2023 ACF Regionals

Packet N by Chicago A, John Jay, Princeton, Stanford A Edited by Nick Jensen, Alexandra Hardwick, Rahul Keyal, Allan Lee, Tim Morrison, Kevin Park, Grant Peet, Graham Reid, and Chris Sims

Tossups

- 1. One of these places titles an early lesbian novel about Ann Childs and the divorce-seeking Evelyn Hall, written by Jane Rule. Life in these places inspired a 1903 book by Mary Hunter Austin. This sort of place titles a memoir whose misanthropic narrator critiques "industrial tourism," pursues the "moon-eyed horse," and nearly traps himself near Havasu. Edward Abbey works as a park ranger in a book titled for this sort of place's "solitaire." A journalistic 1971 novel opens, "We were somewhere around Barstow on the edge of [this sort of place] when the drugs began to take hold." In one of these places, "a creature, naked, bestial" eats its "bitter" heart in a poem by Stephen Crane. For 10 points, what sort of place contains "two vast and trunkless legs of stone" in the poem "Ozymandias"? ANSWER: deserts [accept Mojave Desert; accept high desert; accept "In the Desert"; accept Desert Solitaire; accept Desert of the Heart; prompt on arid regions, sandy places, wilderness, or barren regions] (Mary Hunter Austin wrote The Land of Little Rain. The 1971 novel is Hunter S. Thompson's Fear and Loathing in Las Vegas.) <American Literature>
- 2. This plant is spread on the floor at the start of *The Dream of Rhonabwy* ("ron-AH-bwee"). Robert Graves wrote that Jesus took over for this plant while its counterpart was replaced by John the Baptist in his reading of this plant's king winning Creiddylad ("CRAY-thuh-lod") at midwinter by beheading the Oak King. This plant, which was linked to Tinne ("TEEN-yeh") in the Ogham ("AW-gum") alphabet due to its use in charcoal, was left uncut in hedgerows to prevent witches from running over them. In Britain, slugabeds on Saint Stephen's Day were flagellated with this plant of genus *Ilex* in the outlawed practice of holming. This tree with "a blossom / As white as the lily flower" "bears the crown" in a carol that pairs it with the ivy. For 10 points, a Welsh carol urges listeners to "deck the halls" with boughs of what evergreen that has spiky green leaves and red berries?

ANSWER: holly (accept holly, common holly, common holly oak until "holming" is read; accept holly oak, holly oak, king and Oak King; prompt on trees or evergreen until each is read; reject "oak" or "mistletoe"]
Ally (accept Holly King and Oak King; prompt on trees or evergreens until each is read; reject "oak" or "mistletoe"]

3. In one technique, temperature programming can be used to change quantities named for this word when studying multicomponent samples. In that analytical technique, implementation-independent parameters are derived from measured values using an index named for this word and chemist Ervin Kováts. A time described by this word divided by the peak width squared gives the number of theoretical plates according to the van Deemter equation. The ratio of a factor named for this word for two peaks gives the separation factor between the peaks, describing how well they can be resolved. The time named for this term appears on the *x*-axis of plots showing the results of HPLC or GC. For 10 points, name this word that describes the amount of time an analyte takes to pass through a chromatography system.

ANSWER: <u>retention</u> [accept <u>retention</u> time; accept <u>retention</u> factor; accept <u>retention</u> volume; accept Kováts <u>retention</u> index]

<Chemistry>

4. A monument in this country's town of Floriana honors its postwar child emigrants, whom the Christian Brothers abused in Australia. The 1980 movie set of "Sweethaven" became this country's Popeye Village. It's not Saudi Arabia or Morocco, but the author of the 15th-century poem *Il-Kantilena* lived in this country's "silent city" of Mdina near Rabat. Since 2020 due diligence measures, this country only offers "exceptional investors" who obtain residency its "golden passports." This country's Xaghra ("SHAH-ra") Stone Circle and two "megalithic temples" stand northwest of Comino on the island of Gozo. This country's national language, whose Latin script includes the letter "H with stroke," is a Semitic tongue derived from Siculo-Arabic. For 10 points, the father of Pete Buttigieg emigrated from what Mediterranean island country south of Sicily?

