

TOSSUPS

1. A review of this film contends that its “idiot symbolism may make you want to hoot,” but its length “leaves you too groggy to do more than moan.” After racing her children home from their bus, this film’s protagonist says, “I never did anything in my whole life that was anything, except I made you guys.” A beach trip in this film ends with a man sharing his beer with his children in the back of a truck. Jessie Buckley recites Pauline Kael’s (“kale’s”) review of this film in Charlie Kaufman’s *I’m Thinking of Ending Things*. This film’s protagonist begs her father to stand up for her, only for him to stand up physically, after she describes her shock therapy at an asylum. This film’s title character cuts herself and starts dancing before her husband slaps her. For 10 points, Gena Rowlands plays a troubled housewife in what 1974 John Cassavetes film?

ANSWER: A ***Woman Under the Influence***

<Other Fine Arts>

2. *Specific word required.* A commission named for this word organized a 1972 “Festival of Arts” and a transnational university that employed Ron Crocombe (“KRO-cum”), who formulated its namesake postcolonial “way.” This word names “British Western” territories that included a tripartite mandate mined by Albert Ellis’s BPC and an Anglo-French condominium. This word names a 1901 “Labourers Act” that deported kidnapped cane workers called “Kanakas,” and a multinational diaspora whose visa overstayers were targeted by Robert Muldoon’s dawn raids. This word names a “solution” that detained asylum seekers at facilities like Manus (“MAN-us”) under John Howard. The 1986 Treaty of Rarotonga created this region’s namesake nuclear-free zone. In 2006, Frank Bainimarama’s second coup led this region’s namesake forum to suspend Fiji. For 10 points, the Polynesian Panthers organized what region’s “Islanders”?

ANSWER: **Pacific** [or **Pasifika**; accept **Pacific** Ocean, South **Pacific**, **Pacific** Islanders, **Pacific** Islands Forum, South **Pacific** Nuclear Free Zone, **Pacific** solution, **Pacific** Labourers Act, **Pacific** Community, British Western **Pacific** Territories, University of the South **Pacific**, or Festival of **Pacific** Arts; prompt on south by asking “followed by what word?”; prompt on islands or islanders by asking “preceded by what word?”] (The BPC was the British Phosphate Commission.)

<Other History>

3. Points in one of these sets are assigned “addresses” and belong to “laps” depending on a function from one of these sets to itself in Milnor–Thurston kneading theory. Being separable and metrizable is equivalent to being a subspace of a product named for David Hilbert that is formed from infinitely many of these sets. Any function that is a derivative sends all of these sets to one of these sets, per Darboux’s (“dar-BOO’s”) theorem. The axiom of completeness is implied by a property named for “nested” examples of these sets. The intermediate value theorem means that, under a continuous function, the image of one of these sets is also one of these sets. These sets comprise the compact connected subsets of the reals and are denoted by two numbers between square brackets. For 10 points, what sets of numbers between a lower and upper limit include those limits?

ANSWER: **closed intervals** [accept **closed** unit **interval**; prompt on unit intervals or closed sets; prompt on connected sets until “connected” is read; prompt on compact sets until “compact” is read]

<Other Science>

4. In a play by this author, the “Christ-killer” Matthew Cordelier aids the downfall of a man who cries “you are the invention of the past, I am the inventor of the future!” before being bayoneted. Five nameless bankers panic over the arrival of “Dependa” in a play by this author that features several banal arguments over the beer brands Primus and Polar. In a play by this author, an old man’s rant about opossums overrunning his land and the hero’s encounter with two drunks under a wheelbarrow are punctuated by the refrain “Freedom, hi-day!” In that play by this author, Eshu shows up uninvited to a masque put on by the Greek gods. Gayatri Spivak translated this author’s play about Patrice Lumumba. In a play by this author, the name “X” is claimed by Caliban. For 10 points, name this Martinician playwright of *A Season in the Congo* and *Une Tempête* (“tom-PET”).

ANSWER: Aimé **Césaire**

<World Literature>

5. Vernon Ruttan and an economist from this country created an influential model of agricultural development as induced innovation. An economist from this country is the alphabetically-first who names a model in which patient “gatherers” and impatient “farmers” drive economic fluctuations. An economist from this country co-names a model of credit cycles with John Moore and a model of monopolistic competition with Olivier Blanchard. Derivatives of production functions fulfill conditions named for an economist from this country in neoclassical growth models. Richard Werner first coined the term “quantitative easing” for policies that this country used in response to the 1992 asset price crash that ended its leadership role in the Flying Geese paradigm. For 10 points, name this Asian country whose economy suffered the “Lost Decade” in the 1990s.

ANSWER: **Japan** [or **Nippon**-koku or **Nihon**-koku] (Clues include Yujiro Hayami, Nobuhiro Kiyotaki, and Ken’ichi Inada.)

<Social Science>

6. All of the tempo markings in a piece in this genre, along with the number of bars in each movement, are multiples of either 10 or 23. In Schoenberg’s last piece in this genre, a second movement marked *Comodo* is followed by a *Largo* movement that begins with a unison, recitative-like theme in 8/8. Schubert’s D. 804 inspired the third of four pieces in this genre by Schoenberg. Anton Webern’s (“VAY-bern’s”) Opus 28 is a piece in this genre whose tone row consists of three versions of the BACH motif. A six-movement piece in this genre progresses from a happy “*Allegretto gioviale*” first movement to a sad “*Largo desolato*” last movement, and has a hidden program about the composer’s affair with Hanna Fuchs-Robettin (“fewks ROH-buh-tin”). For 10 points, name this genre exemplified by Berg’s *Lyric Suite*, five pieces by Elliott Carter, and six pieces by Béla Bartók.

ANSWER: **string quartet** [prompt on **quartet**; prompt on **suite** by asking “for what ensemble?”]

