

2025 ACF Regionals

Packet C by Arizona State, SIUE, UCSD

Edited and written by Jeremy Cummings, Ani Perumalla, Erik Christensen, Henry Goff, Taylor Harvey, Amogh Kulkarni, Tim Morrison, Noah Sheidlower, Munir Siddiqui, Abigail Tan, Maxwell Ye, JinAh Kim, Ophir Lifshitz, and Abhinav Rachakonda

Tossups

1. A priest of this ethnicity from Negovan was killed for using his native language during a liturgy. A brigand leader of this ethnicity from Telepana ruled a large, virtually independent state from Yanina. People of this ethnicity adopted the Kanun of the Mountains, which permitted people assigned female at birth to adopt the male societal role of “sworn virgin.” A 1912 revolt led to an independent principality for this ethnic group led by Ismail Qemali (“chay-MAH-lee”). Intellectuals of this ethnicity organized the League of Prizren after the Treaty of San Stefano. A king of this ethnicity developed a salute with a flat hand to the heart, survived 55 assassination attempts, and fled his country after its 1939 invasion by Benito Mussolini. For 10 points, name this Balkan ethnicity ruled by King Zog.

ANSWER: **Albanians** [accept **Kosovars**; accept **shqip**] (The leader in the second line is Ali Pasha of Ioannina.)
<EC, European History>

2. A surah named for this event is the only one to mention the “people of Iram (“IH-rum”)” who had “lofty pillars.” A later surah named for this event condemns a soothsayer’s cursing technique of tying and spitting into a knot; that surah is often grouped with *an-Nas* as the final two surahs of the Qur’an. A now-outdated Islamic practice involved a drummer known as a *mesaharati* walking the streets directly prior to this event. A verse from *al-Baqarah* analogizes this time to a “white thread” that is distinguished from a “black thread.” The second *adhan* for a prayer recited at this time often includes the phrase “prayer is better than sleep.” The *suhūr* meal is eaten directly before this time, during which the *fajr* (“FUH-jur”) prayer is recited. For 10 points, name this time of day at which fasting begins during Ramadan.

ANSWER: **dawn** [or **daybreak**; or **break of day**; accept **sunrise**; accept **fajr** until read; accept *al-Falag*; prompt on *suhūr* until read by asking “what time follows that?”; prompt on **morning** or **day**; prompt on **first adhan** by asking “that occurs at what time?”] (The first line is from *al-Fajr*.)

<AK, Religion>

3. *Original-language term or English translation acceptable.* Ancient views of this concept’s “secrets” are divided into Promethean and Orphic attitudes in Pierre Hadot’s (“ah-DOH’s”) *The Veil of Isis*. The Sophists were among those who debated the roles of this concept and *nomos*, or “law.” Aristotle wrote in *De Anima* that this concept “does nothing in vain.” An aphorism by Heraclitus claims that this concept “loves to hide.” In a poem titled for this concept, a winged chariot takes the narrator to a goddess who describes the “Way of Truth” and the “Way of Opinion.” This concept titles the major fragmentary texts by several pre-Socratics, including Heraclitus and Parmenides. Aristotle is often credited with introducing the idea that this concept “abhors a vacuum.” For 10 points, in the Latin title of a work by Lucretius, what concept follows “De rerum”?

ANSWER: **nature** [or **physis**; or **phusis**; or **physeis**; or **natura**; accept *De rerum natura* or *On the Nature of Things*]
<TM, Philosophy>

4. Donald Tovey describes the “vision of dry bones” in this symphony’s finale, which he analyzes in terms of “a Bass, a Tune, and a Fugue.” In the seventh bar of this symphony, violins enter with syncopated G’s floating above a sustained C-sharp in the cellos resolving up to D. A piece [emphasize] *inspired* by this one that uses hubcaps and brake drums as found percussion was written by Tân Dùn as an “Internet Symphony.” At a rehearsal for this symphony, Ferdinand Ries (“reese”) mistakenly berated a horn player for starting the first movement recapitulation early. Two isolated E-flat major chords open this symphony, whose second movement is an unusually long funeral march. For 10 points, name this early Romantic symphony that bears a retracted dedication to Napoleon.

ANSWER: **Beethoven**’s Symphony No. **3** [or **Eroica** Symphony or Symphony No. **3** in E-flat major, Op. 55 by Ludwig van **Beethoven**; accept the *Sinfonia Eroica* or *Heroic* Symphony]

<JC, Classical Music>

5. *Note to moderator: Read the answerline carefully.* Filigree edges in these things are disconnected rather than removed to efficiently construct them in the “meta” version of a “St. Petersburg” tool. Breakpoint graphs identify synteny (“SIN-tuh-nee”) blocks and rearrangements in these things. The SPAdes tool builds these things using de Bruijn (“duh broyn”) graphs of k-mers for *de novo* assembly. The program MiniMap2 chains minimizers in these things to address quadratic slowdown in the Smith–Waterman algorithm. The Bowtie package uses a Burrows–Wheeler transform to align these things. Eugene Myers helped develop a search tool for these things called BLAST, and advocated for a “shotgun” method to map them, which can also be done using techniques developed by Illumina and Sanger. For 10 points, Celera competed with a project to identify the human version of what entities representing an organism’s genetic material?

