

2024 ACF Nationals

Packet H, Prelims Round 8 by Chicago A, Duke A, Purdue A, Stanford A

TOSSUPS

1. The development of this piece's first movement ends with the viola and the cello alternating droning *forzando* "E-B" fifths for ten bars. This piece's slow movement begins its last variation by restating the theme but harmonized in the relative key, E minor, rather than the expected parallel key. This C-major piece begins with an eighth-note G, a quarter-note E, and then the *staccato* notes "F, D, C." This piece's second movement is a set of four variations on a 20-bar theme in G major and cut time. This piece is sandwiched between ones nicknamed "Fifths" and "Sunrise" as part of a 1797 collection written for József Erdődy ("AIR-der-dee"). A melody in this piece is taken from a hymn written for Francis II, to which August Heinrich Hoffmann later added lyrics. For 10 points, name this string quartet by Haydn that includes the melody of the German national anthem.

ANSWER: **Emperor** Quartet [or **Kaiser**quartett; or Joseph **Haydn**'s **String Quartet** No. **62**; or Joseph **Haydn**'s Opus **76**, No. **3**; prompt on Joseph Haydn's **Opus 76**; prompt on **quartets** until read; prompt on **Erdődy** quartets until "Erdődy" is read]

<Classical Music>

2. This book and a frog inspired the conversion of J. W. Krutch, who wrote its "Cactus" version in Arizona. References in this book led Don Henley to preserve a hill farmed by the Black "former inhabitant" Brister Freeman. A fictional project that extrapolates this book's "experiment" to multiple people produced imitators like Los Horcones ("or-KO-nace"), Mexico, and Twin Oaks, Virginia, and inspired a modular apartment complex by Ricardo Bofill ("boo-FEEL"). Riffing on this book's speculative "Realometer," Richard Primack matched climate data with its author's records of first flowering dates for an unfinished phenology tome. A utopian novel named for this book, in which Six Planners organize T. E. Frazier's engineered community, was written by B. F. Skinner. For 10 points, name this 1854 book about the woods around an Ice Age kettle pond by Henry David Thoreau.

ANSWER: **Walden** [accept **Walden** Pond; accept **Walden Two**, **Walden 7**, **Walden** Woods Project, **Walden Warming**, or the "Cactus **Walden**"] (Krutch, who wrote the "Cactus *Walden*" *The Desert Year*, embraced a pantheism that he first invoked in an essay from *The Twelve Seasons* about the spring peeper.)

<Other Academic>

3. Hydrogens on these molecular features can be targeted by nitroalkanes via the vicarious release of a besyl ("beh-sill") group. Arrows drawn across these features indicate valid sites for "migration" using a rule developed by Erich Clar. Alkyl groups on these features can be rearranged by heating over a zeolite to adjust the ratio of BTX compounds. Amines on these features are replaced by *in situ* transformation into a salt with nitrous acid, followed by cleavage in the presence of copper. Nucleophiles perform a frontside attack at the *ipso* position of these structures, forming an intermediate whose charge is delocalized over five carbons. Adding a directing group to these structures can constrain later substitutions to the *o*- and *p*- positions. For 10 points, what structures are targeted for electrophilic substitution in a Friedel-Crafts reaction?

ANSWER: **arenes** [or **aromatic** rings; accept **benzene** rings, **benzenoids**, **aryl** groups, or **phenyl** groups; accept polycyclic **aromatic** hydrocarbons; prompt on **rings**, **cycles**, **cyclic** compounds, or **conjugated** compounds]

<Chemistry>

4. In an 1872 memoir in this language, the author learns how to read by scratching letters on a blackened kitchen wall after stealing her son's handwriting practice sheets. In a novel in this language, the hero sees statues of Mother-as-she-was, as-she-is, and as-she-will-be in an "abbey of bliss" held by rebel monks. In a novel in this language, a woman nicknamed "Queen Bee" steals rolls of gold sovereigns from her husband's safe. The title alcoholic of a novella in this language dies on his childhood sweetheart's doorstep after leaving a courtesan. In a novel in this language, a campaign against foreign goods is led by an amoralist who loves the song *Vande Mātaram* and charms the pacifist Nikhil's wife Bimala. For 10 points, *Devdas* and *The Home and the World* were written in what language during a "Renaissance" that included Rabindranath Tagore ("ruh-BIN-druh-not ta-GOR")?

ANSWER: **Bengali** [or **Bangla**; accept **Bengali Renaissance**] (The first line refers to *My Life* by Rassundari Devi. Bankim Chandra Chatterjee wrote the song *Vande Mātaram* for his novel *Anandamath*. *Devdas* is by Sarat Chandra Chattopadhyay.)

<World Literature>

5. During an offshoot of this conflict, a series of small mountain shelters called the Casuchas del Rey were constructed to improve communication for a state that dispatched expeditions led by Pedro Antonio de Cevallos to capture Colonia del Sacramento. The Fantastic War was fought during this conflict, whose conclusion set up a standoff between Nicholas Bourke and William Lyttelton over which government should foot defense costs. Admiral John Byng was executed after a disastrous defense at this war's Battle of Minorca. During this war, Samuel Cornish and William Draper demanded a four-million-dollar ransom to stop plundering a city made famous by its namesake galleon trade. During this global war, Britain captured the Spanish cities of Havana and Manila. For 10 points, name this war ended by the 1763 Treaty of Paris.

ANSWER: **Seven Years'** War [accept **Fantastic** War or Guerra **Fantástica** until "Fantastic" is read; prompt on **French and Indian** War or **Anglo-Spanish** War or Guerra **Anglo-Española** by asking what overall conflict was it part of?"]