<Classical Music>

7. One of these molecules is the substrate of soluble liver antigen, a target of autoimmune hepatitis. Modification of the Levitt pair changes which “identity set” these molecules are part of. The high fidelity of the synthesis and subsequent recognition of these kilodalton-sized molecules motivated the theory of kinetic proofreading. Orthogonal systems for processing these molecules are often based on *M. jannaschii*’s reduced set of synthases and can ligate them with “unnatural” components. TetM and TetO are “protectors” that help these molecules bind in the presence of tetracyclines and have homology to EF-Tu. Each of these L-shaped molecules is paired with an AARS that “charges” them with a specific zwitterion before they enter the A site. For 10 points, name these molecules that enter the ribosome carrying the amino acid for a given codon.

ANSWER: **tRNAs** [or **transfer RNAs**; accept aminoacyl-**tRNA**, aa-**tRNAs**, charged **tRNAs**, or loaded **tRNAs**; prompt on **RNA** or **ribonucleic acid**] (Soluble liver/pancreas antigen adds selenium to phosphoserine-tRNA to form selenocysteine-tRNA.)

<Biology>

8. Rulers of this empire took on a “culturally null” universalism per Pamela Crossley, a revisionist of the “new” school based on its First Historical Archives. “Evidential” philologists blamed excessive introspection for the rule of this empire, which was decried by the “national essence” school. A dead poet who inspired a failed coup against this empire was mutilated in a literary inquisition recounted in *Treason by the Book* by Jonathan D. Spence. The Elder Brothers’ Society opposed this empire, whose homeland was settled in a “crashing” that breached the Willow Palisade. A paradigmatic traitor opened a pass’s gates to this empire’s regent Dorgon in 1644. This empire was resisted by loyalists of Tungning’s House of Koxinga in the Revolt of the Three Feudatories. For 10 points, White Lotus rebels cut their queues to defy what empire ruled by Manchus?

ANSWER: **Qīng** Empire [or **Qīng** dynasty, Great **Qīng**, **Dà Qīng**, or **Dulimbai Gurun**; prompt on **China** or **Zhōngguó**; prompt on **Manchus**, **Jurchens**, **Mǎnzú**, **Man-tsu**, **manju**, **yírén**, **yídí**, **tulergi aiman**, or “**Outer Tribes**” until “**Manchus**” is read] (Clues include “new Qīng history,” *kǎozhèng* and *guócuì*, Zéng Jìng and Lǚ Liúliáng, the Gēlǎohuì, Hàn settlement of Manchuria in the Chuǎng Guāndōng, and Wú Sānguì and the Battle of Shānhǎi Pass.)
<World History>

9. Jacob Lassner’s book on “Demonizing” this figure examines an account from Al-Tha‘labī’s anthology. In Yorùbá legend, this figure’s tomb lies in the Oke-Eri sacred grove near Ijebu’s giant earthwork, Sungbo’s Eredo. In a midrash (“meed-RAWSH”), this figure issues a riddle about “seven that exit” and “nine that enter,” and poses challenges to discern boys from girls and discern circumcised men from unclean men. In the *Targum Sheni* (“tar-GOOM shay-NEE”), this figure is found and given a letter after a hoopoe (“HOO-poo”) bird spends three months searching. This figure abandons sun worship after mistaking a crystal floor for a pool of water and lifting up her dress to reveal her hairy legs. In the *sūrah* “The Ants,” this figure’s arrival is preempted by the delivery of her throne in the blink of an eye. For 10 points, name this wise queen who visits Solomon and begets the first emperor of Ethiopia.

ANSWER: Queen of **Sheba** [or **Bilqīs**, **Makeda**, Malikat **Saba**, Malkat **Səbā**, or Nəgśətā **Saba**; accept **Bilikisu** Sungbo; prompt on **Queen** of the South, **malikah**, **nigīštī**, or variants until “queen” is read]
<Mythology>

10. In a story by this author, a Chinese man shames his young rival’s plot to outdo his generosity by gladly agreeing to swap identities. A judge created by this author digs up a venomous toad from a garden to solve the deaths of two lovers who rubbed their teeth with sage. In a story by this author, eight successive lovers, like Uzbek the Turk, fail to forestall the virgin wedding of the sultan’s daughter Alatiel. Giosuè Carducci (“jo-zoo-EH car-DOO-chee”) wrote that this author looked outward, while the other two of the “three crowns” looked inward and upward. In a story that this author set in Barbary, the innocent Alibech (“ah-lee-beck”) is seduced into “putting the Devil back in hell,” stretching the theme of regained losses set by the day’s *brigata* queen Neifile (“NAY-ee-fee-lay”). For 10 points, what *trecento* (“tray-CHEN-toh”) author grouped 100 *novelle* (“no-VELL-lay”) with a frame story about ten Florentines who flee the plague in his *Decameron*?

ANSWER: Giovanni **Boccaccio** [accept il **Certaldese**, the **Certaldan**, Giovanni da **Certaldo**, or Johannes de **Certaldo**] (The other two “crowns” are Petrarch and Dante.)
<European Literature>

11. Many Thai women settled this archipelago after the Asian financial crisis, since it became a visa-free zone in a 1920 treaty that led to its current crab fishing dispute with Latvia. In 1963, a Labour Party lost power after mining deaths on this archipelago's Kings Bay, where research facilities honor Umberto Nobile ("oom-BAIR-toh NO-bee-lay"). GitHub stores code at this archipelago's World Archive. After 1613, Basque flensers docked at this archipelago's colony of Smeerenburg north of Albert I ("the first") Land. It's not in Russia, but museums showcase this archipelago's Pomor trade in the Soviet town of Pyramiden and a hamlet named for the Dutch explorer who reached it before Novaya Zemlya, Willem Barentsz. This archipelago's capital, the world's fastest-warming town, hosts the Global Seed Vault. For 10 points, J. M. Longyear's Arctic Coal Company mined what northern realm of Norway?