ANSWER: **genomes** [accept DNA **sequences** or nucleic acid **sequences** or nucleotide **sequences** or genetic **sequences** or RNA **sequences** or protein **sequences** or polypeptide **sequences**; accept or DNA **sequencing** or RNA **sequencing** or protein **sequencing**; accept **sequence** alignments or **alignments**; accept **BLAST** until read; accept Human **Genome** Project; prompt on **strings** or **queries** or **letters** or **words** or **text**; prompt on **DNA** or **RNA** or **genes** or **promoters** or **codons** or **proteins** or **polypeptides** or **nucleotides** or **nucleic acids** by asking “what kind of data structures can be used to represent them?”]

<UCSD, Biology>

6. One of these works asks “Is not a patron one who looks with unconcern on a man struggling for life in the water, and, when he has reached ground, encumbers him with help?” An early example of travel literature made up of these works and titled for the “Turkish Embassy” was written by Mary Wortley Montagu. Lord Chesterfield, whose own collection of works in this form instructs his son on gentlemanly behavior, was the target of a polemical one of them by Samuel Johnson. During the Age of Enlightenment, European intellectuals were connected by the circulation of these works in a community called “the republic of” these things. The French term for “good writing,” when rendered in English, names “men of” these documents. For 10 points, what sort of documents comprise epistolary novels?

ANSWER: **letters** [or **epistles** or **correspondences**; accept Republic of **Letters**; accept **Letter** to *Chesterfield*; accept men of **letters**; accept *belle-lettres*; accept *Turkish Embassy Letters*; accept **Letters** to *His Son*]

<TH, British Literature>

7. Some sources claim that this musician's popular version of a Hungarian piano tune was banned by the BBC due to its tendency to induce suicidal feelings in listeners. NASA's final transmission to the *Opportunity* rover was this musician's version of "I'll Be Seeing You." Domestic issues inspired this musician to write the songs "Don't Explain" and "Fine and Mellow." The refrain "Mama may have, Papa may have" appears in a song this singer co-wrote with Arthur Herzog. This singer was briefly the vocalist for the big bands of Artie Shaw and Count Basie and gave the nickname "Prez" to Lester Young. This singer popularized a song whose lyrics describe "blood on the leaves and blood at the root." For 10 points, "God Bless the Child" and "Strange Fruit" are songs by what singer what singer nicknamed "Lady Day"?

ANSWER: Billie **Holiday** [or Eleanora **Fagan**] (The Hungarian piano tune is "Gloomy Sunday," which Holiday's version popularized in the Anglosphere.)

<AP, Other Fine Arts>

8. In a story by this author, a woman returns from a movie to find her brother passed out drunk beside her son taking a bath. A photojournalist dies in a tsunami in this author's story "Going Ashore," which appears in a collection by this author titled for a phrase from Nathaniel Hawthorne's "The Custom-House." A 103-year-old woman created by this author breaks her hip after falling off a bench and exclaims "She's a perfect lady!" upon meeting a former tenant's wife. In that story by this author, the protagonist is forced to praise America's landing on the moon as "Splendid." This author of *Unaccustomed Earth* wrote a story in which Rohin defines the title word as "loving someone you don't know." For 10 points, name this author who included "Sexy" in her collection *Interpreter of Maladies*.

ANSWER: Jhumpa **Lahiri** [or Nilanjana Sudeshna **Lahiri**] (The story in the first sentence is "Only Goodness." The story in the third and fourth sentences is "The Third and Final Continent.")

<Arizona State, American Literature>

9. A class of interactions partially named for these structures studied by Dougherty and Gallivan depends on inverse distance to a power less than 2. An interaction named for these structures is described by the controversial Hunter-Sanders model, which explains the effect of EWGs and EDGs on quadrupoles. That interaction named for these structures occurs in "T-shaped" and "parallel displaced" orientations. Electrons in a metal can stabilize a vacant adjacent orbital in an interaction named for these structures that commonly occurs with CO ligands. Instances of these structures have orthogonal orientations in allenes and cumulenes. Parallel instances of these structures mix in conjugated systems. For 10 points, name these structures that arise due to the parallel overlap of *p* orbitals.

ANSWER: **π** ("pie") bonds [or **π** orbitals; accept **π** -systems, **π** - π stacking, **π** backbonding, or cation- **π** interactions; prompt on **bonds**; prompt on double **bonds** or triple **bonds** or **alkenes** or **alkynes** or **arenes**]

<MY, Chemistry>

10. One event that precipitated this historical period was a four-month labor dispute between miners and the Denver-based Johns-Manville Company. Reforms during this period were influenced by an educational treatise called *The Impertinences of Brother Anonymous*. A party elected at the start of this period used the slogan "now or never / masters in our own house." Politicians dubbed the "three wise men" covered an event that laid the groundwork for this period, the Asbestos strike, in the newspaper *Le Devoir* ("luh duv-WAHR"). This period countered the preceding "Great Darkness," during which religious conservatism was enacted by Maurice Duplessis ("doo-pleh-SEE"). For 10 points, the 1960 election of Jean Lesage ("luh-SAHZH") has traditionally been considered the start of what period of upheaval and social restructuring in Quebec?

