnetic moment.**

ANSWER: **spin-orbit** interaction [accept **spin-orbit** coupling or **SOC**]

<DE - Science: Physics>

An essay by this thinker interprets religious conversion as being “spoken through a god” and argues that “to produce religious truth, faith and a certain stupefaction must overlap.” For 10 points each:

[10h] Name author of “God’s Phallus,” an analysis of the “divine libido” which concludes that the “phantasm of power consist(s) in rubbing the two imaginaries of death and sexuality together.”

ANSWER: (Joseph-)Achille **Mbembe**

[10e] Mbembe described “God’s Phallus” as an “allegorical dialogue” with this thinker, a Martinican psychiatrist who discussed the role of violence in decolonization in *The Wretched of the Earth*.

ANSWER: Frantz (Omar) **Fanon** [or Ibrahim Frantz **Fanon**]

[10m] In “The Aesthetics of Vulgarity,” another essay from *On the Postcolony*, Mbembe employs this thinker’s concept of the “grotesque body,” which he explored with the “carnavalesque” in *Rabelais and his World*.

ANSWER: Mikhail (Mikhailovich) **Bakhtin** (“BUKH-teen”)

<JM - Thought: Other Philosophy>