

CMST II

Packet 5

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1. **This event prompted Jonas Basanavičius (“bah-sah-NAH-vih-chyus”) to hold the Great Seimas of Vilnius. The “United Nobility” union formed in response to peasant arson attacks after this event. “Peter the Painter” was part of a gang of exiles from this event who caused the Siege of Sidney Street. Repression after this event led the gallows to be called the prime minister’s “efficient black Monday necktie.” Yezno Azef had a participant in this event killed when Pinhas Ruttenberg revealed that they were a police informant even though Azef himself informed on the (*) SR Combat Organization, which killed Sergei Alexandrovich during it. In one episode during this event, Ippolit Giliarovsky forced subordinates at gunpoint to eat maggot-infested meat. Pyotr Stolypin’s land reforms after this event abolished the *obshchina* (“op-SHEE-nuh”). This event expanded after troops fired upon petitioners led by Father Georgy Gapon. For 10 points, name this “Great Dress Rehearsal” that included the *Potemkin* mutiny and Bloody Sunday and led to Sergei Witte’s creation of the Russian Duma.**

ANSWER: Russian **Revolution of 1905** [anti-prompt on *Potemkin* mutiny or Bloody Sunday until mentioned]

<JG - History: European>

Drawing on Illuminationism, Mullā Ṣadrā (“suh-DRAH”) describes this concept as being, like light, “graded in intensity in a scale of perfection” and illustrated its “primacy” with a shadow’s dependence on whatever casts it. For 10 points each:

[10e] Name this concept that Ṣadrā—for different reasons than Sartre (“SART”)—claimed “precedes essence” in a move overturning centuries of belief in the “primacy” of *quiddity*.

ANSWER: **existence** [accept **being** or *l’être* or *wujūd*]

[10m] Ṣadrā meant that essence was “preceded” in that it exists in this way, called *wujūd dhihnī* (“wuh-JOOD THIH-nee”) or *wujūd i’tibārī* in Islamic thought. Anselm’s ontological argument relies on the idea that existing only in this way is *lesser* than existing in general.

ANSWER: existing (solely) **in the mind** [accept **mental existence**; accept any clear equivalents of existing solely **in ideas, in thought, in understanding, in imagination, or in the brain**; prompt on equivalents of **not existing in the** (external) **world** by asking “so then where does it ‘exist,’ so to speak?”]

[10h] Since Ṣadrā treats existence as light-like, he analyzes it with this intuitive Illuminationist epistemology. Suhrawardī developed this mode of instant knowing to supersede Ibn Sīnā’s “complete essentialist definition.”

ANSWER: **knowledge by presence** [or *‘ilm huḍūrī ishrāqī*; accept any answer that includes an epistemological term and a word form of **presence** or **presential**]

<JG - Thought: Other Philosophy>

2. **With the reggae-influenced hit “The Song of the City,” Daniela Mercury popularized a genre of music associated with this event called Axé (“ah-SHAY”). A tradition associated with this event, whose participants often carry colorful parasols, is named for its “boiling” dances. Luiz Bonfá composed a song titled for the morning of this event for a film set during it. Wandering bands called *blocos* play comical “little marches” in the streets, including for the person elected (*) “King Momo,” as part of this event, during which Marcel Camus’s film *Black Orpheus* is set. An “*enredo*” (“en-HAY-doo”) variant of a popular musical form is performed specifically for this event using percussion instruments like the surdo (“sur-DOO”), *cuíca* (“koo-EE-kuh”), and *pandeiro* (“pahn-DAY-roo”). Many of the celebratory practices of this event emerged from the African and Caribbean diaspora community in the capital of Bahia (“bah-EE-ah”), Salvador. For 10 points, name this pre-Lenten festival celebrated with extravagant parades across Brazil.**

ANSWER: **Carnaval** (do Brasil) [or Brazilian **Carnival**; accept Bahian **Carnival** or **Carnaval** baiano before “Bahia” is read; reject “Mardi Gras”] (The “boiling” tradition is *Frevo*, and the variant is *samba-enredo*.)

<JM - Arts: Other Music>

This man wrote his poem “The Beginnings” to accompany the story “Mary Postgate,” whose title character burns Wynn Fowler’s belongings in “the destructor” before watching a wounded German pilot die. For 10 points each:
[10h] Name this British writer who wrote about the officer Vickery’s obsession with a movie featuring a widow he had met in Auckland in the story “Mrs. Bathurst.”

ANSWER: (Joseph) Rudyard **Kipling**

[10e] In his essay “Kipling’s World,” this author of *The Screwtape Letters* complained that he could not comprehend what actually happens in “Mrs. Bathurst.”

ANSWER: C. S. **Lewis** [or Clive Staples **Lewis**]

[10m] This writer begrudgingly credited Kipling with the insight that “a humanitarian is always a hypocrite,” but nevertheless called him a “good bad poet.” This writer’s essay “Inside the Whale” uses Henry Miller’s *Tropic of Cancer* as a starting point to survey 1930s literature.

ANSWER: George **Orwell** [or Eric Arthur **Blair**]

<SK - Literature: British>

3. **This disease is studied using the Townes or BERK knock-in mice. Many proposed drugs for this disease attempt to increase the “delay time” of a process that unusually depends on the 30th power of a protein’s concentration. Senicapoc may be effective in treating this disease by preventing cellular dehydration via the Gardos channel. In 2019, the FDA approved both the first-in-class drug voxelotor and the P-selectin inhibitor crizanlizumab for this disease, thereby (*) doubling treatment options. This disease often first manifests as infant dactylitis; other common complications of this disease include acute chest syndrome and vaso-occlusive crises. Complications of this disease can be reduced in frequency via treatment with hydroxy-urea, which increases the concentration of the fetal form of a certain protein. For 10 points, name this disease in which a glutamate to valine mutation in hemoglobin causes red blood cells to become misshapen.**

ANSWER: **sickle-cell** disease [or **sickle-cell** anemia; prompt on **SCD**; prompt on **SCA**]

<AF - Science: Biology>

The question “what happens when the king dies?” led this writer to argue that medieval political thought required the idea that a monarchical “body politic” persists independently of the king’s “body natural.” For 10 points each:

[10h] Name this influential historian who, in his book *The King’s Two Bodies*, analyzed the “juridical fiction” of the divinely appointed monarch in the work of Elizabethan jurist Edmund Plowden and in Shakespeare’s *Richard II*.