ANSWER: **Quiet Revolution** [or **Révolution tranquille**; accept **Silent Revolution**; prompt on descriptions of a political **revolution** in **Quebec** or equivalents until read]

<Arizona State, Other History>

11. A poem set during one of these events compares the addressee to a monkey throwing a javelin from the back of a goat, and ends by claiming that enduring poor treatment during these events is akin to “not flinching from the whip.” A discussion of bathing habits at one of these events turns into an exhaustive recollection of the life of Chrysanthus. One of these events overseen by Virro is the subject of Juvenal’s fifth Satire. A quote from one of these events is the source of the epigraph to *The Waste Land*, in which the Sibyl of Cumae says, “I want to die.” Attendees of one of these events swap stories about werewolves and witches, while slaves bring out objects resembling Zodiac signs. That one of these events is attended by the narrator Encolpius. For 10 points, the *Satyricon* features what sort of event hosted by Trimalchio?

ANSWER: **dinner** parties [or **cena**; or **banquets**; or **feasts**; accept **epula** or **convivia**; prompt on **parties** or **meals**]
<HG, European Literature>

12. This politician contracted hepatitis from a vaccine the White House gave him before a trip to South America, where he discussed grain distribution as Food For Peace director. This politician quipped, “I’ve got a secret for you. Kiss my ass” after being heckled in Battle Creek. In a speech, this politician said, “This chamber reeks of blood,” in addressing opponents to an appropriations bill cosponsored by Mark Hatfield. During one campaign, this politician noted he was “1,000 percent behind” his running mate, who confessed to undergoing electroshock therapy. This politician was forced to drop his running mate Thomas Eagleton, whom he replaced with Sargent Shriver. For 10 points, name this South Dakota Senator who only won Massachusetts and D.C. in his 1972 campaign against Richard Nixon.

ANSWER: George **McGovern** [or George Stanley **McGovern**]
<NS, American History>

13. One of these quantities is divided by the flexural rigidity in the integrand of a theorem developed by Mohr. The signs of these quantities determine whether a structure undergoes “hogging” or “sagging.” One of these quantities is defined as a resultant internal couple and is typically plotted alongside shear in a structural design setup. These quantities are defined as the product of another quantity and some power of distance and include a “bending” type. Another of these quantities, which defines a rank-2 tensor appearing in the Euler equations, is invariant along an axis under the “stretch rule.” For 10 points, name these quantities that describe the distribution of another quantity relative to a fixed reference point, such as the analogue of mass in rotational dynamics called one “of inertia.”

ANSWER: **moments** [accept **moment** of inertia or bending **moment**; reject “momentum”]
<UCSD, Physics>

14. A man who visits three of these places while searching for the “thrice-ninth” kingdom is told to blow three horns successively louder to avoid getting eaten. A piece of bread covered in salt and wrapped in cloth can pacify angry spirits in these places, which may be occupied by benevolent female spirits with chicken beaks called kikimora. While following a doll’s instructions, a girl witnesses three subsequent riders wearing white, red, and black entering one of these places. A *barabashka* is an angry subtype of a spirit of these places called *domovoi*. Vasilisa the Beautiful sought fire in one of these places surrounded by a fence of bones and supported by chicken legs. For 10 points, sweets make up what type of location in the Grimm Brothers fairy tale “Hansel and Gretel?”

ANSWER: **houses** [or **households** or **homes** or **huts**; accept **hearths**; accept Baba Yaga’s **house**; prompt on **walls** or **courtyards** or **keyholes** by asking “of what places?”; prompt on **forests** by asking “what sort of place in the forest?”; prompt on **buildings**]
<MS, Mythology>

15. A series of experiments involving these things involved the maxim “generalizations would come in due time” and was conducted by W. S. Small to focus on its subjects’ “natural proclivities.” Olton and Samuelson assessed reference and working memory in an experiment involving a “radial arm” one of these things. Distal cues in these things’ “oasis” type were added after an associative learning study by Richard Morris. Studies using these things, which led to Edward Tolman’s latent learning theory, were used to develop cognitive maps. With Harvey Carr, John Watson conducted a stimulus and response experiment using one of these things that made a “kerplunk” sound when a rat ran into it. For 10 points, name these structures that psychologists use to study the navigation of mice.