ANSWER: <u>Malta</u> [or Republic of <u>Malta</u> or Republika ta' <u>Malta</u>; accept <u>Maltese</u> language or L-Ilsien <u>Malti</u> or Il-Lingwa <u>Maltija</u>] (Pietru Caxaro wrote *Il-Kantilena*.) <Geography>

5. Gaetano De Sanctis provides the basis for literature on a cleavage within this class based either on wealth or heritage debated by scholars like Christopher Smith and Tim Cornell. After a leader denounced members of this class for embezzlement, they destroyed his residence and refused to name their offspring after him. Members of this class served five-day rotations as "between-kings." Legislation passed by the Tribal Assembly was routinely ignored by members of this class until the passage of a law that prevented further "secessions" popular during the Conflict of the Orders. An office that sought to bypass the power of this class was wielded effectively by Gaius Gracchus. For 10 points, name this aristocratic subset of Roman citizens checked by the Tribune of the Plebs.

ANSWER: **patrician** class [or **patricius** or **patricii**; prompt on Roman citizens until read; prompt on Roman aristocraty, Roman aristocraty, Roman nobility, or Roman nobles until "aristocratic" is read] (The Manlii refused to

<u>aristocracy</u>, Roman <u>aristocrats</u>, Roman <u>nobility</u>, or Roman <u>nobles</u> until "aristocratic" is read] (The Manlii refus name their offspring "Marcus" after the treachery of Marcus Manlius Capitolinus. The Latin name of the "between-king" was interrex.)

<Other History>

6. It's not opera, but pieces in this genre inspired two of Leopold Godowsky's *Symphonic Metamorphoses* for solo piano. At the start of a piece in this genre, a plaintive oboe plays the descending melody [read slowly] "E-E, E-E, [pause] D-D, C-low E"; that piece is the "twin" of a similar piece whose little-used lyrics satirically recall a recent military defeat. An optional coloratura soprano sings lyrics by Richard Genée in a piece in this genre titled *Frühlingsstimmen* ("FROO-lings-SHTIM-in"). Either Franz Joseph or Wilhelm II may be referenced by a piece in this genre named "Kaiser." The rising notes [read slowly] "D, D, F-sharp, A, A" pervade a piece in this genre that is the mandatory second encore at an annual New Year's Concert along with a polka and the *Radetzky March*. For 10 points, name this genre whose "king," Johann Strauss Jr., wrote *On the Beautiful Blue Danube*.

ANSWER: waltzes [or Walzer; accept Kaiser-Walzer]

<Classical Music>

7. Henry Oldenburg translated letters from a scientist living in this polity for the benefit of the Royal Society, to which that scientist donated numerous microscopes in his will. While employed by this polity, Georg Eberhard Rumphius, the "Pliny of the Indies," compiled manuscripts that were burned, then lost at sea, into the *Herbarium Amboinense*. Anti-monarchist militias ravaged this polity during the "time of the patriots" before the Duke of Brunswick intervened in support of the exiled author of the Kew Letters. The secret Treaty of Dover caused England to start a war with this polity during the "disaster year" of 1672. The Batavian Republic ended this polity, which was governed by the grand pensionary and stadtholder. For 10 points, name this republic that, during a 17th-century golden age, experienced a "tulip mania."

ANSWER: <u>Dutch</u> Republic [or <u>United Provinces</u>; or United Provinces of the <u>Netherlands</u>; or Republic of the Seven United <u>Netherlands</u>; or Republiek der Zeven Verenigde <u>Nederlanden</u>] (Oldenburg translated the letters of Antonie van Leeuwenhoek. William V wrote the Kew Letters.)