<European History>

6. A reference book by Rupert G. Miller is titled for going "beyond" this method. This is the most common method used to initially analyze data that, after further tests, may ultimately be summarized as sequences of lowercase letters in the Compact Letter Display. In response to "dishonest" follow-up tests to this method, John Tukey introduced the post-hoc "honest significance test" that accounted for family-wise error rate. The "factorial" variety of this method, which is widely used in experimental psychology, includes "two-way" examples of it. This method uses a ratio of mean squares called the *F* statistic to compare the explained and unexplained sources of its eponymous quantity. This method compares the means of more than two groups. For 10 points, what statistical method's full name refers to a quantity representing dispersion?

ANSWER: **ANOVA** [or **analysis of variance**; accept two-way **ANOVA** or two-way **analysis of variance**; accept factorial **ANOVA** or factorial **analysis of variance**; accept *Beyond ANOVA: Basics of Applied Statistics*]

<Other Science>

7. The example of men applying this concept to women is used to argue for the "morally vital" need to "split the input from the output" when critiquing thick concepts in Simon Blackburn's *Ruling Passions*. Lori Merish theorized the "banality" of this concept, whose "unpindownability" is explored in a 2019 book on its "power" by Simon May. Experiences of this concept tend to produce an "act of automatic mimesis" according to a 2012 book that uses the example of a frog-shaped sponge. This is the alphabetically first of three concepts analyzed in the book *Our Aesthetic Categories*, which discusses it alongside the "merely interesting" and the "zany." Sianne Ngai ("nye") has claimed that this quality renders people and objects "appealingly powerless." For 10 points, what aesthetic property, often evoked by neoteny ("nee-OTT-uh-nee"), is the basis of Japan's *kawaii* culture?

ANSWER: **cuteness** [accept **kawaii** until read; accept *The Power of Cute*; accept "**Cuteness and Commodity Aesthetics**"]

<Philosophy>

8. After Soviet training in this industry, the “Terrorist Maria” Amélia Araújo (“ah-MAIL-yah ah-rah-OO-zhoo”) created Libertação (“lee-bair-tah-SAO”), which was operated by the PAIGC from Swedish trucks. Amílcar Cabral’s career began with an agronomy speech for this industry’s Clube de Cabo Verde, a counterpart of its clubs run by colonial Psychosocial Action services in São Tomé, Angola, and Mozambique. Antonio Cubillo (“koo-BEE-yo”) led the Canary Islands Independence Movement via one of these companies in Algiers. After an oil boom, a state-run company in this industry infamously declared Teodoro Obiang a god in Equatorial Guinea. Alongside *Kangura* magazine, *animateurs* denounced “cockroaches” via one of these companies named, like a hotel, for a country’s “thousand hills.” For 10 points, what industry’s company RTLTM issued violent propaganda like “cut down the tall trees” on its Hutu Power broadcasts?

ANSWER: **radio** [accept **FM** radio, **AM** radio, **shortwave** stations, **medium wave**, **Radio** Télévision Libre des Mille Collines, **Emissora** Nacional, or **Rádio** Libertação; prompt on **media**, **networks**, **broadcasting**, **propaganda**, **information**, **telecommunications**, **communication**, **stations**, or **transmissions**; prompt on **RTLTM** or **RCM** or **RCA** by asking “what does that stand for?”] (“Maria Turra” means “Terrorist Maria.” The causal role often attributed to RLTM in the Rwandan genocide is likely exaggerated, although it may be implicated in some killings.)
<World History>

9. In a play by this poet, an imprisoned friar prophesies (“PROFF-uh-sighs”) an enigmatic savior whose “name shall be: forty and four” in a “vision” monologue that coined the metaphor of the “Christ of Nations.” This poet used the motto “ubi patria, ubi male (“MAH-lay”)” as the leader of a legion that fought in Genoa. This poet described a pike cooked three different ways and a broth flavored with pearls and coins in a lavish feast scene drawn from the 1682 cookbook *Compendium ferculorum*. A Jewish innkeeper plays a dulcimer concert in the last canto of a poem by this author in which the Pantler’s granddaughter Zosia falls in love with the scion (“SY-on”) of a rival family. This member of the Three Bards wrote the verse drama *Forefathers Eve* and a poem in alexandrines that begins “Lithuania! My homeland!” For 10 points, name this Romantic author of Poland’s national epic, *Pan Tadeusz* (“pahn tah-DAY-oosh”).

ANSWER: Adam **Mickiewicz** (“meets-KYAY-veech”) [accept **Mickiewicz** Legion]
<European Literature>

10. A book titled for this behavior laments anglophone readers’ lack of access to the Karl Kessler lectures that inspired its author to link institutions like the Lifeboat Association and *artéls* to small wagtails’ ability to fight off hawks. A book titled for this behavior promotes the adages “don’t be too clever” and “don’t be envious” and spun out of a paper co-authored with W. D. Hamilton. This behavior names a class of games that have a set of feasible allocations called the “core” and use the Shapley value solution concept. This “Factor of Evolution” titles a 1902 book by Peter Kropotkin. The “tit-for-tat” strategy is discussed in a book titled for its “Evolution” by Robert Axelrod. Agents take this action by staying silent and not defecting in the prisoner’s dilemma. For 10 points, what form of coalition-building contrasts with competition?

ANSWER: **cooperation** [or word forms of **cooperate** or **cooperative**; accept **coalition**-building until read; accept *The Evolution of Cooperation*; accept **Mutual Aid: A Factor of Evolution**; prompt on **altruism** or word forms]
<Social Science>

11. During this decade, Josephine St. Pierre Ruffin ran *The Woman's Era*. America's first juvenile court was established during this decade due to the efforts of the newly established General Federation of Women's Clubs. During this decade, Hazen S. Pingree sold his horse to fund a namesake "Potato Patch Plan" to convert empty lots into community gardens in Detroit. This decade was deemed the "reckless decade" by H. W. Brands in a history whose first chapter covers an infamous land run in the Cherokee Strip. During this decade, the P&R Railroad went bankrupt. In this decade, the Army of the Commonwealth in Christ marched to the nation's capital from Massillon, Ohio, and the American Railway Union formed under Eugene V. Debs. For 10 points, Coxe's Army responded to a severe "panic" in what decade that prompted the presidential election of William McKinley?