ANSWER: mazes [or labyrinths; accept water mazes; prompt on walls; prompt on water tanks]

<NS, Social Science>

16. One of these sets is divided into simpler regions in Schwarz methods, which fall under a class of methods named for the “decomposition” of these sets. In complex analysis, either “region” or the word for this type of set also refers to a nonempty open connected set. One of these sets can be extended while preserving a norm dominance condition via the Hahn–Banach theorem. In complex analysis, one of these sets is extended via analytic continuation. One of these sets must be at least as large as a related set for a surjection and no larger for an injection. In a common visualization, arrows point rightward from an oval representing one of these sets to an oval representing a related set prefixed “co.” For 10 points, give this term for the set of all inputs to a function, which maps to its range.

ANSWER: domains [accept natural domains or domains of definition; prompt on dom; prompt on inputs to a function until read; prompt on arguments of a function; prompt on basis]

<TM, Other Science>

17. In this novel, a water gun is filled with urine and sprayed on a character by a boy who is beaten with a prosthetic limb in revenge. The title of this novel comes from a poem by Saib Tabrizi that mentions how “every street” of its primary setting is “enthraling to the eye.” In this novel, one character is forced to chew rocks by her shoemaker husband after not cooking rice sufficiently. A businessman in this novel lies about being on a trip to avoid seeing the movie *Pinocchio* with his daughter due to her status as a *harami*, or bastard. In this novel, Mullah Faizullah teaches Miriam to read the Quran decades before she kills her husband to defend his younger second wife, Laila. For 10 points, Kabul is the setting of what 2007 novel by Khaled Hosseini written after *The Kite Runner*?

ANSWER: *A Thousand Splendid Suns*

<SIUE, World Literature>

18. A dynasty of this ethnic group was revived after its leader ended the “Kalabhra interregnum.” Rebels opposing leaders of this ethnicity formed the Confederation of Madja-as in the Philippines. This ethnic group created “singing steps” leading up to one of their three “Great Living” temples; that temple depicted legends associated with 63 “poet-saints” of this ethnicity. Some of the oldest literature written by this ethnic group is collected in the Eight Anthologies and the Ten Idylls, which is part of their Sangam literature. A dynasty led by this ethnicity caused the collapse of the Sailendra (“shy-LAIN-druh”) dynasty during their invasion of Srivijaya led by Rajendra I. For 10 points, name this predominant ethnicity of the “Three Crowned Kings” consisting of the Chera, Pandya, and Chola dynasties in southern India.

ANSWER: Tamils [or Tamilar; or Thamizhar] (The 63 poet-saints are the Nayanars.)

<SIUE, World History>

19. A holder of this title grasps a letter with the artist's signature and wears a chivalric badge in a portrait named for his outfit's brown and silver color. Tiepolo painted this title personified sitting among the continents and the pillars of Hercules in a ceiling fresco on this title's "apotheosis." Théophile Gautier wrote that a holder of this title looked like a "corner grocer who has just won the lottery" in an awkward group portrait of him and his family. A holder of this title commissioned both 1628's *The Triumph of Bacchus* and a painting that shows his victorious army receiving a key in front of a row of vertical lances, titled *The Surrender of Breda*. For 10 points, name this royal title of a patron whose daughter, the Infanta Margarita, is depicted in *Las Meninas* by his court painter Diego Velázquez.

ANSWER: **monarch of Spain** [accept **king of Spain**; accept **monarch of Portugal** or **king of Portugal**; prompt on **king** or **monarch** by asking "of what domain?"; prompt on **ruler of Spain** by asking "with what title?"; reject "queen" or "queen of Spain"] (The painting in the first sentence is Velázquez's *Philip IV in Brown and Silver*, and the painting of the "corner grocer" is *Charles IV of Spain and His Family* by Francisco Goya.)

<Arizona State, Painting and Sculpture>

20. This leader claimed to be protecting workers in the "MZ generation" with proposals to increase the working week from 52 to 69 hours. A Reuters article suggests that this leader's speech about "anti-state forces" was a result of a YouTube addiction. In a press conference, this leader said "if you tell me specifically what I did wrong, then I will apologize for that specific fact" after apologizing for nothing in particular. An opposition politician filmed himself going to vote against a decree set by this leader by jumping a metal fence. This leader of the People Power Party holed up in his Yongsan residence following a successful impeachment vote over his declaration of martial law, which was in place for a single night in December 2024. For 10 points, name this embattled president of South Korea.

ANSWER: **Yoon** Suk Yeol [or **Yun** Seokyeol or **Yun** Seogyel or **Yoon** Seongnyeol]

<EC, Current Events>

Bonuses

1. Many individual symbols in this religion are depicted in a circle in the *milokan* representation of certain images. For 10 points each:

[10m] Name this religion whose practitioners create those images, commonly using cornmeal, to depict important religious symbols such as a cross or a walking cane.

ANSWER: Haitian **Vodou** [or **Voodoo**] (Those images are *vèvè*.)

[10h] Similar to Vodou *vèvè* (“veh-VEH”), practitioners of this religion create diagrams called *firnas* that connect *mpungu* spirits to the material world. This Kongo-inspired religion teaches that spirits inhabit vessels called *nganga*.