ANSWER: **Svalbard** [or **Spitsbergen**; accept **Svalbard** Global Seed Vault or **Svalbard** globale frøhvelv; accept **Svalbard** Treaty or **Spitsbergen** Treaty] (The "Kings Bay affair" occurred in Ny-Ålesund. The Noordsche Compagnie settled Smeerenburg.)

<Geography>

12. Bruce Lipshutz used Merrifield resin to scavenge this molecule and its tricky-to-separate oxidized derivative after reactions using Ni(0) ("nickel-zero"). Adding an acyl group to this molecule, rather than an ester, allows it to be cleaved during a reaction's "traceless" variant. Four copies of this molecule are ligands on a tetrahedral complex that supplies palladium to cross-couplings. An excess of this molecule is separated alongside waste hydrazines in a reaction in which it prepares an alcohol for SN2 substitution after attacking the azo group of DIAD ("D-I-A-D"). This molecule is the bulkiest ligand on Wilkinson's catalyst. This molecule lies at one corner of the square intermediate formed by a carbonyl and an ylide ("ILL-id"). This molecule is a key reagent in both the Mitsunobu and Wittig reactions. For 10 points, name this bulky compound with three aryl groups bound to phosphorus.

ANSWER: **triphenylphosphine** ("tri-phenyl-phosphine") [accept **Ph3PO**, **triphenylphosphine** oxide, **triphenylphosphonium** ylide, or tetrakis(**triphenylphosphine**) palladium(0); prompt on **TPPO** by asking "what does that stand for?"]

<Chemistry>

13. This ruler, who adopted his grandfather's namesake columns and cap as insignia, commissioned chronicles about Prince Palemon in Chancery Slavonic. This ruler failed to besiege a capital city with Henry Bolingbroke and the crusader who inspired "Wallenrodism" during a civil war that destroyed Kernavė. To defend sacred groves, this ruler expelled Jerome of Prague. This ruler settled Karaites ("CARE-uh-ites") in Lutsk, confirmed Ulugh Muhammad's rule in Kazan, and welcomed the Lipka Tatars after he allied with Tokhtamysh to secure Ruthenia. This junior partner in the Ostrów ("AW-stroof") Agreement sent his nephew Prince Korybut to rule the Hussites. This heirless duke of Trakai stoked the Samogitian uprisings that led to the Peace of Thorn. This Gediminid secured his cousin Jogaila's 1410 victory over the Teutonic Knights at Grunwald. For 10 points, name this "great" grand duke of Lithuania.

ANSWER: **Vytautas** [or **Witold**, **Vitovt**, **Vitaūt**, **Wythaws**, **Wythawt**, **Vytautas** the Great, **Witold** Kiejstutowicz, **Witold** Aleksander, Alexander **Vitoldus**, or **Wattad**; prompt on **Alexander**] (The Seal of Vytautas features Gediminas's cap.)

<European History>

14. *Note to moderator: Read the answerline carefully.* This people [emphasize] *originated* a prophecy in which white people must choose between a “green” road and one that is “black, charred, and cuts their feet.” A former enemy gave this people the *dewe’igan* played by the Big Drum Society. Mental hospitals targeted this people’s Dawn Society faith. Many tribal codes cite this people’s ideal of *mino-bimaadiziwin* (“min-OH bee-MAH-dih-ZEE-win”), or a reciprocal good life. This people [emphasize] *originated* the now Pan-Indian “Seven Fires” prophecy and the “spiderweb charm” that inspired “dreamcatchers.” This people’s language provided the name of the *Midewiwin* (“mih-DAY-wuh-win”) medicine lodge. Birch bark scrolls record this people’s tale of moving to where food “grew on water,” reflecting their sacralization of *manoomin* (“muh-NOH-min”), or wild rice. For 10 points, religious tales of the rabbit trickster Nanabozho (“na-na-bo-ZHO”) are told by what indigenous peoples of the Great Lakes?

ANSWER: **Anishinaabe** (“uh-nish-uh-NAH-bay”) [or **Anicinape**; accept **Ojibwe**, **Chippewa**, **Odawa**, **Ottawa**, **Potawatami**, **Algonquin**, **Saulteaux** (“sawl-TOH”), **Nipissing**, **Mississaugas**, **Omàmiwinini**, **Nakawemowin**, **Odishkwaagami**, **Saulteaux-Cree**, **Oji-Cree**, or **Chippewa-Cree**; prompt on **Algonquian**, **Native Americans**, **American Indians**, **First Nations**, or other terms for **indigenous** inhabitants of North America; reject “Cree”] (Traditionally, a woman from the Anishinaabe’s traditional nemeses, the Dakota, gave them the *dewe’igan* drum as a symbol that indigenous people should no longer fight each other given the threat of colonization.)

<Religion>

15. This character, who reads a book by counting 50-page blocks, seems to say “it’s a mutual, joint-stock world” after he saves a drowning “bumpkin.” While everyone else reads marble memorial tablets, this character alone notices a man who fears that two horns portend their gallows. An “attendant” imagines himself as the Loom of Time’s shuttle as this man weaves a mat with a sword. This man’s head is compared to George Washington’s by the narrator, who opens this man’s door in panic after he locks it to fast during his “Ramadan.” This prince of Rokovoko, who smokes a tomahawk-pipe, presses his forehead to the narrator’s and declares them “married,” after which they jointly worship his black idol Yojo and make a “cosy, loving pair” in a bed at the Spouter Inn. For 10 points, the narrator becomes “bosom friends” with what tattooed harpooner in *Moby-Dick*?

ANSWER: **Queequeg**

<American Literature>

16. The exploitation of a property whose name begins with this word was repopularized by a 1998 study of a truncated ERGE (“E-R-G-E”) by Martin Reuter, after it was first proposed in a 1979 paper by Steven Weinberg on quantum gravity. A property whose name begins with this word prevents divergences in the UV limit in perturbatively nonrenormalizable quantum field theories, provided that a nontrivial renormalization group fixed point exists. This adjective describes that type of “safety” and begins the name of a feature of theories that lack Landau poles. A feature whose name begins with this word occurs when the beta function is negative, so that the coupling constant decreases with energy, and the force increases with increasing distance. For 10 points, the strong force exhibits a “freedom” named for what adjective that refers to behavior at infinity?