ANSWER: **1890s** [prompt on '90s]

<American History>

12. In an example of this state, three sequential transcriptional programs hijack NF-kappa-B signaling with LMP1 to generate an *in vivo* immortal cell line. MicroRNAs that maintain this state are expressed by the BHRF1 and BART gene clusters. Episomal DNA undergoes chromatinization with host histones during this state, producing epigenetic silencing as an escape mechanism. In some populations, this state can be identified by accumulation of the LAT intron. Entering this state requires suppression of early genes and can be viewed as a form of bet-hedging due to its creation of a drug-resistant reservoir in long-lived cells like neurons of the dorsal root ganglia. Stress-triggered reactivation can end this state, producing outbreaks of shingles or cold sores. For 10 points, name this form of dormancy assumed by viruses not actively undergoing the lytic cycle.

ANSWER: viral **latency** [or **latent**; accept **lysogeny** or **lysogenic** cycle; prompt on chronic (viral) **infection**; prompt on **dormancy** or **dormant** until "dormancy" is read]

<Biology>

13. This artist described eating caviar for breakfast daily and going against Cézanne by painting people "ruined by the rat race" in an interview with Johnny Carson. Kenneth Doolittle burned hundreds of paintings by this "collector of souls," damaging one of them that shows a crazy-looking Joe Gould with three penises. The bold blue outlines and unfinished backgrounds of this artist's late-career portraits are shown in the Met's 2021 exhibition "People Come First," which traces this artist's career in Spanish Harlem and the Upper West Side. This artist depicted a scarred torso and protective corset in a 1970 portrait of a shirtless Andy Warhol, and painted a nude self-portrait at 80 years old in which she sits in a striped blue chair. For 10 points, name this New York artist known for expressionistic portraits like *Margaret Evans Pregnant*.

ANSWER: Alice **Neel**

<Painting & Sculpture>

14. In a play subtitled for one of these events, the Abbess of X leads an order of assassin nuns who poisoned Cromwell. Dogwater helps the author of *Hydriotaphia* accumulate capital in that Tony Kushner farce about one of these events involving Thomas Browne. A married couple read an encyclopedia entry on one of these events caused by a Spanish Communist in a play whose scenes end with that event followed by a bell ringing. In a play titled for an event of this kind, a man who says he doesn't "have a thing in the ground" uses a flashlight to plant his garden, and imagines his brother saying "the jungle is dark but full of diamonds." These events title a David Ives play about Leon Trotsky and a play permeated by flute music in which a man intentionally crashes his car to help his son Biff. For 10 points, what kind of event titles Arthur Miller's play about Willy Loman?

ANSWER: **death** [accept **Death** of a Salesman; accept *Variations on the **Death** of Leon Trotsky*; accept *Hydriotaphia*, or the **Death** of Doctor Browne; accept **assassination** or **murder** after "encyclopedia" is read]

<American Literature>

15. In 2021, North Macedonian women protested this company over sexual harassment. Pressure from the “Axis of Resistance” reversed this company’s 2023 ban over Iraqi Sadrism (“Sadr-ism”). Delhi’s High Court demanded details on copyright violators from this BVI-based company, which gave German police access to its data centers. This company’s founders created the social network VK before they bought Kittian citizenship and one of them became Dubai’s richest billionaire. Governor Ricardo Rosselló (“roh-say-YO”) resigned in a 2019 scandal facilitated by this company in Puerto Rico. Belarus’s YouTube channel Nexta (“NEKH-tuh”) expanded via this company, which is ISIS’s main recruiting platform. This company founded by Nikolai and Pavel Durov collects IP addresses and uses the MTProto protocol, unlike Signal. For 10 points, what cloud-based app offers “secret chats” with end-to-end encryption?

ANSWER: **Telegram** [or **Telegram** Messenger; accept **Telegram** Group Inc. or **Telegram** FZ-LLC; accept **Telegramgate**]

<Current Events>

16. A mosque in this city that lacks a courtyard and minarets uses sunlight to create the illusion of a peacock at the yellow center of its “seven-color” tiled dome. 18 wooden columns support the *talar* balcony of a six-story palace in this city that features a music hall with stucco cut-outs resembling bottles and instruments. Jean Chardin described the architecture of this city, where an early version of aperiodic *girih* tiling decorated the brick Darb-e Islam shrine. This city contains a mosque with a four-*iwan* plan with white flowers and gold vines in the *muqarnas* at its turquoise entrance. The Loftallah Mosque, ‘Ali Qapu Palace, and Shah Mosque border this city’s Naqsh-e Jahān Square. Reza Abbasi led this city’s school of miniaturists, which supplanted schools from Herāt and Tabriz. For 10 points, name this Iranian city developed by the Safavids.

ANSWER: **Isfahan** [or **Esfahān**] (The Darb-e Islam is also called the Darb-e Imam.)

<Other Fine Arts>

17. Andocides’s speech about one of these things rues Athenian aid to Amorges’s revolt. Isocrates’s speech about one of these things in 355 BCE lacks Diodorus’s idea that they were guided by “common” Panhellenism. Based on its Ionic inscription, Theopompus wrote that one of these things from the Pentecontaetia (“PEN-tuh-kon-tuh-EH-tee-uh”) was forged circa 375 BCE, when Cephisodotos celebrated another of them with a cult statue for its personifying goddess. Tissaphernes thrice forbid Sparta from making these things without joint Persian support. Cleon rebuffed one of these things at Pylos. Artaxerxes II enforced one of these things called the “king’s” requested by Antalcidas. Pericles denied that the Megarian Decree violated one of these things, whose 30-year duration was cut short by the Archidamian phase. For 10 points, what type of document was negotiated by Pleistonax and Nicias?