ANSWER: Ernst (Hartwig) **Kantorowicz** ("can-TORE-uh-VITSCH")

[10m] Kantorowicz’s first book was a controversial biography of this “messianic” monarch, whose plague-delayed arrival to the Sixth Crusade got him excommunicated. He then achieved the crusade’s goals diplomatically.

ANSWER: **Frederick II**, Holy Roman Emperor [prompt on **Frederick**; accept **Frederick, Stupor Mundi**; reject “Frederick the Great,” “Frederick Barbarossa,” or “Frederick II” of any other polity]

[10e] This other king proclaimed his “incorruptible crown” in heaven shortly before being decapitated by parliamentarians in 1649 at the peak of the English Civil Wars.

ANSWER: **Charles I** [prompt on partial answer]

<JM - History: European>

4. **This movement developed a syllogistic form of argumentation that begins with one of their core principles, compares the thing in question with it, and then judges “this” or “not.” This movement’s founder argued that the title artform is valueless in the chapter “Against Music.” Scholars refer to a core section of this movement’s founding text as the ten “ethical triplets” or “triads” on account of their format. This school judges actions in terms of outcomes for the whole public, a position called “state consequentialism.” An offshoot of this school which examined (*) paradoxes like repeatedly dividing a one-foot stick was called the “Logicians” or the School of Names. This movement advocated “impartial care,” and its emphasis on ethical “models” or “standards” called *Fa* led to the emergence of Legalism, which largely supplanted its popularity. For 10 points, name this school of thought that taught “universal love,” named for its Warring-States period founder.**
ANSWER: **Mohism** [or **Mòjiū**; accept answers indicating the school of Master **Mo**, also known as **Mozi** (“MOH-tsoh”), **Mo** Tzu, **Micius**, or **Mo** Di; prompt on answers of the **Logicians**, the **School of Names**, or **Xíngmíngjiā** before mention by asking “which emerged from what earlier school of thought?”]
<JM - Thought: Other Philosophy>

The most famous contemporary jazz player of this instrument, Brandee Younger, has done extensive crossover work, playing with Common, Lauryn Hill, and The Roots, and appearing on Kanye West’s *Donda*. For 10 points each:
[10e] Name this instrument common in Celtic folk music. This large lyre-derived instrument with a roughly triangular frame is played by plucking its strings with one’s hands.

ANSWER: **harp** [accept pedal **harp** or concert **harp**]

[10m] This jazz harpist and frequent collaborator with Pharaoh Sanders was the bandleader on records like *Journey in Satchidananda* and *Universal Consciousness*, which were inspired by her Hindu spirituality.

ANSWER: **Alice Coltrane** [or **Turiyasangitananda**; or Alice **McLeod**; prompt on **Coltrane**]

[10h] This virtuoso player popularized the harp in bebop-era jazz with records like *Hip Harp* and *Afro-Harping*. She played the koto on a record titled for her *Rubaiyat*.

ANSWER: Dorothy **Ashby** [or Dorothy Jeanne **Thompson**]

<JM - Arts: Jazz>

5. **James Knowlson’s biography *Damned to Fame* links this character’s “vision at last” to a “revelation” that an author had while staying with his mother in Foxrock. This character repeats, “Past midnight. Never knew such silence,” as he describes a woman in a punt who scratched her thigh picking gooseberries. This character describes holding a ball out for a dog while sitting on a bench with a view of a hospital window. In a 2006 production, a cancer-stricken, wheelchair-bound (*) Harold Pinter played this character, who was written for the actor Patrick Magee. When reminded of his mother’s death, this character grabs a massive dictionary to look up the word “viduity.” This character repeats the word “spool” and meditatively eats several bananas throughout a play set on his 69th birthday in which he listens to recordings of himself from years past. For 10 points, name this protagonist of a one-man, one-act Samuel Beckett play titled for his “*Last Tape*.”**
ANSWER: **Krapp** [accept **Krapp’s Last Tape**]
<EL/TM - Literature: British>

In Hamiltonian mechanics, generalized versions of this quantity are the independent variables along with the generalized coordinates. For 10 points each:

[10e] Name this quantity, whose generalized form is the derivative of the Lagrangian with respect to generalized velocity. In Newtonian mechanics, it is the product of a particle's mass and velocity.

ANSWER: **momentum** [accept generalized **momenta** or generalized **momentum**]

[10m] These operations on generalized position-momentum space preserve the form of Hamilton's equations. Liouville's theorem states that phase space volumes are conserved under these operations.

ANSWER: **canonical transformations** [accept answers containing **canonical** and referencing a **change of coordinates**; prompt on **coordinate transformations** or **contact transformations**; anti-prompt on **point transformations**; prompt on but DO NOT REVEAL **symplectomorphisms**]

[10h] Canonical transformations form a group described by this adjective, which also names manifolds arising as cotangent bundles of the configuration space of a system. In Cartan's classification of simple Lie algebras, algebras with this name compose the C_n ("c-sub-n") series.