<European History>

8. A man of this profession notes that "the ugly and the stupid have the best of it in this world" in lamenting "a fatality about all physical and intellectual distinction." In an opening-chapter conversation in a garden, a man of this profession is mocked for claiming to have "put too much of myself into it." These people lack "ethical sympathies" according to a preface that ends by calling their work "quite useless." The protagonist heads to an opium den after he stabs a man of this profession and blackmails the chemist Alan Campbell to dissolve the body. The hedonist Lord Henry Wotton contrasts with a man of this profession who makes an object that grows hideous over time. For 10 points, Basil Hallward has what profession in an Oscar Wilde novel in which his work ages in place of Dorian Gray? ANSWER: artist [accept painter or portraitist]

<British Literature>

9. This philosopher drew on the *Gorgias* in a passage that claims that the wicked are powerless because power derives from what we desire, which is related to the good. This philosopher compared timeless eternity to how the center of a circle is equidistant from its entire circumference in a work that likens God to a ship's "helm and rudder." Until the 12th century, the only works of Aristotle available to medieval Europeans were translations by this philosopher, whose translation of Porphyry's *Isagoge* ("ICE-uh-GO-gay") became a standard medieval textbook. This philosopher is told about Providence and the "wheel of fortune" by a Lady who personifies the title discipline in a work that he wrote while imprisoned by Theodoric. For 10 points, name this 6th-century Roman who wrote *The Consolation of Philosophy*.

ANSWER: **Boethius** [or Anicius Manlius Severinus **Boethius**] <Philosophy>

10. A high value of this quantity favors robustness over speed, causing the "survival of the flattest." Over time, this quantity reaches a minimum by Michael Lynch's drift-barrier hypothesis, which predicts its negative correlation with effective population size. This quantity sets a "threshold" for quasispecies above which "catastrophe" occurs and below which it is balanced by selective purging. In asexual species, low population sizes and high values of this quantity speed up the accumulation of genetic load by Muller's ratchet. This quantity, which measures both transitions and transversions, is generally high for RNA viruses due to their low-fidelity, error-prone polymerases. For 10 points, what quantity measures the frequency of induced and spontaneous events that introduce genetic variation?

ANSWER: <u>mutation rate</u> [or <u>rate</u> of <u>mutation</u>; or <u>frequency</u> of <u>mutation</u>; accept <u>substitution rate</u>; accept per-site <u>mutation rate</u> or population-scaled <u>mutation rate</u>; prompt on <u>error</u> rate or <u>error</u> threshold or <u>error</u> catastrophe until "error" is read; prompt on <u>mutation</u> or <u>mutation</u>—selection balance or <u>mutator</u> alleles; prompt on <u>mu</u>/s or <u>lambda</u> or <u>theta</u>]

<Biology>

- 11. After this conflict, the Dovecote and Rock plans called for the reinforcement of the Lexicon and Lateral supply roads. A 2013 book by Jesse Ferris analyzed how this conflict was precipitated by a belligerent's intervention on behalf of the YAR, which had deposed the Mutawakkilite Kingdom. Before this conflict, Indar Jit Rikhye was ordered by U Thant to withdraw UN Emergency Force troops. At a meeting in Khartoum after this conflict, one side adopted the "Three No's" and initiated the War of Attrition. This conflict opened with Operation Focus as retaliation for closing the Straits of Tiran, which one side captured at its end along with the rest of the Sinai Peninsula. For 10 points, name this 1967 war in which Israel won decisive victories over three Arab neighbors in less than a week. ANSWER: Six-Day War [accept June War; accept 1967 Arab-Israeli War or War of 1967 until "1967" is read; accept Third Arab-Israeli War; accept an-Naksah or The Setback; accept Milhemet Šešet HaYamim] (The roads supplied the Bar Lev Line. Ferris's book is Nasser's Gamble.)
- 12. In this novel, a student, a sacristan ("SACK-rist-in"), and a lawyer converse in prison because they fear the silence and the darkness. In this novel, the death of a beggar who "saw nothing, felt nothing" is witnessed by puppets whose cardboard eyes shed tears. This novel begins with the lawyer Abel Carvajal blamed for the murder of Colonel Sonriente, who was actually killed on the Cathedral Porch by a traumatized beggar known as the Zany. In this novel, a character who is "as beautiful and wicked as Satan" dies in Cell 17 believing that his wife Camila has become the title man's mistress. This novel was inspired by Manuel Estrada Cabrera's regime, although it is not explicitly set in Guatemala. For 10 points, Miguel Angel Face is the protagonist of what magical-realist dictator novel by Miguel Ángel Asturias?