ANSWER: **peace** treaties [or **peace** treaty, **peace** offers, **pax**, **eirēnē**, or **irene**; accept **armistice** or **truce**; accept **Peace** of Nicias, **Peace** of Antalcidas, King’s **Peace**, **Peace** of Callias, **Peace** of Epilycus, Common **Peace**, Koinē **Eirēnē**, or *On the Peace*; prompt on **treaties**, **settlements**, **agreements**, **accords**, **documents**, **pacts**, or equivalents of any; reject “surrender” or “alliance” or equivalents of each]

<Other History>

18. In 2023, Douglas Natelson’s lab showed that this phenomenon is heavily suppressed in a nanowire made of the strange metal ytterbium dirhodium disilicide (“it-TER-bium di-rhodium di-silicide”), which thus disobeyed Fermi liquid theory. A limit resulting from this phenomenon is achieved when a local oscillator signal is sent into a beam combiner in balanced heterodyne detection. Dark current and this intrinsic phenomenon are contrasted with an equipment-dependent “read” phenomenon in digital photography. This phenomenon’s power spectral density is twice the fundamental charge times the current, per Schottky’s theorem. This phenomenon is described by a Poisson (“pwah-sahn”) distribution, both in the context of the number of photons reaching a pixel, and for single electrons carrying charge. For 10 points, name this type of noise that arises due to particles being quantized.

ANSWER: **shot noise** [accept **shot** noise after “noise” is read; accept **Poisson noise** until “Poisson” is read and prompt afterward; accept **Schottky noise** until “Schottky’s” is read and prompt afterwards; prompt on **noise** until read]

<Physics>

19. In the alliterative poem *The Awntyrs* (“AHN-ters”) *off* *Arthure*, this knight and his riding companion Guinevere meet her mother’s ghost at Tarn Wadling. The otherworldly Inglewood Forest features in a group of “northern” romances named after this knight set mainly in Cumbria, including a poem in which he sleeps with the daughter of the Carle of Carlisle. In *Le Morte d’Arthur*, this knight accidentally kills a lady while trying to retrieve a white hart during the first quest of the Round Table, and his ghost later warns Arthur not to fight at Camlann. This knight fathers Gingalain, sometimes known as the “Fair Unknown,” in a poem in which he marries the loathly lady Ragnelle. This knight returns to his host the kisses, but not the protective girdle, that he receives from Lady Bertilak. For 10 points, name this nephew of Arthur who beheads the Green Knight.

ANSWER: **Gawain** [accept *Sir **Gawain** and the Green Knight*; accept *The Weddyng of Syr **Gawen** and Dame Ragnelle*; accept *Sir **Gawain** and the Carle of Carlisle*]

<British Literature>

20. A religious group in this country organizes local associations called *dahira*, which grant prominent roles to women like Sokhna Magat. That group in this country commemorates its founder with coffee spiced with grains of Selim and uses the motto “you reap what you sow” to describe religious legume farming. A figure from this country supposedly defied colonists by jumping off a boat onto a miraculous marine prayer mat and instituted annual visits to his home village’s “Wall of Mercy.” In this country, Malick Sy’s Tivaouane (“TIV-ah-wahn”)-based branch of the Tijānīyyah (“tih-jah-NEE-yah”) shares influence with a Sufi order that conducts the Grand Magal pilgrimage to the tomb of Ahmadou Bamba in Touba. This country is home to most of the Saltigue (“sahl-TEE-ghee”) priests of the Serer people. For 10 points, name this country where the Mouride (“moo-REE-dee”) Brotherhood allied with Léopold Sédar Senghor.

ANSWER: **Senegal** [or **Senegaali**, Republic of **Senegal**, République du **Sénégal**, or Jumhūriyya al-**Sinigāl**]

<Religion>

BONUSES

1. In a dialogue, this position is briefly analyzed with a four-step “divine method” that was handed down by “some Prometheus.” For 10 points each:

[10m] Name this position attacked with Platonic animal analogies such as an oyster in the *Philebus* and the constantly-defecating “gully-bird” in the *Gorgias*. This was the signature position of the Cyrenaic school.

ANSWER: **hedonism** [or **hedonists**; prompt on descriptions of seeking **pleasure** or **pleasure** being the highest or only good]

[10e] The anti-hedonist founder of this school often yelled “I would rather go mad than feel pleasure!” Antisthenes founded this school, which included Hipparchia and her barrel-dwelling husband.

ANSWER: **Cynicism** [or **Cynics**]

[10h] One of the Cynic Letters of this thinker complains about excessive pursuit of pleasure. The 18th-century world federalist Baron de Cloots renamed himself after this Scythian philosopher who laughed at Solon’s constitution.

ANSWER: **Anacharsis** [accept **Anacharsis** Cloots]

<Philosophy>

2. This woman is called “the Allmaziful, the Everling” in a chapter that describes a “mamafesta” she wrote to defend her husband, but which was never properly delivered. For 10 points each:

[10m] Name this mother of Shem and Shaun. She imagines herself as the River Liffey in a monologue that begins, “Soft morning, city!” and ends the novel in which she appears by wrapping back to its first word, “riverrun.”

ANSWER: **Anna** Livia Plurabelle [or **ALP**; or Anna Livia **Plurabelle**; accept **Alma** Luvia, Pollabella or Alma Luvia, **Pollabella**]

[10e] Anna Livia Plurabelle appears as the wife of Humphrey Chimpden Earwicker in this famously difficult final novel by James Joyce.