ANSWER: **symplectic**

<DE - Science: Physics>

6. **A key find involving this practice in the Americas included a set of gold and silver peanut-shaped beads. *Guëchas* oddly carried products of this practice into battle. A "Black" form of this technique involving disassembly and manganese paint was practiced by the Chinchorro Culture before they adopted a "Red" approach. Julio Tello's ("HOO-lee-oh TAY-yoh's") 1920 find of "bundles" named for this practice from the Paracas Culture triggered a cultural craze. The Aztecs used cloth or ropes to maintain the position of this practice's products. Huaca Rajada ("HWAH-kuh rah-YAH-duh") and (*) Huaca Cao Viejo ("HWAH-kuh COW VYAY-hoh") contained Moche ("MOH-chay") examples of this practice. So-called "Incan" products of this practice are often frozen results of the *qhapaq hucha* ("KAH-puh-KOO-chuh") ceremony, like one called "Juanita." This practice created the "Lord of Sipan." ("sih-PAHN") A version of this practice used a straight rod to liquify a certain object, not a long hook. For 10 points, give this preservation method associated with Egyptian burials.**

ANSWER: **mummification** [accept word forms and any answers describing making a **mummy**; accept **embalming**; prompt on (descriptions of) **burial** rituals or **preservation of the dead**; prompt on human or child **sacrifice** after "Incan" is read by asking "what term describes the manner in which the sacrificed people were preserved?" but do not accept or prompt earlier] (The first clue concerns the Lord of Sipan.)

<JG - History: Ancient/Other>

This is the primary country where people venerate a grim-reaper-like religious figure named Santa Muerte, for whom a popular Shrine of the Most Holy Death was created in 2001. For 10 points each:

[10e] Name this Latin American country where the Christian holidays of All Hallow's Eve and All Saints and Souls Days are celebrated by leaving food and marigolds at home altars called *ofrendas* on the Day of the Dead.

ANSWER: **Mexico** [or the United **Mexican** States; or *Estados Unidos Mexicanos*]

[10h] Because of her association with owls, veneration of Santa Muerte is thought to be continuous with traditions surrounding this Aztec deity, a bloody skeleton god of the dead and ruler of his namesake region of the underworld.

ANSWER: **Mictlantēcutli** (His domain is named "Mictlān.")

[10m] José Guadalupe Posada created many of these decorative depictions of skulls found in Day of the Dead celebrations, including one wearing a feathered hat that has become a motif unto herself. General term or Posada's iconic rendition both acceptable.

ANSWER: **calaveras** [accept **Catrin**s; accept "**Catrina** La **Calavera** (Garbancera)" or "La **Calavera Catrina**"]

<JM - Geography (Mythology)>

7. **This character regretfully contemplates his need to “kill more efficiently” and “bleed and bleed the enemy until his good sense be reborn.” In order to discourage this character’s son from “tarrying,” a man referred to as “Mr. Sheep-Dumpling” takes him to see a girl who “tarried” for so long that she transformed into a “horrid blackened furnace” while tied to an iron fence by supernatural tendrils. A novel titled for this character opens with a printer recounting how he was put in a “sick-box” before he could consummate his marriage due to a metal beam falling on his head. Elise Traynor, Roger (*) Bevens III, and Hans Vollman succumb to the “matterlightblooming phenomenon” after finally accepting that they are dead at the behest of this character’s son, who had died from typhoid. George Saunders wrote a 2017 novel about—for 10 points—what American president who mourns the death of his son Willie while in “*the Bardo*?”**
ANSWER: Abraham **Lincoln** [or “Honest Abe” **Lincoln**; accept **Lincoln** in *the Bardo*; prompt on **Abraham** or “Honest **Abe**”]
<WJ - Literature: American>

Cheating in microbial communities with regards to the production of compounds that chelate this metal is studied extensively in *P. aeruginosa*. For 10 points each:

[10e] Name this metal that is trapped in a biologically usable form by siderophores, which can then be oxidized later by chemolithotrophs. Alternatively, bacteria often scavenge this metal from heme.

ANSWER: **iron** [or **Fe**]

[10h] Because the oxidation of ferric iron has a higher redox potential than that of the oxidation of NADH, iron respiration must coincide with this process to maintain redox balance in the cell. This process involves using proton motive force to invert the function of complex I.

ANSWER: **reverse electron flow** [or **reverse electron transport**, reject “electron transport chain”]

[10m] Iron oxidation is substantially less viable under this condition due to ferric iron’s oxidation potential being higher. Chemotactic “burrowing” and production of urease are adaptations by one organism against this condition.

ANSWER: **acidic** conditions [accept answers about **low pH**]

<SS - Science: Biology>

8. **The dynamics of this process are dependent on the characteristics of the microscopic collective inertia, which can be computed by applying the cranking approximation to the adiabatic time-dependent Hartree–Fock–Bogoliubov formalism. So-called “cold fusion” reactions, which reduce the occurrence of this process, are necessary to produce elements beyond atomic number 106. A form of radioactive dating used to track the thermal evolution of mountain belts relies on damage trails produced by this process in (*) uranium-238. Nuclides with mass number 93 or greater are theorized to undergo this process, though it has not been observed in nuclides lighter than thorium-232. Because it decays via this process relatively frequently, californium-252 is used as an artificial neutron source. Curium-250 primarily decays via this process, producing nuclei like tellurium-130 and ruthenium-78. For 10 points, name this process in which very heavy nuclei split into multiple smaller nuclei that can occur spontaneously but is more often induced by neutrons.**
ANSWER: (spontaneous) nuclear **fission** [prompt on radioactive **decay** until read]
<DE - Science: Physics>

In the “Octopus” aria, this opera’s title character recounts seeing an erotic image with the same subject as Hokusai’s *Dream of the Fisherman’s Wife* in a temple during her childhood. For 10 points each:

[10h] Name this Pietro Mascagni (“ma-SCAHN-ye”) opera set in Japan, which features the celebrated tenor serenade “*Apri la tua finestra*” and begins with an offstage choir performing a “Hymn to the Sun.”

ANSWER: **Iris**

[10e] Like *Iris*, this other Italian composer set his opera *Madama Butterfly* in Japan. His opera *La Bohème* was premiered with Arturo Toscanini as conductor.