ANSWER: *El <u>Señor Presidente</u>* [or *Mister <u>President</u>*; or *The <u>President</u>*] <World Literature>

- 13. A miscibility gap in minerals from this group with intermediate composition results in exsolution during cooling, ultimately producing perthite or antiperthite formations. The minerals from this group correspond to the left and right vertices of a QAPF diagram, whose bottom vertex corresponds to a group of minerals that is named for resembling this group. Minerals from this group are found on the continuous branch of Bowen's reaction series, in contrast to the discontinuous branch, which contains iron-rich mafic minerals. Orthoclase is a potassium-rich mineral from this group, which defines six on the Mohs scale. For 10 points, name these aluminum silicate minerals that, like quartz, have a tetrahedral structure, and which make up around 60 percent of the Earth's crust.

 ANSWER: feldspars [accept felsic minerals; accept alkali feldspars or plagioclase feldspars; accept potassium feldspars; prompt on silicate minerals until read]

 Other Science>
- 14. Isamu Noguchi designed nine "floating" examples of these artworks for the 1970 World Expo in Ōsaka. Robert Woodward used a dandelion design for one of these artworks that serves as a memorial to Australian soldiers who died at the battles of El Alamein. Niki de Saint Phalle created a spiral-shaped snake and a large pair of lips for one of these artworks that depicts 16 pieces by Igor Stravinsky. One of these artworks that depicts Samson ripping open a lion's jaw is found in the Peterhof Palace, whose Grand Cascade contains 64 of them. The Baroque artist Nicola Salvi designed one of these artworks in front of Rome's Palazzo Poli, whose central niche depicts Oceanus. For 10 points, name these architectural features that include Geneva's Jet d'Eau and the Trevi.

ANSWER: **fountains** [accept Trevi **Fountain** or **Fontana** di Trevi; accept Samson **Fountain**; accept *Stravinsky* **Fountain** or *La Fontaine Stravinsky*; accept El Alamein **Fountain** or El Alamein Memorial **Fountain** or Kings Cross **Fountain**; prompt on <u>sculptures</u>; prompt on war <u>memorial</u>s until "memorial" is read by asking "the memorial is what kind of structure?"]

<Other Fine Arts>

15. Wang and Turner proposed that the LIGO detectors could measure this quantity by characterizing the chirp mass spectrum of binary neutron star collisions, inferring this quantity from the observed distance distribution. Instead of this quantity, quintessence theory uses a dynamical scalar field. Observational estimates of this quantity are roughly one hundred orders of magnitude smaller than quantum-field-theory-based calculations, which assume that it corresponds to zero-point energy. This quantity multiplies the metric tensor in a set of field equations. This quantity is denoted capital lambda in the standard lambda-CDM model of cosmology, in which it accounts for the effect of dark energy. For 10 points, name this quantity that Einstein called his "greatest blunder," which describes the accelerating expansion of the universe.

ANSWER: **cosmological constant** [accept capital **lambda** until read; prompt on <u>dark energy</u> density until read] <Physics>

16. Description acceptable. This cause was promoted by a group co-founded by future Yale president Kingman Brewster Jr. This cause was advocated by the "Mothers' Crusade to Defeat H.R. 1776," which led to Elizabeth Dilling's brief arrest. Support for this cause was renounced in the "speech heard around the world" delivered by Arthur Vandenberg. This cause was supposedly abandoned by George Norris after he saw H. S. Wong's photo of a baby at a Shanghai rail station. After this cause was popularized by the anti-industrial reports of the Nye Committee, it was entrenched by four 1930s laws that were weakened by the "cash and carry" policy. This foreign policy doctrine was avidly supported by Charles Lindbergh's speeches for the America First Committee. For 10 points, what American foreign policy doctrine lost support after Pearl Harbor was bombed?