ANSWER: ***Finnegans Wake***

[10h] In this story by another author, Cynthia realizes that the name of the river Alph from “Kubla Khan” is linked to Anna Livia Plurabelle’s initials. This story’s narrator is fascinated by “a family of brilliant icicles.”

ANSWER: “The **Vane Sisters**” (by Vladimir Nabokov)

<British Literature>

3. This school inspired the *intendant* Pierre Poivre (“pwahv”) to conserve forests in an attempt to halt plantation erosion and provide rainfall for smuggled spice gardens. For 10 points each:

[10m] Name this economic school that guided 18th-century French exploitation of natural wealth in the Mascarenes.

ANSWER: **physiocrats** [or **physiocracy** or **physiocratic** school; prompt on **economistes**] (The tongue twister “Peter Piper” may reference Poivre bringing spices to Mauritius, Réunion, and the Seychelles.)

[10e] In 1786, the physiocratic explorer Lapérouse blamed deforestation for this island’s alleged “ecocide.”

Jean-Baptiste Dutrou-Bornier (“doo-TROO born-YAY”) depopulated this island to grow copra in Tahiti before Chile annexed it.

ANSWER: **Rapa Nui** [or **Easter** Island; or Isla de **Pascua**; or Île de **Pâques**]

[10h] Gregory Cushman argued that ecological imperialism was worst on drought-prone islands like Rapa Nui and the Marquesas, which this Spanish explorer infected with syphilis. Pedro Fernandes de Queirós evacuated this man’s failed colony in the Solomons in 1595.

ANSWER: Álvaro de **Mendaña** de Neira [prompt on **Neira** or **Neyra**]

<Other History>

4. A machine learning subfield called “learning to” do this task uses normalized discounted cumulative gain as a metric for evaluating it. For 10 points each:

[10m] Name this information retrieval task. Search engines use an algorithm for this task that computes the principal eigenvector of the transition matrix of a webgraph.

ANSWER: **ranking** [accept Page**Rank**; accept learning to **rank**]

[10h] When ranking based on a vector space model, this statistic is usually used for a vector’s components. This statistic is a product of two terms: one that represents how common a word is in a document, and another that represents how rare a word is in a corpus.

ANSWER: **tf-idf** [or **term frequency–inverse document frequency**]

[10e] Ranking documents by relevance improves on information retrieval models using this algebra system, which computes truth values using logical operators.

ANSWER: **Boolean** algebra [or **Boolean** logic; accept **Boolean** model or **Boolean** query]

<Other Science>

5. A chicken farmer is scammed into selling his farm to go to college in Cyprus in a novel narrated by one of these beings titled *An Orchestra of Minorities*. For 10 points each:

[10h] Name this sort of being that “says yes also” when a man “says yes,” per a proverb repeated in another novel. That novel’s author translated his own first name as “may [one of these beings] fight for me.”

ANSWER: **chi** [prompt on personal **gods**] (*An Orchestra of Minorities* is by Chigozie Obioma.)

[10e] Chinua Achebe wrote “Chi in Igbo Cosmology” and called chi “personal gods” in this novel, the first of three he set in Umuofia.

ANSWER: ***Things Fall Apart***

[10m] Nnu Ego dreams of her chi handing her a baby by the banks of a stream in this Igbo author’s novel *The Joys of Motherhood*. This “feminist with a small f” fictionalized her life in London in *Second Class Citizen*.

ANSWER: Buchi **Emecheta** [or Florence Onyebuchi **Emecheta**]

<World Literature>

6. *Description acceptable.* J. W. Buel’s *Sea and Land* illustrated one of these monsters called the Ya-te-veo, a possible Colombian cousin of a Nicaraguan “vampire.” For 10 points each:

[10h] Identify these monsters that include a creature worshiped with orgiastic sacrifices by Madagascar’s Mkondo people in a lurid 1874 *New York World* hoax.

ANSWER: man-eating **plants** [or descriptions of carnivorous **trees**, **vines**, **flowers**, **tendrils**, **pineapples**, **bromeliads**, **agaves**, or other types of plant; accept Nicaraguan vampire **vine**, **Devil’s snare**, “**sagenas de diable**,” or **Devil’s seine**; accept man-sucking **tree** or *Crinoida dajeeana*; prompt on **tentacled** monsters by asking “what sort of life form?”]

[10e] A lazy Filipino hero with this name rides his carabao to avoid a tree giant called a kapre. Puerto Rican and Haitian tricksters with this name are actually little, unlike a giant ally of Robin Hood.

ANSWER: **John** [or **Juan** or **Jean**; accept Little **John**, Ti-**Jean**, Petit-**Jean**, **Juan** Bobo, **Juan** Tamad, or **Juan** Pusong] (The kapre is sometimes described as man-eating, but it was later portrayed as a relatively benign trickster.)

[10m] Stories of the vengeful lupuna tree include a myth about grandchildren cutting one down to create a habitat of these animals. They are known as *encantados* for disguising as dapper men to seduce women in the Amazon.

ANSWER: river **dolphins** [or **botos**, **bufeos**, pink river **dolphins**, Amazonian river **dolphins**, or *Inia geoffrensis*; prompt on **cetaceans** or **whales**] (The “tree and the flood” myth of peoples like the Yagua describes the creation of the Amazon River.)

<Mythology>

7. This practice was largely unavailable in Japan until the Health and Welfare Ministry approved a low-dose drug in 1999. For 10 points each:

[10m] Name this practice that was championed in the National Diet by Katō Shidzue (“shee-ZOO-eh”), who promoted it with a violator of the Comstock laws who visited Japan on the “black ship of Taishō” after founding the ABCL.