ANSWER: Giacomo (Antonio Domenico Michele Secondo Maria) **Puccini**

[10m] *Madama Butterfly* features a notable chorus using this atypical vocal technique. Heitor Villa-Lobos instructs the soprano to use this technique in part of *Bachianas Brasileiras* no. 5.

ANSWER: **humming** [accept answers describing singing with **closed mouth** or **through the nose**]

<JM - Arts: Misc>

9. **In Mauritius, many people identify a local crater lake with this deity. Devotees venerate the local variant of this deity by floating decorated baskets in the Loy Krathong festival in Thailand. After this deity put out a ritual fire, the sage Jahnu ingested her, but she escaped out his left ear. The Bhagavata Purana narrates how Vishnu tried to measure the universe with his foot and accidentally produced this deity when his big toe poked a hole. In most accounts, the sage Kapila vaporized the (*) sixty thousand sons of King Sagara with his gaze after Bhaghirata tried to summon this deity with a horse sacrifice. This goddess of forgiveness and purification is usually depicted riding the Makara, a dolphin-tailed crocodile monster, and legendarily emerged from Shiva’s hair. At the Triveni Sangam in Prayag near Allahabad, the Yamuna and mythical Saraswati join with a river identified with this deity. For 10 points, name this goddess and sacred river in Hinduism.**

ANSWER: **Ganges** [or the **Ganges** River; or **Ganga**; or **Padma**; or *Phra Mae Khongkha*] (The lake in Mauritius is Ganga Talao.)

<JM - Geography (Mythology)>

An Alfred Siewers essay claims that this concept was critical to understanding “Otherworlds” in medieval literature and discusses its centrality in Paul N. Edwards’s article “Cyberpunks in Cyberspace.” For 10 points each:

[10h] Give this concept that names literary settings used “not as an escape from ‘reality,’ but as the genuine form of the world that human life tries to imitate.” Its originator introduced it with examples from Shakespeare.

ANSWER: **green world**

[10m] This theorist introduced the “green world” in a chapter subtitled “Theory of Myths” in *Anatomy of Criticism*, which maps the Great Chain of Being and four seasons onto the structure of tragedy and comedy.

ANSWER: (Herman) Northrop **Frye**

[10e] That chapter introduced Frye’s “archetypal criticism,” which this later critic deployed in discussing the “monomyth” of the title figure’s “journey” in *The Hero with a Thousand Faces*.

ANSWER: Joseph (John) **Campbell**

<JM - Thought: Soft Social Science>

10. **This architect used the Moravian Star and Moravian Arch in the granite-domed skyscraper 100 North Main Street in Winston-Salem, North Carolina. A tower with a red frame designed by and formerly named for this architect is the only skyscraper in Seville, and his Gran Torre Santiago in Chile is the tallest building in South America. This architect's last work before his death in 2019 barely passed the Transamerica Pyramid to become the tallest building in San Francisco. Perhaps inspired by the (*) Qutb Minar, this architect of the Salesforce Tower based the cross-section of his most famous project on the Rub-el-Hizb, an Islamic eight pointed star motif. That project by this architect features a double-decker skybridge on the 41st and 42nd floors. For 10 points, name this Argentine architect who included unnecessary spires in a pair of skyscrapers in Kuala Lumpur so they would be the tallest in the world, the designer of the Petronas Towers.**

ANSWER: César **Pelli**

<JM - Arts: Architecture>

An alliance between the Tang Dynasty and a people partly named for this river led to the destruction of the Uyghur ("WEE-gur") Khanate after the absurdly-named Battle of Kill the Foreigners Mountain in 843. For 10 points each: [10h] Name this river around which the Tashtyk Culture flourished. Edward Vajda ("VYE-duh") argues that the extinct Eyak language was related to languages spoken near this river by the Ket people and possibly the ancient Dingling people.

ANSWER: **Yenisei** ("YEH-nih-say") river [accept **Gorlog** müren, **Uluğ-Hem**, or **Kim suğ**] (Eyak was spoken among the Tlingit; this is the basis of the "Dené-Yeniseian Language Family" hypothesis, of which Vajda is a major proponent.)

[10m] The Yenisei names a Khaganate of this ethnic group's ancestors. Roza Otunbayeva briefly led their namesake country after the Melon Revolution ousted Kurmanbek Bakiyev, who himself took power after the Tulip Revolution.

ANSWER: **Kyrgyz**

[10e] The Sinologist Edward Pulleybank hypothesized that the Xiongnu ("SHONG-noo") spoke a Yeniseian language. The Xiongnu are often controversially linked to these people, led at Châlons ("SHAH-lohn") by a meteoric iron sword-wielding "Scourge of God."

ANSWER: **Huns**

<VA - History: Ancient/Other>

11. **This scholar argued that exploring non-Western cultures is an important exercise for "widening" the "conception of possible forms of human life." This thinker wrote a 2006 book examining the intersection of 19th century anarchism and Philippine history, *Under Three Flags*. A work by this thinker highlights Marco Polo's reflections on Kublai Khan's "calm religious relativism" while discussing pre-modern "dynastic realms" forming multi-ethnic empires. This thinker reflected on a "Tomb of the Unknown Marxist" in a book concluding with Walter (*) Benjamin's ("BEN-ya-meen's") "angel of history." This thinker collaborated with Ruth McVey on an article about the failed 1965 Indonesian coup, the "Cornell Paper." A book by this thinker asks why citizens go to war for people they don't know and analyzes the social construction of "horizontal comradeship" through "print capitalism." For 10 points, name this author who examined the *Origin and Spread of Nationalism* in *Imagined Communities*.**

ANSWER: Benedict (Richard O'Gorman) **Anderson**

<JM - Thought: Soft Social Science>

A poem titled for this genre opens with the command to “begin, ephebe, by perceiving the idea / Of this invention.”
For 10 points each:

[10m] Name this genre that “must be abstract,” “must change,” and “must give pleasure,” according to a manifesto poem that delineates “notes toward a supreme” version of it.