ANSWER: American isolation ism [or American non-intervention; or American neutrality; accept pacifism or anti-war sentiment; accept keeping the US out of World War II or other equivalents; accept America First until read; prompt on pro-Nazism, pro-fascism, pro-German sentiment, anti-Semitism, anti-Jewish sentiment, pro-Japanese sentiment, or equivalents by asking "what foreign policy doctrine did they promote as a result?"; reject answers that refer to conflicts other than World War II] (H.R. 1776 was the Lend-Lease Act.)

<American History>

17. Michael Fried claims that this artist used a mirror to paint "immersive" and "specular" moments based on a remark by his rival Giovanni Baglione, such as for a portrait whose pained expression was linked by Roberto Longhi to a chalk sketch by Sofonisba Anguissola. A sketch by Ottavio Leoni suggests that one of this artist's paintings may not depict his assistant and possible lover Cecco ("CHECK-oh"). A carafe ("kuh-RAFF") of wine hides a tiny self-portrait in this artist's painting of a god with grapes and vine leaves in his hair. This artist painted himself in the cabinet piece *Young Sick Bacchus*, a tondo of a beheaded *Medusa*, and the 1610 *David with the Head of Goliath*, which was possibly painted to make amends for a fatal brawl. For 10 points, name this painter of *chiaroscuro* scenes like *The Calling of Saint Matthew*.

ANSWER: <u>Caravaggio</u> [or Michelangelo Merisi da <u>Caravaggio</u>; or Michelangelo <u>Merisi</u> or Michelangelo <u>Merisi</u>; accept *The Moment of <u>Caravaggio</u>*] (The portrait in the first line is *Boy Bitten By a Lizard*, which parallels Anguissola's *Boy Bitten by a Crayfish*. The second line references the 1610 *David with the Head of Goliath*.) <Painting/Sculpture>

18. A book by this author ends with its protagonist becoming reconciled with "a very chaste bliss" in a letter to Lizaveta. In another book by this author, a band of street musicians performs a song in which each stanza ends with rhythmic mocking laughter. In a novella by this author, the title character is surprised to see Hans Hansen and Ingeborg Holm together at a ball. In another novella by this author, the protagonist dreams of a bacchanalia-like ritual dedicated to the "Stranger God" and stays at the Hotel des Bains. This author depicted Consuelo's writer son, who tries to reconcile his Northern and Southern European sides, in *Tonio Kröger*. For 10 points, name this German author who wrote about Gustav Aschenbach's obsession with Tadzio ("TAH-joe") in *Death in Venice*.

ANSWER: Thomas <u>Mann</u> [or Paul Thomas <u>Mann</u>] <European Literature>

19. The "Latin Americanization" thesis holds that this concept exists as a tripartite system in the US, as elucidated by Eduardo Bonilla-Silva. A highly-cited introduction to a framework based around this concept by husband-and-wife Richard Delgado and Jean Stefancic considers both its "idealistic" and "realist" schools. Gunnar Myrdal advocated the "principle of cumulation" to break a "vicious cycle" regarding this concept in his 1944 book *The American Dilemma*. Peggy McIntosh introduced the idea of an "invisible knapsack" to describe how this concept confers advantages. Robin DiAngelo has written about how a type of this concept gives rise to a "fragility" that blocks social progress. For 10 points, "critical theorists" of what social construct study phenomena like white privilege?

ANSWER: <u>race</u> [accept <u>racism</u> or <u>racial</u> stratification; accept critical <u>race</u> theory; accept <u>race</u> relations; accept <u>white</u>ness, <u>black</u>ness, being BI<u>POC</u>, being <u>Hispanic</u>/<u>Latinx</u>/<u>Latino</u>, or being <u>Asian</u>-American] <Social Science>

20. This noun titles a follow-up to *The Sealed Nectar* by the Indian scholar Safiur Rahman Mubarakpuri. This thing alternately names the Theemuge ("THEE-moo-gay") dynasty of the Maldivian king who embraced Islam. The Chera king Thajuddin legendarily dreamed about this thing and brought Islam to Kerala ("KAIR-uh-luh"), in contrast to those who turned away from this thing's "transient magic" in the Qur'ān. Robert Morey popularized the Christian myth that Allāh originated as a god of this thing derived from Hubal. It's not edible, but hilāl committees track this title object of Sūrah 54, which describes Muhammad miraculously splitting it. An Islamic symbol on the flags of Western Sahara, the Comoros ("KOM-uh-roze"), and Mauritania pairs this object with stars. For 10 points, Ramaḍān begins with the sighting of what object, whose phases determine the Islamic calendar?