ANSWER: **Palo** [or **Palo** Mayombe; prompt on **Reglas** de Congo]

[10e] Practitioners of a religion from this country, Abakuá, draw diagrams called *anaforuanas* based on Nsibidi symbols. Palo developed in this country, as did the Yoruba-Catholic syncretic religion Santería.

ANSWER: **Cuba** [or Republic of **Cuba**; or República de **Cuba**]

<AK, Religion>

2. This thinker’s application of *autopoiesis*, or self-creation, to his systems theory was controversial for its alleged abuse of scientific terminology. For 10 points each:

[10h] Name this author of *Theory of Society*. This German author developed a sociologically oriented systems theory that analyzes the role of, and disturbances in, communication in social organizations.

ANSWER: Niklas **Luhmann** (“LOO-mahn”)

[10m] Luhmann’s systems theory was influenced by this transdisciplinary field led by Norbert Wiener and Gregory Bateson. This field studies feedback systems where outputs also serve as inputs.

ANSWER: **cybernetics**

[10e] Luhmann wrote a “sociological theory” of this concept in an analysis of unexpected situations. In economics, people fearful of uncertain outcomes have an “aversion” to this concept.

ANSWER: **risk** [prompt on **volatility** or **beta**]

<Arizona State, Social Science>

3. Early versions of Linux used the “round-robin” system for performing this task on processes before later versions switched to a constant-time system. For 10 points each:

[10m] Name this task that dictates how CPU time is allocated among a computer’s processes. In general, this task aims to maximize throughput and minimize latency and resource starvation.

ANSWER: **scheduling** [accept word forms such as **schedule**]

[10e] For system processes, scheduling is done by this component of the operating system that performs system calls. This component is so named because it is the “core” of the operating system.

ANSWER: **kernel**

[10h] Some scheduling algorithms use this quantity that lets users manually adjust the priority of a process. In Linux, a maximal value of 19 for this quantity means that a process will only run if no other process wishes to.

ANSWER: **niceness**

<MY, Other Science>

4. The novella *Arrowroot* is often published in a dual edition with a so-called *Secret History* that delves into this character's sadomasochistic relationship with his foe's wife. For 10 points each:

[10h] Name this title character of a nearly thousand-page-long, 1935 novel by Eiji Yoshikawa that climaxes with a battle in which he wields a weapon carved from a boat's oar.

ANSWER: Miyamoto **Musashi** [or **Miyamoto** Musashi; or **Musashi** Miyamoto; or **Musashi**; accept *The Secret History of the Lord of Musashi*]

[10e] This novelist wrote that "Secret History" of Musashi. Edward Seidensticker translated two of this novelist's titles that are idioms about "water pepper-eating bugs" and "falling snow," *Some Prefer Nettles* and *The Makioka Sisters*.

ANSWER: Jun'ichiro **Tanizaki** [or **Tanizaki** Jun'ichiro]

[10m] Perhaps the best-known fictional treatment of feudal Japanese history in the West is this 1975 James Clavell novel about John Blackthorne.

ANSWER: **Shōgun**

<AP, World Literature>

5. According to Herodotus, these people's response to an invasion saw one party leave their land, while the "princes" remained and fought among each other until they all lay dead. For 10 points each:

[10h] Name these agro-pastoralist people. These people's 7th-century BCE ruler Tugdamme ("toog-da-MEH") conquered territory stretching from Lydia to Urartu ("oo-RAR-too") and was recognised as "king of the world" by a foreign astrologer.

ANSWER: **Cimmerians** [or **Kimmerioi** or **Cimmerii** or **Gimirrāya** or **Gimirri**]

[10m] Tugdamme's Cimmerians were identified with the *Ummān-manda*, recalling a powerful enemy that opposed this earlier ruler in the Cuthean Legend. This fourth ruler of the Akkadian Empire created a "Victory Stele" that depicted himself as a god.

ANSWER: **Naram-Sin** [or **Naram-Suen**]

[10e] Letters from this empire directly attest to the Cimmerians' equipment, specifically requesting their leather straps, arrows and bows. This empire's last major capital was Nineveh.

ANSWER: Neo-**Assyrian** Empire [or **Assyria** or māt **Aššur**]

<AT, Other History>

6. The cinematographer Dick Pope and actresses Alison Steadman and Lesley Manville are regular crew members of this director, who won the 1996 Palme d'Or for a film about a Black doctor and her white birth mother. For 10 points each:

[10h] Name this director whose scripting approach involves crafting characters in one-on-one sessions with actors. This director from Manchester set films like *Hard Truths*, *Naked*, and *Secrets and Lies* in London.

ANSWER: Mike **Leigh** ("lee")

[10e] Before making feature films, Leigh wrote and directed teleplays and shows produced by this public broadcaster. David Attenborough narrated this public broadcaster's *Planet Earth* series of nature documentaries.