ANSWER: **asymptotic** [accept **asymptotic** freedom or **asymptotically** free; accept **asymptotic** safety or **asymptotically** safe; prompt on **nonperturbative** renormalizability or **nonperturbatively** renormalizable until “perturbatively” is read]

<Physics>

17. In 2024, the Leonard N. Stern Collection loaned the Met over 150 works from this region shown in glass cases with a red backdrop. Evidence for polychromy in this region's art includes traces of azurite and cinnabar on pieces by the Bastis Master. A "hoard" from this region was the site of hundreds of purposely broken leg figurines. This region's violin-shaped figurines preceded the "canonical" Kapsala style. A ship surrounded by spirals appears on this region's ceramic Chalandriani "frying pan." Seated harp players and folded-arm figurines from this region influenced modern artists like Constantin Brâncuși and Amedeo Modigliani, who admired this region's minimal geometric white-marble aesthetic. For 10 points, along with Minoan and Mycenaean works, Aegean art includes sculpture from what group of islands including Paros and Naxos?

ANSWER: **Cyclades** [or **Kyklades**; accept **Cycladic** art; accept **Syros**; accept **Paros** or **Naxos** until each is read; prompt on **Greece**, **Hellas**, **Elláda**, or **Ellás**; prompt on South **Aegean** or **Eyéó** Pélagos until "Aegean" is read; <Painting & Sculpture>

18. This book contrasts the impossibility of the "changing of genera," such as blackness becoming a cooking pot, with the possibility of a staff becoming a snake. A *reductio* in this book that hinges on Jupiter and Saturn's periods of rotation was repurposed in a later argument against "actual infinities." Before Peter Olivi or Jean Buridan, this book used the example of a man gazing at two identical dates to suggest that God could have chosen any time to create the world. This book identifies the idea that God only knows universals, the theory of the world's "pre-eternity," and the denial of bodily resurrection as the three "irreligious" beliefs among 20 propositions. William Lane Craig traced the KCA to this Asharite book, which was rebutted by Ibn Rushd. For 10 points, Aristotelians like Ibn Sina are the target of what treatise by al-Ghazali?

ANSWER: *The **Incoherence of the Philosophers*** [or ***Tahāfut al-Falāsifa***]; prompt on the ***Incoherence*** or the ***Tahāfut*** (The KCA is the Kalam Cosmological Argument.) <Philosophy>

19. This person indicted Dorcas Allen for killing two of her daughters on the day she was sold back into slavery in a case rekindled by the diaries of John Quincy Adams. William Wirt and this person solicited the Supreme Court to free those on the slave ship *Antelope*. In the lead-up to the Snow Riot, this person charged Reuben Crandall with sedition for inciting Black people to revolt. In a trial over the caning of William Stanberry, this person defended Sam Houston. This person's son was murdered over his affair with the wife of future Civil War general Daniel Sickles. To secure a prisoner's release, this person dined aboard the HMS *Tonnant* during the War of 1812, where he witnessed the Battle of Baltimore. For 10 points, name this lawyer who was inspired by a flag flying over Fort McHenry to write the lyrics to "The Star-Spangled Banner."

ANSWER: Francis Scott **Key**
<American History>

20. A poem titled for a "Journey to" a city in this country calls it a "country of bone" and ends by calling for "Rain from the red cloud." Another poem about this country, which compares events in its past like "the abolition of fairies and giants" to "the shared cigarette" and "cards in the candlelit barn" of the present, states, "The stars are dead. The animals will not look." A collection about this country features poems written by Sylvia Townsend Warner while serving with the Red Cross; Stephen Spender edited that collection, which includes a W. H. Auden poem that repeats, "to-day the struggle." The author of a memoir about this country recounts being shot in the neck by a sniper and failing to free Georges Kopp from prison before escaping the suppression of its Communist POUM ("pohm") militia. For 10 points, what country's civil war is the subject of George Orwell's *Homage to Catalonia*?

ANSWER: **Spain** [or **España**; or Kingdom of **Spain**, Reino de **España**, Regne d'**Espanya**, or **Espainiako** Erresuma; accept **Spanish** Civil War or Guerra Civil **Española**; accept (Second) **Spanish** Republic or (Segunda República **Española**; prompt on **Catalonia** until read] (The first poem is Sylvia Townsend Warner's "Journey to Barcelona.") <British Literature>

BONUSES

1. The lyrics to this song describe the good fortune brought by the characteristic knocking sound of the title beetle. For 10 points each:

[10h] Name this traditional wedding song popularized by Miriam Makeba. Its common English title is a reference to its difficult pronunciation.

ANSWER: “**Click** Song” [or “**Qongqothwane**” (“KONG-oh-twah-nay”)]

[10e] The “Click Song” comes from the traditions of this Bantu people of Southern Africa. After the Zulu, they are the largest Nguni (“ung-GOO-nee”) ethnic group.

ANSWER: **Xhosa** (“KAW-suh”) [or Ama**Xhosa**]

[10m] Xhosa weddings often feature the mouth- or gourd-resonated *uhadi*, which belongs to this class of chordophones. The *berimbau* used in capoeira (“cap-uh-WAY-ruh”) music is one of these instruments.

ANSWER: musical **bow** [or string **bow**; prompt on bar zither or string instrument; reject “bowed instrument” or “zither”]

<Other Fine Arts>

2. Microcrystallizations of this ideology operate in family life according to a Félix Guattari paper titled “Everybody Wants to Be” a proponent of it. For 10 points each:

[10e] Michel Foucault called *Anti-Oedipus* an “introduction” to a life without what ideology? The manifesto of a party named for this ideology was written by Giovanni Gentile (“jen-TEE-lay”).