ANSWER: **contraception** [or **contraceptives**; or **birth control**; accept **family planning** or **family limitation** or equivalents; accept the **pill**, combined oral contraceptive **pill**, **condoms**, **diaphragms**, **pessaries**, **pessary**, or **spermicides**; accept descriptions of **preventing pregnancy** or **preventing conception** or **reducing fertility**; reject “abortion” or “sterilization” or “Plan B”] (Katō worked with Margaret Sanger, who founded the American Birth Control League.)

[10h] Yamakawa Kikue advocated contraception after challenging this ideology in the 1918 maternity protection debate. This ideal of womanhood, known by four English or two Japanese words, was similar to *yamato nadeshiko*.

ANSWER: “**good wife, wise mother**” [or **ryōsai kenbo**, “**good wives, wise mothers**,” “**wise mother, good wife**,” or “**wise mothers, good wives**”; accept **virtuous** in place of “wise”]

[10e] *Ryōsai kenbo* was most visibly repudiated by Ginza’s fashionable *moga*, or “modern girls,” who copied the bob haircuts of these American women during the 1920s.

ANSWER: **flappers**

<World History>

8. Octahedral carbonyls are particularly labile when in this position relative to ligands that are neither pi accepting nor sigma donating. For 10 points each:

[10m] Name this configuration adopted by the ammine (“AH-mean”) ligands on carboplatin, making it more stable.

ANSWER: **cis** [accept **cis** effect; prompt on **Z** or **zusammen**]

[10e] This pericyclic reaction preserves stereochemistry, so adding *cis* substituents to either the dienes or dienophiles will form *syn* cyclohexenes.

ANSWER: **Diels–Alder** reaction

[10h] Ronald Breslow reported that this solvent greatly accelerates the Diels–Alder reaction and shifts it further towards *endo* products. Lanthanide triflates can be used as dienophile activators in this solvent.

ANSWER: **water** [or **H₂O**; accept **water**-compatible Lewis acids]

<Chemistry>

9. Georges Bataille (“buh-TYE”) reviewed a Georges-Henri Luquet (“loo-KAY”) book titled for this theme, as described in Hal Foster’s *Brutal Aesthetics*. For 10 points each:

[10h] Name this theme explored in modern art in a 1938 monograph by Louise Bourgeois’s husband Robert Goldwater. The exhibit *Magiciens de la terre* (“ma-zheese-YAN duh la TAIR”) responded to a controversial 1984 MoMA exhibition titled for this theme.

ANSWER: **primitivism** [or word forms of **primitive** or **primitivist**; accept *Primitive Art*; accept *Primitivism in Modern Art*; accept *L’art primitif*]

[10e] Goldwater described a “romantic primitivism” in the art of this Post-Impressionist artist, who painted *When Will You Marry?* and *Spirit of the Dead Watching*.

ANSWER: Paul **Gauguin** [or Eugène Henri Paul **Gauguin**]

[10m] Goldwater describes how a Gauguin exhibit caused members of this movement to develop an “emotional primitivism.” The *Dance Around the Golden Calf* was painted by a member of this movement, which popularized the linocut medium.

ANSWER: Die **Brücke** [or The **Bridge**; prompt on **Expressionism** or **Expressionist art** or **Expressionismus**]

<Painting & Sculpture>

10. In the *Dīgha Nikāya*, Ajātashatru reports weak arguments for becoming these people from six non-Buddhist sects. For 10 points each:

[10h] Name these heterodox schools condemned by early Buddhist texts. These ascetics, including the materialist Chārvākas and determinist Ājīvikas (“AH-jee-vih-kahs”), became distinct from the *sannyasa* ashram of Brahmanic householders.

ANSWER: **śramaṇas** (“SHRUM-uh-nuhs”) [or **samaṇas**, **shramaṇas**, **Śramanism**, or **shāmén**; accept **paribbājakās** or **parivrājakas**; accept *Samaññaphala Sutta*; prompt on **bhikṣuṇī** or **bhikkhunī**; prompt on **sādhu**, **saddhu**, **sādhvīne**, **muni**, **nirgrantha**, or **aryika**]

[10m] Jaina and Ājīvika *śramaṇas* (“SHRUM-uh-nuhs”) may have shared a common canon of these texts, which include the 14 lost Purvas and 12 Angās. Four early Buddhist texts with this name are the Chinese canon’s equivalent of the Nikāyas.

ANSWER: **Āgamas** [accept Jain **Āgamas** or *Ṣaṭkhaṇḍāgama*; prompt on Jain **sūtras** or Jain **suttas** or Jain **shrut**]

[10e] The *Uttaradhyayana Sutra* says that good acts, like this vow, make one a *śramaṇa*. Jainism’s primary vows are truth, non-stealing, non-attachment, *ahimsa*, and this vow also taken by Catholic priests.

ANSWER: **chastity** [or word forms of **chaste**; accept **celibacy**, **celibate**, **abstinence**, **abstinent**, **virginity**, sexual **restraint**, or equivalents of any; accept **bachelorhood**, **unmarried**, **single**, or equivalents]

<Religion>

11. This composer’s Opus 6 *Symphonic Poem* premiered in Minsk on the eve of Operation Barbarossa, after which he fled to Tashkent and worked on the patriotic opera *The Sword of Uzbekistan*. For 10 points each:

[10h] Name this Polish Soviet composer of Holocaust-inspired music like the opera *The Passenger* and a Twenty-First Symphony dedicated to Warsaw ghetto victims. His *Moldavian Rhapsody* is based on Kishinev folk music.

ANSWER: Mieczysław (“mee-yay-CHISS-waff”) **Weinberg** [or Moisey **Vainberg**, Mosze **Weinberg**, Moisei Samuilovich **Vainberg**, or Mojsze **Wajnberg**]

[10m] The first of Weinberg’s two pieces with this title was initially praised for adapting Jewish themes, but may have contributed to his 1953 arrest. A brass-heavy 1926 piece with this title was composed for the Sokol Festival.