ANSWER: **fiction** [accept “**Notes Toward a Supreme Fiction**”]

[10e] “Notes Toward a Supreme Fiction” was written by this poet, who implored the reader to “call the roller of big cigars” in his poem “The Emperor of Ice Cream.”

ANSWER: Wallace **Stevens**

[10h] Stevens dedicated “Notes Toward a Supreme Fiction” to this writer and literary patron, whose death also inspired Stevens to write another poem titled “The Owl in the Sarcophagus.”

ANSWER: Henry **Church**

<WJ - Literature: American>

- HALFTIME -

12. **This thinker wrote a partly satirical philosophy of eschatology in his essay “The End of All Things.” Though not the same notion Merleau-Ponty (“murr-LOW pawn-TEE”) coined, this philosopher’s work was embraced as the starting point for a “Philosophy of Faith” through “non-Philosophy” by thinkers like Hammann and Eschenmayer. A later thinker introduced a “Neglected Alternative” about this philosopher’s theory of space in a dispute called the Fischer-Trendelenburg Debate. Along with those thinkers, Fries, Herbart, and Hermann Cohen are key players in the schools of thought named for (*) re-centering this thinker. Though it lost in competition to Moses Mendelssohn’s less-remembered entry, this thinker defined the title concept as “man’s emergence from his self-incurred immaturity” in his essay “What Is Enlightenment?” For 10 points, name this thinker who emphasized “conditions of possibility” in the “transcendental” mode of inquiry in *Critique of Pure Reason*.**

ANSWER: Immanuel **Kant** [accept (Neo-)Kantianism]

<JM - Thought: Philosophy>

A four-part poetic drama by this romantic author contains a scene known as the “Great Improvisation,” in which a prisoner reproaches God for spurning his songs on the glass harmonica. For 10 points each:

[10m] Name this Polish-Lithuanian poet, who wrote that “our nation is like lava, on the top it is hard and hideous, but its internal fire cannot be extinguished” in that play, *Dziady*. He also wrote *Pan Tadeusz* (“tah-DYOOOSH”).

ANSWER: Adam (Bernard) **Mickiewicz** (“ah-DOM MITS-kyuh-vits”)

[10h] This Polish director illustrated his idea of “Poor Theater” with a production of *Dziady* and a staging of Stanisław Wyspiański’s (“stah-niss-WOFF viss-pee-YAN-skee’s”) play *Akropolis* in which the actors built an Auschwitz crematorium around the audience.

ANSWER: Jerzy (Marian) **Grotowski** (“grow-TOFF-skee”)

[10e] One of Grotowski’s first notable productions was a staging of this absurdist playwright’s one-act *The Chairs*. This French-Romanian author’s Berenger cycle includes *The Killer* and *Rhinoceros*.

ANSWER: Eugène **Ionesco** [or Eugen **Ionescu**] (“yo-NESS-koo”)

<JG - Literature: European>

13. **This composer’s PhD thesis on the *Choralis Constantinus* of Heinrich Isaac inspired a work by this composer that calls for harp, clarinet, bass clarinet, two horns, and strings without double basses. Pierre Boulez (“boo-LEZ”) included juvenalia in his more comprehensive second recording of this composer’s music. The second movement of this composer’s symphony contains seven palindromic variations nested inside another palindrome. Elizabeth Sprague Coolidge commissioned this composer’s Opus 28 string quartet, which uses the (*) BACH motif, its inversion, and the motif transposed up a minor sixth to construct its tone row. This composer of the *Concerto for Nine Instruments* often used Baroque and Classical forms, as in his late Romantic-style *Passacaglia for Orchestra*. For 10 points, name this Second Viennese school composer known for strict twelve-tone pieces much briefer than those of Arnold Schoenberg and Alban Berg.**

ANSWER: Anton (Friedrich Wilhelm von) **Webern**

<CS - Arts: Classical Music>

Answer the following about incidents where a man was sexistly acquitted for murder because the victim slept with his wife, discussed in a Hendrik Hartog article on “Husband's Rights” in 19th-century America. For 10 points each: [10e] In one case, Congressman Daniel Sickles was acquitted for killing a lawyer with this surname. That lawyer’s father wrote a poem set to “Anacreon in Heaven” after watching the bombardment of Fort McHenry.

ANSWER: **Key** [accept Francis Scott **Key** and Philip Barton **Key** II]

[10h] L. Harris Hiscock was killed by a soldier who had served under this Union general. This man almost stopped champagne’s popularization in the US by insisting French businessman “Champagne Charlie” Heidseick was a spy.

ANSWER: Benjamin (Franklin) **Butler**

[10m] Daniel McFarland’s defense claimed he was driven mad by a “free love conspiracy” involving this man, who officiated a death-bed marriage between the ex-wife and her lover. Sharps rifles were once nicknamed for this man.

ANSWER: **Henry Ward Beecher** [prompt on **Beecher** or **Beecher's Bibles**] (McFarland here was an abusive drunk who was *left* by his ex-wife, Abby Sage, not cheated on.)

<JG - History: American>

14. **Azerbaijani poet Mirza Fatali Akhundov’s first work was a Persian-language “Eastern poem on the death of” this person. A poem about this person asks, “With what price had he bought adeptness?”, and ends with a joking final line about how he called “a foot ‘a little foot.’” A poem about this man decries “haughty ones, descendants / Of forebears known for shallowness of trait,” and ends by saying their “blood of blackness” “will not obliterate” his “true and righteous blood.” That poem, which laments how this person was “entrapped by honor, / Felled by slanderous rumors spread,” is (*) “Death of the Poet” by Mikhail Lermontov. This poet wrote a poem in which the protagonist sits on top of marble lions during a flood and stares at the title statue. Unlike this poet, the protagonist of one of his works wins a duel with Lensky, Tatiana’s lover. For 10 points, name this Russian poet of *The Bronze Horseman* and *Eugene Onegin*.**

ANSWER: Alexander (Sergeyevich) **Pushkin** (The short poem in the second clue is Anna Akhmatova’s “Pushkin.”)