ANSWER: **fascism** [or **fascist** or **fascismo** or **fascista**; accept “Everybody Wants to be a **Fascist**”; accept non-**fascist** life; accept National **Fascist** Party or Partito Nazionale **Fascista**]

[10m] Alain Badiou’s (“ah-LAN bod-YOO’s”) “The Fascism of the Potato” is an attack on this concept of Deleuze and Guattari’s. “Decalomania” (“de-CAL-co-mania”) is among the features of these non-hierarchical networks theorized in *A Thousand Plateaus*.

ANSWER: **rhizomes**

[10h] *Anti-Oedipus* contrasts fascist “biunivocalizing” with the “polyvocal” tendency of these people, whose “-ology” titles another book by the authors. These people name Rosi Braidotti’s (“bry-DOT-ee’s”) theory of fluid subjectivity.

ANSWER: **nomads** [accept **nomadism** or **nomadisme**; accept *Nomadology: The War Machine*; accept **nomadic** theory]

<Philosophy>

3. *Two answers required.* These two states vied for supremacy of the Persian Gulf during the 1550s, including when one's admiral Piri Reis ("pee-ree race") was executed for lifting a siege of the other's vassal, Ormus. For 10 points each:

[10e] Name these two states whose near-contemporaneous interregnums were respectively ended by the restoration of Mehmed I and the Battle of Aljubarrota ("all-zhoo-bah-ROH-tah").

ANSWER: **Ottoman** Empire AND **Portugal** [accept Sublime **Ottoman** State, Devlet-i 'Alīye-i '**Osmāniye**, Sublime **Porte**, **Sublime Gate**, Grand **Porte**, **Bāb-ı Ālī**, or **Babiali** in place of "Ottoman Empire"; accept **Portuguese** Empire, Império **Português**, **Portuguese** Overseas Empire, or Ultramar **Português** in place of "Portugal"; prompt on **Turkish Empire** in place of "Ottoman Empire"]

[10m] The Ottomans supported the Saadi Sultanate, which successfully halted Portuguese expansion into North Africa at this 1578 battle that ended the House of Aviz and sparked another Portuguese succession crisis.

ANSWER: Battle of **Alcácer Quibir** [or Battle of the **Three Kings** or Battle of **Ksar el-Kebir**; prompt on Battle of **Alcazar**]

[10h] The Ottomans angered Portugal further when they allowed two brothers from this family to monopolize Moroccan trade with the Barbary Company. Elsewhere, the younger brother from this family led a relief force in exchange for the "cautionary towns."

ANSWER: **Dudley** [accept Robert **Dudley**; accept Ambrose **Dudley**] (The Treaty of Nonsuch promised English support for the Dutch Republic in exchange for the "cautionary towns," which prompted the Spanish Armada.)

<European History>

4. An angel instructs the speaker to send his words "over the Western Sea" in a poem about this political issue whose main section ends each stanza with the refrain, "This is the curse. Write." For 10 points each:

[10m] Name this subject of Elizabeth Barrett Browning's "A Curse for a Nation." In another Browning poem about this issue, a woman at Pilgrim's Point recounts the death of her child.

ANSWER: **slavery** [or **slave** labor or **enslavement** or equivalents; accept **abolitionism** or **free labor** or equivalents; accept **slave** trade or equivalents; prompt on **labor**]

[10h] This other English poet asked the "Bright intellectual Sun" why it distributes to earth "only partial day" in her poem "Slavery." This member of the Blue Stockings Society was an ally of William Wilberforce.

ANSWER: Hannah **More**

[10e] The most famous of the *Olney Hymns*, a collaboration between John Newton and the abolitionist poet William Cowper ("cooper"), is this poem whose speaker says he "Was blind, but now I see."

ANSWER: "**Amazing Grace**"

<British Literature>

5. Transcription of these genes relies only on existing transcription factors and proceeds in the presence of synthesis inhibitors. For 10 points each:

[10h] Name these genes that mediate short-scale cell signaling. The N antiterminator is an example of these genes in the lambda phage, while c-Fos ("C-foss") is a human one used as a marker of neuronal activation.

ANSWER: **immediate early** genes [or **IE** genes]

[10m] c-Fos can dimerize with c-Jun ("C-joon") by forming this structural motif. Transcription factors that incorporate this motif, such as AP-1 and CREB ("creb"), contain a heptad ("HEP-tad") repeat with two hydrophobic residues.

ANSWER: **leucine zipper** [accept basic **leucine zipper** domain; prompt on **coiled coils**]

[10e] The Fos-Jun leucine ("LEW-seen") zipper is a canonical example of how this secondary structural motif can form a coiled coil. Each residue in these structures rotates about 100 degrees relative to the last.

ANSWER: **alpha helix** [or **alpha helices**; prompt on **helix** or **helices**]

<Biology>

6. Ruzbihān Baqlī and Awḥad al-Dīn Kermānī defended the practice of meditating on people who [emphasize] *lacked* these features from conservative critics like ‘Alī al-Hujwīrī. For 10 points each:

[10h] Name these features [emphasize] *lacked* by people who symbolize Allāh’s beauty in controversial Ṣūfī meditation practices called *naẓar ilā’l-murd* (“NAH-zer ill-el-MURD”) or *shahīdbāzī* (“shah-heed-BAH-zee”).

ANSWER: **beards** [or **mustaches**, **facial hair**, **lihyā**, or other types of facial hair; prompt on **hair**]

[10e] Ṣūfīs tried to experience the divine form of this concept, or *‘ishq*, by meditating on beardless boys and on beautiful women. First Corinthians calls this concept “patient” and “kind.”

ANSWER: **love** [or **hubb**; accept divine **love**; accept **agapē** or **erōs**; reject “philia” or “storgē”]

[10m] *Arabic term required.* The Ṣūfī master Bayezid Bisṭāmī was known for meditating on Fāṭima of Nishapur’s beauty and for recounting one of these events. During another of them, Moses lowered the number of daily prayers.