ANSWER: **Sinfonietta** [accept *Military Sinfonietta*; accept **Sinfonietta** No. 1 in D minor or **Sinfonietta** No. 1, Op. 41 or **Symfonietta**] (The second piece is by Leoš Janáček.)

[10e] The prominent clarinets in Weinberg’s *Sinfonietta* were inspired by this genre of folk music created by Ashkenazi Jews.

ANSWER: **klezmer**

<Classical Music>

12. Answer the following about the fluid dynamics behind the rotating disk electrode, for 10 points each.

[10e] Fluid moves toward the rotating disk to replace the fluid pushed outward by this fictitious force, whose magnitude is proportional to angular speed squared times radius.

ANSWER: **centrifugal** force

[10h] This scientist’s equation predicts the electrode’s limiting current density to be proportional to the square root of rotation speed. With his teacher Lev Landau, he names the thin film flow resulting from pulling a flat plate out of a container of fluid.

ANSWER: Veniamin **Levich** [or Veniamin Grigorievich **Levich** or Benjamin Grigorievich **Levich**; accept Landau–**Levich** flow; accept **Levich** equation]

[10m] The fluid flow near the rotating disk is modeled as this scientist’s namesake swirling flow. This scientist also names a repeating pattern formed behind bodies in a fluid, which is created by vortex shedding.

ANSWER: Theodore von **Kármán** [or szőlőskislaki **Kármán** Tódor or szőlőskislaki **Kármán** Tivadar; accept (von) **Kármán** vortex street; accept (von) **Kármán** swirling flow]

<Physics>

13. Havana people carved frogs on the “platform” type of these objects, whose steatite (“STEE-uh-tite”) designs were traded northeast from Appalachia in the Hamilton phase. For 10 points each:

[10m] Name these objects for which catlinite was quarried from 1000 BCE at a national monument seized from the Yankton people in Minnesota. Black Elk recorded White Buffalo Calf Woman giving these objects to the Lakota.

ANSWER: **pipes** [accept **pipestone** or **Pipestone National Monument**; accept peace **pipes**, **calumets**, **chalumets**, **chanunpas**, **čhannúnpas**, tube **pipes**, platform **pipes**, or Sterling **pipes**]

[10h] This culture interred a 7-inch effigy pipe of a man with earspools. West Virginia’s conical Grave Creek Mound is attributed to this Woodland Period culture, whose engraved tablets may have been printing blocks.

ANSWER: **Adena** culture [accept **Adena** period, **Adena** people, **Adena** Mound, **Adena** pipe, **Adena** tablets, or **Adena** Man]

[10e] Ohio’s effigy mounds shaped like an alligator and this animal were attributed to the Adena culture before they were dated to the later Fort Ancient period.

ANSWER: **serpents** [or **snakes**; accept **Serpent** Mound or Great **Serpent** Mound; prompt on **reptiles** or **squamates**] (It is disputed if the “Fort Ancient culture” should be distinguished from the late Hopewell period.)

<American History>

14. Theorists of this poem’s “anti-Augustanism” analyze its unflattering mention of the father-and-son pairs of Atreus and Agamemnon and Saturn and Jove. For 10 points each:

[10m] Name this poem that ends “vivam,” or “I will live,” after a paean to Augustus and a description of the soul of a murdered politician becoming a comet.

ANSWER: **Metamorphoses** (The murdered man is Julius Caesar.)

[10h] Ovid’s *Metamorphoses* claims that this “free” concept prefers Augustus to Julius Caesar. In Book 13, the personification of this concept lives in a mountain-top brass house with a thousand doorless entrances.

ANSWER: **fame** [or **fama**; or **rumor**; accept **glory**, **renown**, **gossip**, or **reputation**; accept libera **fama**]

[10e] Ovid’s curse poem *Ibis*, which may target Augustus, was written after he was subjected to this punishment. Ovid claimed that this punishment resulted from a “poem and a mistake.”

ANSWER: **exile** [or **exilium**; or **banishment** or word forms of **banished**; accept descriptions of **exile** to Tomis or the Black Sea]

<European Literature>

15. This blog mocked “one weird trick” results, like Amy Cuddy’s study of “power poses,” by “proving” that the song “When I’m Sixty-Four” literally made listeners younger. For 10 points each:

[10h] Name this blog run by Simonsohn, Neilson, and Simmons. Francesca Gino sued this blog after it found evidence that she and Dan Ariely fabricated data on studies of lying.

ANSWER: **Data Colada**

[10e] Data Colada is widely credited with coining the term for “hacking” this value. By convention, results are often considered “significant” if this value for an experiment is below 0.05.

ANSWER: **p-values**

[10m] Several Data Colada posts critiqued Diederik Stapel, who faked results that “chaos” worsens these beliefs. With Fiske et al., Amy Cuddy created a “content model” classifying them by “warmth” and “competence.”

ANSWER: **stereotypes** [prompt on **biases** or **prejudices**]

<Social Science>

16. Answer the following about the neuroethology of escape, for 10 points each.

[10e] These animals have enormous synapses in their stellate ganglia. Hodgkin and Huxley discovered action potentials in the giant axons of these animals, which innervate the mantle during jet propulsion.

ANSWER: **squid** [or **Decapodiformes**; accept **cuttlefish**; accept specific squid species; prompt on **cephalopods**, **Cephalopoda**, **mollusks**, or **Mollusca**; reject “octopus”]

[10m] *Description acceptable.* The teleost (“TEE-lee-ost”) C-start reflex uses the two Mauthner cells, which have these relative positions to each other. The withdrawal reflex in humans is paired with an extensor response in this position.