ANSWER: **BBC** [or **British Broadcasting Corporation**; or **BBC** Studios]

[10m] In Leigh's film *Happy-Go-Lucky*, Sally Hawkins plays a woman with this profession. Mads Mikkelsen played men with this profession in Thomas Vinterberg's films *The Hunt* and *Another Round*.

ANSWER: **teachers** [or school**teachers**; or **instructors**]

<AP, Other Fine Arts>

7. A president of this union criticized FDR for his callous response to the Little Steel strike despite earlier being one of his largest donors. For 10 points each:

[10h] Name this union led by John Llewellyn (“loo-ELL-in”) Lewis, who enforced strikes during World War II. In 1914, strikers tried joining this union before being attacked by guards of the CF&I.

ANSWER: **United Mine Workers** of America [or **UMWA**]

[10e] Lewis was instrumental in splitting the Congress of Industrial Organizations, or CIO, from this other labor union led by George Meany and founded by Samuel Gompers.

ANSWER: **AFL** [or **American Federation of Labor**; accept **AFL-CIO**]

[10m] The AFL-CIO’s anti-corruption push led to conflict with David Beck, who succeeded this man. This man’s death, presumably outside Detroit, likely occurred after meeting with Anthony Giacalone and Anthony Provenzano.

ANSWER: Jimmy **Hoffa** [or James Riddle **Hoffa**]

<Arizona State, American History>

8. Brian Cantor led a team that developed one of these materials consisting of an equal mixture of five first row transition metals. For 10 points each:

[10e] Name these materials said to be “high-entropy” or “multi-component” when they contain at least five different metals. More common two-component examples of these materials include bronze.

ANSWER: **alloys** [accept high-entropy **alloys** or multi-component **alloys**]

[10h] The Cantor alloy undergoes a phase separation into metallic and intermetallic phases, an example of a decomposition described by this term. The zero set of the second derivative of Gibbs free energy with respect to composition percentage defines a curve described by this term.

ANSWER: **spinodal** [accept **spinodal** decomposition or **spinodal** curve]

[10m] The “sluggish diffusion” effect in high-entropy alloys results from unequal lattice potential energies around the “vacancy” type of these sites. Other types of these sites may be classified as “substitutional” or “interstitial.”

ANSWER: point **defects** [or crystallographic point **defects**; accept vacancy **defects** or substitutional **defects** or interstitial **defects**]

<Arizona State, Physics>

9. In 2023, the UK’s transport secretary Mark Harper amplified conspiracy theories that a design named for this number is a plot to dictate people’s behaviors. For 10 points each:

[10m] Give this number that names a city design concept begun by Carlos Moreno and embraced by Anne Hidalgo. That design named for this number aims to make daily needs reachable by cycling, walking, or public transit.

ANSWER: **fifteen** minutes [or **quart** d’heure; accept **15**-minute city]

[10e] Hidalgo adopted the 15-minute city concept while campaigning for re-election as mayor of this capital city that hosted the 2024 Summer Olympics.

ANSWER: **Paris**

[10h] This city has officially adopted the “20-minute neighborhood.” The Hoddle Grid created this city’s pedestrian laneways, while its shopping arcades were built after a mining boom ushered in this city’s 1880s “Marvellous” era.

ANSWER: **Melbourne**, Australia

<EC, Other Academic>

10. The narrator imagines “moans of movement, voices, hands in air” and “nude ghosts seeking each other out in the silence” in a “Love Poem on a Theme by” this author. For 10 points each:

[10m] Name this poet, described as a “childless, lonely old grubber, poking among the meats in the refrigerator” in a poem whose narrator also asks Federico Garcia Lorca, “what were you doing down by the watermelons?”

ANSWER: Walt **Whitman** (The other poem is “A Supermarket in California” by Allen Ginsberg.)

[10e] Allen Ginsberg’s “Love Poem on a Theme by Whitman” describes these things “fallen from heaven” and “locked shuddering naked,” drawing from a Whitman poem that begins, “I sing [this sort of thing] electric.”

ANSWER: **bodies** [accept “I Sing The **Body** Electric”]

[10h] In the essay “Taking a Walk Through *Leaves of Grass*,” Ginsberg highlights the eroticism of a Whitman poem titled for this figure. In the last poem preceding the *Calamus* poems, this figure is told “be not afraid of my body.”

ANSWER: **Adam** [accept “As **Adam** Early in the Morning”]

<HG, American Literature>

11. According to a BBC journalist, clips of this musical work were interspersed with a man awkwardly reading announcements from the State Committee on the State of Emergency. For 10 points each:

[10h] While the hardline Gang of Eight attempted to seize power, what musical work was broadcast on loop on state television?

ANSWER: **Swan Lake** [or **Lebedínoje ózero**]

[10e] During the August Coup, the Gang of Eight arrested this politician, who starred in a famous Pizza Hut commercial. This politician was the last leader of the USSR.