ANSWER: al-**Mi’rāj** [prompt on descriptions of visiting **heaven** or ascending to **jannah**; prompt on **dreams**, **hulm**, **minām**, or **ru’yā**; prompt on **Night Journey** or **‘isrā’** by asking “what event immediately followed the ‘isrā’?”] (The *Mi’raj of Bisṭāmī* is frequently referenced by ‘Aṭṭār. Fāṭima of Nishapur was Bisṭāmī’s teacher.)

<Religion>

7. In Numbers Chapter 11, God sends a wind to scatter these birds to satisfy Israelite meat cravings, resulting in a plague that may reflect a form of rhabdomyolysis. For 10 points each:

[10m] Name these birds whose meat can cause coturnism during their Mediterranean migration. A “bevy” or “covey” is a flock of partridges or these gamebirds, whose New World family includes the California state bird.

ANSWER: **quails** [accept Old World **quails**; accept New World **quails** or **Odontophoridae**; accept California **quail** or common **quail** or other specific species; prompt on *Coturnix*]

[10e] The seasonal toxicity of quail meat may result from the birds feeding on seeds from hellebore, henbane, and this plant that poisoned Socrates.

ANSWER: **hemlock** [accept poison **hemlock** or *C. maculatum*; prompt on *Conium*]

[10h] This holistic approach identifies interdependent factors like the ecological causes of quail toxicity. This two-word framework tackles issues like zoonotic disease at the intersection of human, animal, and environmental well-being.

ANSWER: **One Health** [accept **One Medicine**; prompt on planetary **health** or conservation **medicine**]

<Other Academic>

8. A play by this author opens with a man in an Italian suit jacket and dress shirt, but no pants, posing for a painting by his wife modeled on Velázquez’s *Portrait of Juan de Pareja* (“puh-RAY-huh”). For 10 points each:

[10m] Name this playwright of *Disgraced*, in which Amir says that he felt “just a little bit of pride” on 9/11 while he and his wife Emily host another couple for dinner.

ANSWER: Ayad **Akhtar**

[10h] In this play, Gabe and Karen cook a meal for a couple whom they had set up 12 years prior, only for Beth to come alone and reveal that she and Tom are divorcing. Donald Margulies won a Pulitzer Prize for this play in 2000.

ANSWER: ***Dinner with Friends***

[10e] In this 1962 two-couple play, George pretends that his imaginary son died in a car crash while he and Martha host Nick and Honey for drinks.

ANSWER: ***Who’s Afraid of Virginia Woolf?*** (by Edward Albee)

<American Literature>

9. A history titled for this phrase's "origins" by C. Vann Woodward identifies its so-called "apostle," Daniel Augustus Tompkins, as a promoter of Social Darwinism in the Piedmont. For 10 points each:

[10m] Give this two-word phrase for an era typified by Vanderbilt's "Athenian" branding. This slogan was spread by boosters like the *Constitution* newspaper editor Henry W. Grady after the 1870s.

ANSWER: "**New South**" [or "**Emancipated South**"; accept *Origins of the **New South**, 1877–1913*]

[10e] Mayor William B. Hartsfield led the "Forward Atlanta" campaign to attract "New South" industrialists with the aid of this company's "Boss" Woodruff, whose father bought its secret formula.

ANSWER: **Coca-Cola** [or **Coke**; or The **Coca-Cola** Company]

[10h] David Oshinsky's book *Worse Than Slavery* links "New South" industry to convict leasing from this prison that later held the Freedom Riders. Only Louisiana's Angola rivaled this plantation in notoriety.

ANSWER: **Parchman** Farm [or **Mississippi State** Penitentiary or **MSP**; prompt on **Mississippi** or **MS**]

<American History>

10. Answer the following about DeepMind researchers training humanoid robots to play one-on-one soccer, for 10 points each.

[10e] The team modeled the soccer environment using extensions of stochastic processes named for this mathematician, in which event probabilities depend only on the current state.

ANSWER: Andrey **Markov** [or Andrey Andreyevich **Markov**; accept **Markov** processes or (discounted partially observable) **Markov** decision processes]

[10h] The researchers trained the robot agents to learn this function using an actor-critic algorithm. Agents learn this function, which maps a state to an action, in reinforcement learning.

ANSWER: **policy** [or **policies**]

[10m] The agents controlled their movement on the field using 20 servomotors, which generally belong to either the rotary or linear type of this class of devices. These devices convert an input signal into mechanical motion or force.

ANSWER: **actuators** [accept rotary **actuators** or linear **actuators**] (The paper is "Learning Agile Soccer Skills for a Bipedal Robot with Deep Reinforcement Learning.")

<Other Science>

11. Turanists celebrate these people's "fraternity" with Turkic peoples at the "Great Kurultáj ("koo-rool-TYE")" in a country where hoaxers claimed to discover their ruler's tomb in 2014. For 10 points each:

[10e] Name these people who were viewed as Székely ("SAY-kay") ancestors by Simon of Kéza. The *Chronicon Gothanum* calls a ruler of these people the "scourge of god."

ANSWER: **Huns** [or **Hunni** or **Ounnoi** or **Kuns**; accept Attila the **Hun** or variants like Etele the **Hun**; accept **Hunnic** Empire] (The Great Kurultáj is held in Hungary.)

[10h] Before Huns sacked it in 452, this "second Rome" was one of the world's largest cities. Friulian nationalists celebrate a medieval patriarchate in this city, which broke with Rome over the Three Chapters under the Lombards.