ANSWER: on **opposite sides** of the body [or **opposite sides** of the midline; accept **contralateral**; accept **crossed** extensor reflex; accept descriptions of being **across** the **sagittal** plane or **across** the **longitudinal** plane; prompt on **lateral** or on the **sides**]

[10h] The lateral giant interneuron mediating this response in crayfish is a true command neuron and has the first observed electrical synapse. Holding a lobster by the shell represses this escape response, in which the tail is flexed to propel a crustacean backwards.

ANSWER: **caridoid** (“CARRY-doid”) escape reaction [prompt on **lobstering** or **tail-flipping**; reject “cardioid”]
<Biology>

17. A musician with this nickname recorded a jam at the Montreux Jazz Festival with Jamaican pianist Monty Alexander a year after his tour with Othello Molineaux (“mo-lee-NOH”) introduced steelpan to jazz. For 10 points each:

[10e] Give this nickname shared by the Jamaican hard bop trumpeter on *Asia Minor* and the bebop trumpeter on *Afro-Cuban Jazz Moods*, who composed “Salt Peanuts.”

ANSWER: **Dizzy** [accept **Dizzy** Gillespie or John Birks “**Dizzy**” Gillespie or **Dizzy Gillespie Jam**; accept **Dizzy** Reece or Alphonso Son “**Dizzy**” Reece; prompt on **Gillespie** or **Reece** by asking “what was his nickname?”]

[10h] Dizzy Gillespie wrote “Cubop” Latin jazz tracks like “Manteca” with Chano Pozo after this musician introduced them. He played sax on the *son* (“sohn”) “The Peanut Vendor” and defined Afro-Cuban jazz with the hit “Tangá” (“tahn-GAH”).

ANSWER: Mario **Bauzá** (“bao-SAH”) [or Prudencio Mario **Bauzá** Cárdenas; prompt on **Cárdenas**]

[10m] In *descarga* sessions with Bauzá and Machito, Uvaldo Nieto played this Cuban percussion instrument whose “king” was Tito Puente. Ralph Irizarry’s Latin jazz septet is named for these stand-mounted drums.

ANSWER: **timbales** (“tim-BAH-leez”) [or **timbaletas**, **timbalitos**, **timbales** criollos, or **pailas** criollas; accept **timbaleros**; accept **Timbalaye**]

<Other Fine Arts>

18. This book’s introductory “Author’s Account of Himself” likens it to the work of a landscape artist who paints nooks, corners, and by-places, but “not a single glacier or volcano.” For 10 points each:

[10h] Name this book made up mainly of vignettes about English life, including four pieces set at Bracebridge Hall on Christmas. Its narrator talks to a book in Westminster Abbey in “The Mutability of Literature.”

ANSWER: *The **Sketch Book** of Geoffrey Crayon, Gent.*

[10e] This American author wrote *The Sketch Book of Geoffrey Crayon*, which includes stories attributed to another of his alter egos, Diedrich Knickerbocker.

ANSWER: Washington **Irving**

[10m] A piece from *The Sketch Book* about this activity agrees with an earlier author that “a man must be born to it.” Venator learns the joys of this activity in a 1653 book in which a milkmaid recites “The Passionate Shepherd to His Love.”

ANSWER: **fishing** [or **angling**; accept *The Compleat **Angler***; accept “The **Angler**”] (Izaak Walton wrote *The Compleat Angler*.)

<American Literature>

19. The original cantons within the Old Swiss Confederacy chose to adhere to this faith when the doctrine of *cuius regio, eius religio* spread to Swiss lands. For 10 points each:

[10e] Name this faith that traditionally dominated the rural central cantons of Switzerland, like Uri and Schwyz (“shveets”), in opposition to Huldrych Zwingli’s Zürich.

ANSWER: Roman **Catholicism** [or **Catholic** church or Ecclesia **Catholica**; prompt on **Christianity**; prompt on **Christian Union**]

[10m] Uri and Schwyz formed the Christian Union to ally with Austria against the spread of Protestantism during this set of two wars; Zwingli died during the second of them in 1531.

ANSWER: **Kappel** Wars [or Wars of **Kappel**; or **Kappeler**kriege]

[10h] In 1845, the Catholic cantons opposed the dissolution of monasteries in Aargau in the Sonderbund, which was led by the head of a political party named for this ideology. In France, nonbelievers in this ideology, like Pierre Pithou and Edmond Richer (“ree-SHAY”), coalesced under the Gallican banner.

ANSWER: **Ultramontanism** [accept **Ultramontane** Party]

<European History>

20. Answer the following about the economic geography of nuts, for 10 points each.

[10m] Guinea-Bissau taxes *ponteiro* orchards, which grow these nuts whose “apples” are turned into wine like Goan (“GO-in”) feni. Women who pick these nuts in Côte d’Ivoire and Vietnam are burned by the caustic anacardic acid of their double shells.

ANSWER: **cashews** [or **acajú**; or *A. occidentale*; prompt on *Anacardium*]

[10e] State ownership of wild walnut forests was overhauled by the KIRFOR leasing program in this valley, where pistachios grow wild across Tajikistan, Kyrgyzstan, and Uzbekistan.

ANSWER: **Fergana** Valley [or **Ferghana** Valley, **Farg’ona** vodiysi, **Fergana** öröönü, or Vodii **Farg’ona**]

(KIRFOR stands for Kyrgyz–Swiss Forestry Support Program.)

[10h] Brazil, but not Bolivia, concedes communal rights known by this term in extractive reserves for Brazil nuts and rubber. Papua New Guinea’s betel planters enjoy this type of right to benefit from property they do not damage.

ANSWER: **usufruct** [accept **usufruct** rights or **usufructory** benefits or **usufructuary** benefits; accept **afromentos**]

(Seringueiros were initially granted usufruct rights for rubber concessions.)

<Geography>