<JM - Literature: European>

Most industrial examples of these materials contain nickel due to its yield strength anomaly in the gamma-prime phase. For 10 points each:

[10h] Name this class of materials used in jet engines that is valued for their ability to retain their mechanical properties at high temperatures.

ANSWER: **superalloys**

[10m] Superalloys gain their high-temperature properties via precipitation hardening, which strengthens materials by preventing the movement of these crystal defects. Deformation generates these phenomena in the Frank–Read mechanism.

ANSWER: **dislocations** [accept specific types, e.g. edge or screw **dislocations**]

[10e] Most superalloys have this crystal structure that is tied for the highest packing density with hexagonal close-packed.

ANSWER: **fcc** [or **face-centered cubic**; accept **ccp** or **cubic close-packed**]

<DE - Science: Other>

15. **John Wansbrough’s *Quranic Studies* leverages the fact that the surah named for this figure is written as if its audience already knows the story to argue that Islam arose from an Abrahamic sect rather than the traditional pagan context. That surah named for this figure includes a variation on his story where he watches handmaidens cut their fingers with knives. That chapter named for this person, the 12th of the Quran, only uses the generic title *Aziz* for a character named in the Hebrew scriptures, and dubs his there-unnamed wife *Zolaykĕā*. In the Quran, “Aziz” initially believes this man’s claims of innocence, unlike in the Biblical story where (*) Potiphar immediately believes his wife’s accusation of sexual assault. Imprisoned for that scandal, this person wins royal favor with his ability to interpret dreams. For 10 points, name this Abrahamic prophet, a child of Jacob and Rachel sold into Egyptian enslavement by eleven older siblings jealous of his coat.**

ANSWER: **Yūsuf** [or **Joseph**; or **Yōsef**; or **Yōsēp**; or **Iōsēph**; accept all such answers with added titles, like “The Prophet **Yōsef**” or “**Joseph**, Son of Jacob/Yaqub”]

<JM - Religion>

A landmark essay on this topic argued that two possible models of it—termed the “A series,” organized by futurity and pastness, and the “B series,” organized by “before” and “after”—are both contradictory. For 10 points each:

[10e] Name this concept that contemporary philosophers often discuss in terms outlined in McTaggart’s aforementioned essay on “The Unreality of” it.

ANSWER: **time** [accept “The Unreality of **Time**”]

[10h] This thinker argued that absolute time cannot exist by postulating a universe which is the same as ours except everything happens a second later, noting that there would be no reason this world exists rather than the delayed one.

ANSWER: Gottfried Wilhelm (von) **Leibniz** (“LYBE-nitz”)

[10m] This other thinker wrote extensively on the subjective experience of temporality in works like *Matter and Memory* and *Duration and Simultaneity*, leading to an underwhelmingly unproductive debate with Albert Einstein.

ANSWER: Henri(-Louis) **Bergson** (“bairg-SAWN”)

<JM - Thought: Philosophy>

16. **Urban renewal plans evicted hundreds of elderly members of this ethnicity from a housing complex called the “I-Hotel” despite protests led by a social worker nicknamed “Bullet X.” The murder of a union leader of this ethnicity in Seattle’s Gyokko Ken Cafe bolstered the CWLFU’s successful campaign to end labor contracting in one industry. The Watsonville Riots targeted a dance hall catering to this ethnicity, whose members led the 1934 Salinas Lettuce Strike. Stockton became a center for immigrants of this ethnicity from the (*) *manong* generation. Alaskan salmon canneries were dominated by seasonal workers of this ethnicity, like the author of *America is in the Heart*. A farm worker of this ethnicity called “Seven Fingers” organized the *start* of the Delano Grape Strike before Cesar Chavez allied with him. The Tydings-McDuffie Act capped this ethnicity’s immigration. For 10 points, UFW co-founder Larry Itliong was a member of what ethnic group that settled in Little Manilas?**
 ANSWER: **Filipino**-Americans [accept feminine, gender neutral, or non-binary forms; accept **Pinoy**s or **Pinay**s; prompt on **Asian**-Americans] (“Bullet X” was the nickname of Violeta Marasigan, the second sentence refers to Virgil Duyungan, and the author of *America is in the Heart* was Carlos Bulosan.)
 <CK - History: American>

This collection, which ends with a *Passacaglia* for solo violin, includes a *Resurrection* piece which idiosyncratically calls for the second and third strings to be swapped below the bridge. For 10 points each:

[10h] Name this collection by Heinrich Biber (“BEE-bur”) for violin and continuo. Composed in 1676, it was forgotten on account of its technical difficulty until its 20th-century rediscovery.

ANSWER: **Rosary Sonatas** [or the **Mystery Sonatas**; or **Rosenkranzsonaten**; or the **Copper-Engraving Sonatas**]

[10m] Excluding the first and last pieces, Biber called for this technique in every part of the *Rosary Sonatas*. This technique refers to re-tuning an orchestral string instrument from its standard pitches.

ANSWER: **scordatura**

[10e] Biber spent most of his career working in Salzburg, where this later composer would grow up and likewise be patronized by the archbishop, going on to compose operas including *Don Giovanni*.