ANSWER: Mikhail **Gorbachev** [or Mikhail Sergeyevich **Gorbachev**]

[10m] Boris Yeltsin personally thanked this station for its coverage of the 1991 coup. Eastern Bloc citizens could tune in to Voice of America and this station if they bypassed jamming with short-wave equipment from the black market.

ANSWER: **Radio Free Europe** [or **Radio Liberty**; accept **RFE** or **RL**]

<EC, European History>

12. After an exhumation of a mass grave, the apparent remains of this author were claimed and taken home by a friend who decided the largest skull must be his. For 10 points each:

[10m] Name this author whose lost skull is the focus of a poem at the end of the *Wilhelm Meister* novel series. This author included *The Piccolomini* in a trilogy of plays about a 17th-century military leader.

ANSWER: Friedrich **Schiller** [or Johann Christoph Friedrich von **Schiller**] (The trilogy is *Wallenstein*. The friend in the lead-in is Goethe.)

[10e] The title character of Johann Wolfgang von Goethe’s *Wilhelm Meister* novels portrays this Shakespeare character, who rhapsodizes on the skull of his former jester Yorick.

ANSWER: **Hamlet**

[10h] After growing bored of *Hamlet*, Wilhelm’s theater troupe puts on this Gotthold Ephraim Lessing play, a retelling of the myth of Virginia in which the title character is stabbed by her father Odoardo.

ANSWER: **Emilia Galotti** [or **Emilie Galotti**]

<HG, European Literature>

13. Ricardo Viñes (“VEEN-yess”) is the dedicatee of the “Sad Birds” movement of a piano suite by this composer whose movements are each dedicated to a different member of Les Apaches (“lay zah-PAHSH”). For 10 points each:
[10e] Name this composer of *Miroirs* (“meer-WAHR”) who abandoned work on orchestrations of Isaac Albéniz’s *Iberia* suite to compose *Boléro*.

ANSWER: Maurice **Ravel**

[10h] The painter Paul Sordes (“sord”), who was called a “Ravel of the palette” by Les Apaches member Tristan Klingsor, was the dedicatee of this third movement of Ravel’s *Miroirs*. This movement is known for its lush arpeggios imitating sea currents.

ANSWER: “Une **barque sur l’océan**” (“oon bark soor lo-say-AWN”) [accept “A **Boat on the Ocean**”]

[10m] Viñes premiered Ravel’s *Gaspard de la nuit* (“gas-PARR duh la NWEH”), whose third movement was written to be more difficult than this “Oriental Fantasy” for piano by Mily Balakirev.

ANSWER: **Islamey** [or **Islamey**: *Oriental Fantasy*]

<Arizona State, Classical Music>

14. Ritual flogging was a key portion of the *yondo* ritual that François Tombalbaye (“tohm-bahl-BYE”) forced his people to undergo as part of a program with this name. For 10 points each:

[10m] Give this French-language term also used by Mobutu Sese Seko. This term describes the process of changing personal and place names to reject Western influence.

ANSWER: **authenticité** [accept **authenticity**]

[10e] As part of his *authenticité* program, Mobutu renamed the Democratic Republic of the Congo to this name, which he promoted as the first of the “Three Zs.”

ANSWER: **Zaire** [or Republic of **Zaire**]

[10h] This leader founded the record label Syliphone as part of his own *authenticité* program more focused on the arts. This leader’s nephew oversaw a facility in which this leader implemented the “black diet,” Camp Boiro.

ANSWER: Ahmed Sékou **Touré** [or Sheku **Turay**; or Sheku **Ture**] (Touré was the first president of Guinea. His nephew was Siaka Touré.)

<AK, World History>

15. Answer the following about discoveries in ecology achieved by studying butterflies, for 10 points each.

[10e] Until recently, monarch butterflies were thought to be the insect to undergo the longest type of this process. During this process, an organism travels across long distances, usually on a seasonal basis.

ANSWER: **migration** [or word forms; prompt on **movement** or **navigation**] (The insect with the longest migration is now thought to be the dragonfly species *Pantala flavescens*.)

[10m] This type of mimicry was first observed in the butterfly genus *Heliconius*. This type of mimicry relies on all involved species exhibiting aposematism and being unpalatable.

ANSWER: **Müllerian** mimicry

[10h] A study of the Glanville fritillary butterfly in Finland’s Åland Islands is the largest ever to examine these entities, which are approximated using the source-sink model. Richard Levins coined the term for these entities, which are patches of habitat linked by migration or dispersal of individuals.

ANSWER: **metapopulations** [prompt on **populations**]

<MS, Biology>

16. An essay on “Existence and” this field argues that this field’s purpose is to “conquer a remoteness” to allow for the creation of meaning. For 10 points each:

[10m] Name this field that is applied to phenomenology in *Time and Narrative* by Paul Ricoeur (“ree-CURR”). Many thinkers in this field conceptualize it as an interplay between the whole and its parts in a namesake “circle.”