ANSWER: **Aquileia** ("ACK-wee-LAY-uh") [or **Aquilee**, **Olee**, **Olea**, or **Oglej**; accept Sack of **Aquileia**; accept Patriarchate of **Aquileia**, Patriarcato di **Aquileia**, Patriarchæ **Aquileiensis**, Patriarcjât di **Aquilee**, Patriarcal de **Aquileja**, Patriarchal State of **Aquileia**, or Principato patriarcale di **Aquileia**]

[10m] Maximinus Thrax was killed during a 238 CE siege of Aquileia ("ACK-wee-LAY-uh") a few years after he took the title "Germanicus Maximus" for campaigns against these people, who inspired an exonym of Germany.

ANSWER: **Alamanni** [or **Alemanni**; prompt on **Allemagne**, **Alemania**, **Alemania**, **alemán**, or variants]

<Other History>

12. John Eshelby introduced a type of “force” named for this word, which he contrasted with “standard forces,” in his studies of the evolution of an elastic inclusion. For 10 points each:

[10m] What word also names a space used to plot the generalized coordinates, but [emphasize] *not* the momenta, of a physical system? This word refers to a particular set of positions of the points in a system.

ANSWER: **configuration** [or **configurational**; accept **configurational** forces or **configuration** space or **configurations**]

[10e] Configurational forces can be used to explain the J-integral, which gives the energy released by these things as they expand. “Brittle” examples of these features form without significant plastic deformation beforehand.

ANSWER: **fractures** [or **cracks**; accept brittle **fractures** or brittle **cracks**; prompt on **breaks** or similar descriptions]

[10h] The two stress tensors of this name respectively give the stresses in either the deformed or reference configuration with respect to unit areas in the reference configuration.

ANSWER: **Piola–Kirchhoff** stress tensors [or **PK** stress tensors; accept **PK1** stress tensor or **PK2** stress tensor]
<Physics>

13. In *Painting and Experience*, Michael Baxandall analyzes this century’s cognitive style using terms like *ornato* and *devoto*. For 10 points each:

[10e] Baxandall charts the development of linear perspective by Filippo Brunelleschi (“broo-nuh-LESS-kee”) and Masaccio during the [emphasize] *beginning* of what century?

ANSWER: **15th** century [or **1400s**; or **quattrocento**]

[10h] In the section “The Conditions of Trade,” Baxandall reproduces many of these things to show how a “cult of pictorial skill” developed in the 15th century as these things started to deemphasize gold and ultramarine.

ANSWER: **contracts** between artists and patrons [prompt on **agreements**, **documents**, **texts**, or equivalents of any]

[10m] Baxandall quotes Piero’s *De Abaco* on how to gauge these objects to show how geometrical training shaped the perception of paintings. Romanesque art often featured a vault named for these objects, which frames the scene in Masaccio’s *Holy Trinity*.

ANSWER: **barrels** [accept **barrel** vaults]

<Painting & Sculpture>

14. This condition afflicts the narrator’s mother Adele after she emigrates from Trinidad in David Chariandy’s (“chair-ee-AHN-dee’s”) novel *Soucouyant* (“soo-koo-YAHN”). For 10 points each:

[10m] Name this condition that afflicts Nancy, who seeks help in the story “In Sight of the Lake.” Grant gives Fiona a book on her mother’s native Iceland after she develops this condition in “The Bear Came Over the Mountain.”

ANSWER: **dementia** [accept **Alzheimer**’s disease, **AD**, **senility**, **senile** dementia, frontotemporal **dementia**, **FTD**, or **Lewy body** dementia; prompt on **memory loss**, **forgetting**, **forgetfulness**, **amnesia**, **amnesiac**, or **obliviousness**; prompt on old **age**; **aging**, getting **old**, **elderly**, **senescence**, or equivalents] (Alice Munro wrote both stories.)

[10h] David’s aging mother forgets to turn off the stove in this Canadian author’s story “In the Fall” from *Island*. Grandparents’ memories of Gaelic culture on Cape Breton punctuate this author’s novel *No Great Mischief*.

ANSWER: Alistair **MacLeod** (“mac-CLOUD”)

[10e] MacLeod (“mac-CLOUD”) was on the jury that awarded the Giller Prize to *Anil’s Ghost*, a novel by this Sri Lankan-born author who portrayed Almásy’s (“ALL-mah-shee’s”) amnesia after a plane crash in *The English Patient*.

ANSWER: Michael **Ondaatje** (“on-DAH-chee”) [or Philip Michael **Ondaatje**]

<World Literature>

15. Answer the following about contributions to social science by the inventor of magnetic core memory, Jay Wright Forrester, for 10 points each.

[10m] Stafford Beer's "viable models" of these entities inspired Forrester's study of their "dynamics." Niklas Luhmann popularized theories of these entities, like Ludwig von Bertalanffy's "general" one, in sociology.

ANSWER: **systems** [accept general **systems** theory]

[10e] Forrester's systems dynamics were applied in a controversial 1972 Club of Rome study titled for the "Limits to" this process. This process can lead to a Malthusian trap if it outpaces agricultural production.

ANSWER: population **growth** [or *The Limits to Growth*; accept descriptions of an **increase** in the **number of people**; prompt on **population** or descriptions of the **number of people** by asking "undergoing what process?"]

[10h] Forrester sometimes names this effect modeled by his "beer game." In this effect, fluctuations in demand, and swings in inventory at the point of sale, magnify as they travel up a supply chain.

ANSWER: **bullwhip** effect

<Social Science>

16. Derivatives of succinimide ("suck-SIN-uh-myde") with these bonds are good sources of free radicals. For 10 points each:

[10h] Name these bonds between a particular element and a particular group. Löffler and Freytag ("FRY-tack") used the radical formed by homolytic cleavage of these bonds to close the pyrrole ("PIRR-roll") ring of nicotine.

ANSWER: **nitrogen-halogen** bonds [or **N-X** bonds; accept **bromine**, **Br**, **chlorine**, **Cl**, **iodine**, or **I** in place of "halogen"; accept **N** in place of "nitrogen"; accept **N-haloamines**, **N-bromosuccinimide**, **N-chlorosuccinimide**, or **N-iodosuccinimide**; prompt on **halogen** bonds by asking "with what element?"]