ANSWER: Wolfgang Amadeus **Mozart** [or Joannes Chrysostomus Wolfgangus Theophilus **Mozart**]

<JM - Arts: Classical Music>

17. **A matrix must be approximately norm-preserving when acting on inputs with this property to satisfy the restricted isometry property. The textbook *The Elements of Statistical Learning* popularized an informal “bet” that this property holds in some basis. A common explanation for why a certain algorithm tends to yield outputs with this property involves drawing a typical point of tangency between an elliptical contour and a diamond-shaped unit ball. Incoherent signals with this property are central to the field of compressed sensing. Unlike (*) ridge regression, LASSO tends to produce solutions with this property, making it useful for feature selection. Instead of using adjacency matrices, graphs with this property are better represented using adjacency lists. Matrices with this property are often stored in compressed data structures since it would waste space to store them as arrays. For 10 points, give this property of a matrix or vector whose entries are mostly zero.**
 ANSWER: **sparse** [or word forms like **sparsity**; accept k-**sparse**; prompt on descriptive answers that mention the entries being **mostly zero**] (The third sentence is a common explanation of why Lasso gives sparse solutions.)
 <TM - Science: Mathematics>

Though some studies suggest second-generation medications of this type are not so problematic, many of these drugs have been shown to result in loss of brain matter and tardive dyskinesia. For 10 points each:

[10m] Name this class of medications developed to treat schizophrenia. These dopamine antagonist drugs' "typical" first generation includes chlorpromazine and haloperidol, while "atypical" examples include risperidone.

ANSWER: **antipsychotics**

[10e] It has been observed that some atypical antipsychotics, especially olanzapine, induce this disorder in some patients. Patients with this malady manage recurrent anxieties through rituals like hand washing.

ANSWER: **obsessive-compulsive** disorder [or **OCD**]

[10h] This treatment introduced by Steven C. Hayes has been found effective for OCD patients. This method of behavioral analysis integrates covert conditioning and mindfulness, teaching principles like "cognitive defusion."

ANSWER: **acceptance and commitment therapy** [or **ACT** (often pronounced as the word "act")]

<JM - Hard Social Science: Psychology>

18. **The 1982 murder of an author originally from this country was detailed in the essay "Portrait of an Artist," from the collection *Minor Feelings*. A novel by an author originally from this country opens with two fragmented paragraphs of French and English, containing phrases like "aller à la ligne" and "open paragraph." That novel is divided into nine chapters, each named for the Greek muses, and follows several female activists from this country alongside fictionalized versions of Joan of Arc and Saint Thérèse of Lisieux. After attempting suicide, the protagonist of another novel from this country recounts a childhood memory of her father tying a dog to his (*) motorcycle and driving in circles. This is the birth country of the author of *Dictée*, who took the name Theresa after immigrating to America, as well as an author who wrote about a video artist painting flowers on his body before having sex with a woman with a "Mongolian birthmark." The 2016 International Booker Prize was won by *The Vegetarian*, a novel from—for 10 points—what home country of Han Kang?**

ANSWER: South **Korea** [or *Hanguk*; or Republic of **Korea**, **ROK**, or *Daehan-minguk*] (*Minor Feelings* is by Korean-American poet Cathy Park Hong.)

<WJ - Literature: World>

Answer the following about the chemistry of geosmin, the compound responsible for the smell after rainfall, for 10 points each.

[10h] In most microorganisms, geosmin is synthesized from this compound via an intermediate cyclic carbocation. Bisphosphonates treat osteoporosis by inhibiting this compound's synthase.

ANSWER: **farnesyl diphosphate** [or **farnesyl pyrophosphate**; accept **FPP** or **FDP**]

[10e] Both farnesyl diphosphate synthase and geosmin synthase use this metal as a cofactor. ATP must bind to this divalent cation to be biologically active.

ANSWER: **magnesium** [or **Mg²⁺**]

[10m] Geosmin is a member of a subclass of these compounds whose synthesis involves a farnesyl diphosphate intermediate. In general, these compounds have repeated isoprene subunits.

ANSWER: sesqui**terpenes**

<JM - Science: Chemistry>

19. In a book titled for a state in this region’s “Heroic Age,” Jay Spaulding described how commercial pressures and demand for slaves helped the Hamaj Regency reduce the *mekk* to figurehead rulers. Amara Dunqas founded that state in this region after the ‘Abdallab clan conquered Soba. This region’s traditional southern border was a marsh literally called “The Barrier,” or *al-sudd*. Attacks by this region’s King Dawud on the port of ‘Aydhāb (“ay-THOB”) led to the end of a multi-century (*) peace treaty and a retaliatory sack of Dongola. That peace treaty required this region to export 360 slaves annually and was called the *baqt*. This region’s Funj Sultanate rose to power after its Christian kingdoms of Nubatia, Alodia, and Makuria collapsed. Muslim conquest of this region was thwarted by its people’s archery prowess, for which its earlier Kingdom of Kush was also renowned. For 10 points, name this region once ruled from Meroë and classically defined as the area south of the Nile’s Second Cataract.

ANSWER: Nubia [accept Sudan or South Sudan; accept Kush or South of the Nile Cataracts until mentioned and anti-prompt on any other specific state like Funj/Sennar or Makuria; prompt the Nile valley or other specific rivers or branches; prompt on Red Sea; anti-prompt on other specific subregions like Darfur or Kordofan] (The first three sentences concern the Funj Sultanate. Soba was Alodia’s capital.)

<JG - History: World>

The Septuagint confoundingly rendered this word as “*diapsalma*” or “apart from psalm,” suggesting its meaning was already lost even then. For 10 points each:

[10h] Give this Hebrew word of uncertain meaning used in a number of the Psalms. Its presence in 31 of the 39 psalms addressed “to the choir-master” suggests it may be some kind of musical instruction.

ANSWER: selah

[10m] “*Selah*” only otherwise appears in a likely appended liturgical third chapter of this minor prophet’s book, found between Nahum and Zephaniah. This text emphasizes that “the just shall live by his faith.”

ANSWER: Book of Habakkuk

[10e] A *peshet* commentary on Habakkuk, missing that chapter, was one of the first texts found among these manuscripts. Written by a Qumran-based sect and discovered by goat herders in a Palestinian cave, these manuscripts include some of the oldest known copies of the Hebrew scriptures.