ANSWER: **hermeneutics** [accept “Existence and **Hermeneutics**”; prompt on **interpretation**]

[10h] Ricoeur coined a hermeneutical school named for this concept that aims to find hidden meanings within texts. Ricoeur named Freud, Marx, and Nietzsche as the “masters” of this concept for their views on false consciousness.

ANSWER: **suspicion** [or **soupçon**]

[10e] Rita Felski built on the school of suspicion to theorize a “critique” denoted by this prefix. Thomas Pynchon belongs to a movement containing this prefix that Frederic Jameson called the “cultural logic of late capitalism.”

ANSWER: **post** [accept **postcritique** or **postmodernism**]

<Arizona State, Philosophy>

17. Liberty Blue and Liberty Prime are two instruments produced by CEM that enable the synthesis of molecules in this fashion, starting with reagents named Wang or Rank Amide. For 10 points each:

[10h] Name this form of synthesis that underpins “split and pool” synthesis. Peptides synthesized in this manner are immediately treated afterwards with a cocktail of 95-percent TFA supplemented with TIS and DODT.

ANSWER: **solid-phase** synthesis [accept **on-resin** synthesis; accept **solid-phase** peptide synthesis or **on-resin** peptide synthesis]

[10m] The aforementioned cocktail is used to remove the final products from the resin and to remove these modifications. The compounds Fmoc (“F-mock”) and Boc (“bock”) are used as these modifications.

ANSWER: **protecting groups** [or **protective groups**]

[10e] Each round of solid-phase peptide synthesis begins with the removal of Fmoc by adding one of these compounds while leaving Boc and Trt untouched. These compounds form solutions with a high pH.

ANSWER: **bases**

<Arizona State, Chemistry>

18. After this being was slain by the demoness Jahi, a tree sprouted from their corpse, leading to the birth of the first man Mashya and the first woman Mashyana. For 10 points each:

[10h] Name this first human being from Avestan mythology. One epic begins by describing this figure’s rule during a time when humans still lived in caves and wore leopard skins.

ANSWER: **Gayomart** [or **Kayomart**; or **Keyumars**; or **Kiomars**]

[10e] Upon Gayomart’s death after ruling for 30 years, their grandson Hushang founded this modern-day country’s Pishdadian Dynasty. The story of Gayomart opens this country’s national epic, the *Shahnameh*.

ANSWER: **Iran** [or Islamic Republic of **Iran**; or Jomhuri-ye Eslami-ye **Iran**; prompt on **Persia**]

[10m] Gayomart’s son Siamak is killed while leading an army against the forces of this figure. In a story from the *Shahnameh*, kisses from this figure cause snakes to grow from the shoulders of the evil king Zahhak.

ANSWER: **Ahriman** [or **Angra Mainyu**]

<UCSD, Mythology>

19. The title character of this novel contracts a skin disease called “dragonhide” before being swallowed by the earth and waking up in a kind of hospital that uses incurable patients for power and food. For 10 points each:

[10h] Name this novel in which another character, Duncan Thaw, calmly anticipates an apocalyptic ending while sitting in a hilltop cemetery after meeting his creator, Alasdair Gray.

ANSWER: **Lanark** [or **Lanark**: *A Life in Four Books*]

[10m] *Lanark* is largely set in Unthank, a dystopian version of this city devoid of daylight. This city is the setting of Douglas Stuart’s *Shuggie Bain* and James Kelman’s *How Late It Was, How Late*.

ANSWER: **Glasgow**

[10e] Gray wrote *Lanark* a decade before *Poor Things*, a send-up of this Mary Shelley novel about a scientist who reanimates dead matter.

ANSWER: **Frankenstein** [or **Frankenstein**: or, *The Modern Prometheus*]

<UCSD, British Literature>

20. Answer the following about the artistic impact of the physiognomist Johann Kaspar Lavater, for 10 points each.

[10e] Lavater’s studies influenced Franz Xaver Messerschmidt’s portrayal of the “canonical grimaces” in a series of these works. Jean-Antoine Houdon (“oo-DON”) made many of these sculptures that show a subject’s head and upper torso.

ANSWER: **busts** [or portrait **busts**; prompt on **character heads** or **Charakterköpfe**]

[10h] This friend of Lavater made an English translation of his *Essays on Physiognomy*. This artist’s fantasies about Lavater’s niece, Anna Landolt, may have inspired a painting popularized by a Thomas Burke engraving.

ANSWER: Henry **Fuseli** (“FUSE-lee”) [or Johann Heinrich **Füssli**] (The painting is *The Nightmare*.)

[10m] Thomas Rowlandson and James Gillray, who mainly worked in this genre, both made studies based on Lavater’s work. Charles Baudelaire wrote that an artist had “the accuracy of a Lavater” in works in this genre like *Gargantua* that often appeared in *Le Charivari* (“luh shah-ree-vah-REE”).

ANSWER: **caricatures** [accept political **cartoons**; prompt on **satires** or **satirical**; prompt on **sketches** or **comic strips**; prompt on **lithographs** or **drawings**] (The artist is Honoré Daumier.)

<TM, Painting and Sculpture>