[10m] This scientist showed that radicals formed from nitrogen-halogen bonds could be used to create alkaloids. An isocyanate ("iso-CYAN-ate") is the intermediate during a reaction named for this scientist, which removes one carbon from an amide ("AM-idd").

ANSWER: August Wilhelm von **Hofmann** [accept **Hofmann** rearrangement or **Hofmann-Löffler(-Freytag)** reaction]

[10e] Nitrogen-halogen bonds can be formed by mixing bleach with this other cleaner, which will evolve chloramine gas. This volatile compound has an incredibly distinctive smell.

ANSWER: **ammonia** [or **NH3**]

<Chemistry>

17. By the Late Pleistocene, these weapons likely took down guanacos and rheas in Patagonia, where horse cultures wielding them arose by the 17th century. For 10 points each:

[10m] Name these weapons that Querandí ("kair-ahn-DEE") game hunters may have introduced to the Diaguita ("dee-ah-GHEE-tah") Confederacy. Gauchos adopted these roped throwing stones to fell cattle.

ANSWER: **bolas** [or **bolas** de piedra or **boleadoras** or **boleadeiras**; accept **bola** perdida; prompt on **balls** or **projectiles**]

[10e] Citing anti-cavalry bolas, this book about pre-contact societies denies that horses enabled conquests after the title year. "Holmberg's mistake" about the Sirionó in *Nomads of the Long Bow* opens this Charles C. Mann book.

ANSWER: **1491** [or **1491: New Revelations of the Americas Before Columbus**; reject "1493"] (Allan R. Holmberg's "mistake" was to view the Sirionó as "backward" and unchanging.)

[10h] *1491* discusses Tom Dillehay's work at this Pleistocene site, where Paleolndians hunted guanacos with bolas but unusually did not butcher horses. This coastal site was an early challenge to the Clovis-first model.

ANSWER: **Monte Verde** [accept **Monte Verde I** or **Monte Verde II**; accept **Chinchihuapi** Creek] (It is located in Chile. Horses went extinct in the Americas before they were reintroduced by the Spanish.)

<World History>

18. This period's "revival" marked the advent of historically informed performance, as exemplified by Arnold Dolmetsch's use of the recorder and Isolde Ahlgrimm's use of the harpsichord and fortepiano. For 10 points each: [10m] Give this adjective that serves as a catch-all term for medieval, Renaissance, and Baroque music before the common practice period.

ANSWER: **early** [accept **early** music, **alte** Musik, musique **ancienne**, musica **antica**, musica **antiqua**, or música **antigua**; accept **early** music revival; reject "old" or "ancient"]

[10h] This city's historically informed early music festival revived Antonio Cesti's opera *L'argia*, which honored Christina of Sweden's 1655 visit. Heinrich Isaac mourned "Ich muss dich lassen" in a song about this city, whose library preserved *Lieder* ("LEE-der") by the one-eyed knight Oswald von Wolkenstein.

ANSWER: **Innsbruck** [accept "**Innsbruck**, ich muss dich lassen"; accept **Innsbruck** Festival of Early Music or **Innsbrucker** Festwochen der Alten Musik]

[10e] This instrument was played by Innsbruck court musician Paul Hofhaimer, whose style was imitated by later "Paulomimes." J. P. Sweelinck ("sway-link") wrote for this instrument with both keyboards and a pedalboard.

ANSWER: **organ** [accept pipe **organ** or church **organ**; accept positive **organ** or chair **organ** or portable **organ**; accept **organ** revival or **Orgelbewegung**]

<Classical Music>

19. Locals in this country bought the Bwiza Riverside homes allegedly reserved for deportees. For 10 points each: [10e] What country's Gashora camp houses its many refugees from Libya and Burundi? UK Home Secretary Priti Patel signed a failed deal to deport asylum seekers to this country led by Paul Kagame.

ANSWER: **Rwanda** [or Republic of **Rwanda**, Repubulika y'u **Rwanda**, République du **Rwanda**, or Jamhuri ya **Rwanda**; accept **Rwanda** asylum plan or **Rwanda** Migration and Economic Development Partnership]

[10h] 2018 killings by Rwandan police led refugees of this Congolese minority, often conflated with Tutsis, to reroute to Tanzania. Rwanda's aid to this ethnicity's militias in the Congo Wars is a pretext for their expulsion.

ANSWER: **Banyamulenge** [or **Banyamurenge**]

[10m] Xenophobic violence against the Banyamulenge in this Congolese region spiked after 2022 protests against M23's ongoing offensive. Conflict in this region has displaced millions to Uganda and the neighboring Ituri Province.

ANSWER: **Kivu** [accept **Kivu** conflict; accept North **Kivu**, Nord-**Kivu** or **Kivu** Kaskazini; accept South **Kivu** or Sud-**Kivu** or **Kivu** Kusini; accept Lake **Kivu**; accept **Maniema**]

<Current Events>

20. Answer the following about supernatural creatures encountered in the woods in Norwegian novels, for 10 points each.

[10m] In the first chapter of Sigrid Undset's *Kristin Lavransdatter*, Kristin is offered one of these objects by an elf maiden. The first book in that trilogy is titled for one of these objects that Kristin wears at her wedding.

ANSWER: **wreaths** [accept bridal **wreaths**; accept *The* **Wreath** or **Kransen**; prompt on bridal **crowns**]

[10h] A man encounters the title "Shining" while lost in the woods in the follow-up novel to this series. Each part of this series ends with the prayers of an aging Catholic who tries to depict shining darkness in his painting of Saint Andrew's Cross.

ANSWER: **Septology** [or **Septologien**] (by Jon Fosse)

[10e] Antinuos Bellori meets two angels in the woods in this author's *A Time for Everything*. This contemporary Norwegian author also wrote the six-volume memoir *My Struggle*.

ANSWER: Karl Ove **Knausgård**

<European Literature>