ANSWER: Dead Sea Scrolls [or Qumran Caves Scrolls]

<JM - Religion>

20. A poem by this author inspired a painting in which a woman in blue places her hands on her hips in front of a stained-glass Annunciation copied from the Merton College chapel. Arthur Hughes’s painting *April Love* was first exhibited alongside a passage by this author. The Dalziel Brothers made elaborate woodcuts for the illustrated Moxon edition of this author’s works. This 19th-century poet popularized a ballad depicted in a painting located next to *The* (*) *Golden Stairs*, which shows the African king Cophetua and a “Beggar Maid.” Edward Lear’s arrangement of a poem by this author lies on the floor as a woman rises from a man’s lap in *The Awakening Conscience*. A woman created by this poet weaves a tapestry in front of a mirror reflecting Camelot in a painting whose title includes his line “I Am Half-Sick of Shadows.” For 10 points, name this poet who inspired Pre-Raphaelite paintings like John Everett Millais’s *Mariana* and John William Waterhouse’s *The Lady of Shalott*.

ANSWER: Alfred, Lord Tennyson

<TM - Arts: Painting and Sculpture>

This novel's second part begins as the protagonist moves from an unnamed village to an unnamed city with her husband Nathan. For 10 points each:

[10m] Name this Kamala Markandaya novel that opens with Rukhmani's marriage at age 12. It takes its title from Samuel Taylor Coleridge's poem "Work Without Hope."

ANSWER: *Nectar in a Sieve*

[10e] Markandaya wrote *Nectar in a Sieve* in this European colonial language, like Raja Rao's *The Serpent and the Rope*, Mulk Raj Anand's *Untouchable*, and R.K. Narayan's novel *Swami and Friends*.

ANSWER: English

[10h] Rukhmani and Nathan are forced to move when a business of this type buys their land. Earlier, their son Raja is beaten to death after being accused of stealing from that business of this type.

ANSWER: tannery [accept reasonable equivalents indicating the business that tans animal hides]

<CS - Literature: World>

21. A test abbreviated "P.I.A." measures rights to this resource under the *Winters doctrine*. Legal rules about this resource based on the *acequia* were sidelined by the uniquely American "prior appropriation" doctrine starting in the 1850s. A notorious regulation that counted anything frequented by migratory birds as this resource was struck down in 2001's *SWANCC* case. The confusing 4-1-4 *Rapanos* decision governs Federal regulation of this resource. Since 2020's *County of Maui* case, a law named for this (*) resource applies the uniquely stringent "Best Available Demonstrated Control Technology" standard to new "functional equivalents of a point source" under the NPDES permit system. The scope of the term-of-art "[this resource] of the United States" determines the extent of federal authority over this resource, use of which is governed in most places by riparian rights. A counterpart to the Clean Air Act protects this resource. For 10 points, name this resource, the subject of a contentious 1922 "compact" named for the Colorado River.

ANSWER: water [accept obvious equivalents or more specific types or sources thereof, including wetlands]

<JG - Hard Social Science: Law>

Alluri Seetharama Raju launched the Rampa rebellion during this campaign, which expanded tactics like symbolic promotion of "self-reliant" spinning of *khadi* cloth from the earlier Swadeshi Movement. For 10 points each:

[10m] Name this post-World War I *satyagraha* movement promoting boycotts of British goods and denial of labor that supported British rule in India. The later Salt March re-affirmed the value of its intended non-violent approach.

ANSWER: Non-Cooperation Movement

[10e] Gandhi was inspired to launch the Non-Cooperation Movement by the 1919 massacre of protestors in this holy city. Indira Gandhi's bodyguards killed her after the siege of its Golden Temple in Operation Blue Star.

ANSWER: Amritsar [accept Rāmdāspur or Ambarsar]

[10h] Gandhi called off the Non-Cooperation Movement after this 1922 incident in Uttar Pradesh, in which picketers of a liquor store responded to police brutality by burning down a police station with the police force still in it.

ANSWER: Chauri-Chaura Incident

<VA - History: World>

22. This element can be “programmed” to produce ideal precipitation behavior in the Magic Denuded Zone technique. Alloys of aluminum that are hypereutectic with respect to this element are commonly used as engine pistons, since they solidify with almost zero thermal contraction. High-purity samples of this element’s oxide are obtained via CVD using TEOS as the source gas. HIT (“H-I-T”) devices sandwich a thin layer of this element between two ultrathin layers of its cheap amorphous form to improve efficiency. Production of (*) single crystals of this element is the most important industrial application of the Czochralski (“CHOKE-ral-ski”) method, but the more common polycrystalline form is produced in the Siemens process. This element is doped with boron for use in CMOS (“SEE-moss”) circuits. The most common design of solar cells uses a crystalline wafer of this element acting as a p-n junction. For 10 points, name this metalloid used in semiconductors which can be extracted from sand.

ANSWER: **silicon** [or **Si**]

<DE - Science: Chemistry>

This movement's name was coined by its standard-bearer Sharon Butler in a 2011 article presenting it as deliberately “provisional” and “incomplete” unlike the dogmatic manifestos of earlier abstract art. For 10 points each:

[10h] Name this contemporary movement including artists such as Amy Feldman, Keltie Ferris, and Rebecca Morton whose playful abstractions are, per Butler, “looking for unexpected outcomes rather than handsome results.”

ANSWER: new **casualism**

[10e] Many casualists like Ferris make use of this type of paint, earlier used by Jean-Michel Basquiat in his SAMO (“SAME-oh”) collaboration. Keith Haring often used this type of paint, which is commonly employed for street art.

ANSWER: **spray paint** [or **aerosol paint**; prompt on **paint**]

[10m] Butler argued that casualists deploy earlier forms of abstraction the way this artist made use of found objects in works like *Canyon* and *Monogram*.

ANSWER: Robert **Rauschenberg** [or Milton Ernest **Rauschenberg**]

<JM - Arts: Painting and Sculpture>