ANSWER: the <u>Moon</u> [or al-<u>Qamar</u> or <u>luna</u>; accept crescent <u>moon</u>; accept <u>lunar</u> calendar; accept <u>lunar</u> deity or <u>moon</u> god; accept splitting of the <u>moon</u> or shaq al-<u>Qamar</u> or *When the <u>Moon</u> Split*; accept <u>Lunar</u> dynasty or <u>Soma</u> Vansa or <u>Chandra</u> Vansa; prompt on <u>crescent</u>] (The Chera king only took the name Thajuddin after he converted to Islam. Hilal committees track the appearance of a crescent moon that marks a new month.)
<Religion>

21. Circuit components whose properties vary with the circuit's value for this quantity can be divided into PTC and NTC subclasses. A dimensionally incorrect equation that sets the reciprocal of this quantity equal to a plus b times log resistance plus c times log resistance cubed is known as the Steinhart–Hart equation. A power series in terms of this quantity is used to express integrals over the Fermi–Dirac distribution in the Sommerfeld expansion. The classical power radiated by a blackbody scales as the fourth power of this quantity according to the Stefan–Boltzmann law. One over this quantity times k-sub-B gives thermodynamic beta. For 10 points, thermal energy equals Boltzmann's constant times what quantity measured in kelvins?

ANSWER: **temperature** [prompt on *I*] <Physics>

1. Answer the following about Friedrich Nietzsche's love of over-the-top superlatives, for 10 points each. [10e] In *Ecce Homo*, Nietzsche humbly proposes that the "greatest gift" ever given to humanity is his own book titled for this prophet. That book titled for this prophet examines the idea of the Übermensch.

ANSWER: <u>Zarathustra</u> [or <u>Zoroaster</u>; accept *Thus Spake <u>Zarathustra</u>* or *Thus Spoke <u>Zarathustra</u> or <i>Also sprach* <u>Zarathustra</u>]

[10m] *The Genealogy of Morals* claims that "the greatest haters in world history... have always been" these people, who invented the slave morality. In Nietzsche's view, these people encourage *ressentiment* ("ruh-SAWN-tee-MAWN") among the masses.

ANSWER: **priest**s [or **clergy**; accept **priest**ly caste or ascetic **priest**s; or **Priester**; prompt on <u>Christians</u> or <u>Jews</u>] [10h] This work by Nietzsche opens by describing "the most arrogant and mendacious minute of world history" as when "clever beasts" on some star invented knowledge. This work analyzes the inherent shortcomings of language, in which "every word instantly becomes a concept."

ANSWER: On Truth and Lies in a Nonmoral Sense [or On Truth and Lies in an Extra-Moral Sense; or Über Wahrheit und Lüge im aussermoralischen Sinne; accept Lie or Lying in place of "Lies"]

<Philosophy>

2. The China National Petroleum Corporation developed the Soraz refinery in this country, which shrank the Termit and Tin-Toumma Reserve for Chinese oil exploration. For 10 points each:

[10m] Name this country whose seventh republic is led by the "Diffa Arab" Mohamed Bazoum. Africa's biggest uranium exporters are Namibia, Malawi, and this member of G5 Sahel, where the CIA launches drones from Dirkou.

ANSWER: <u>Niger</u> ("nee-ZHAIR") [or Republic of the <u>Niger</u> or République du <u>Niger</u>; reject "Nigeria"]

[10e] A scheme to plant Aleppo pines in Niger's Agadez region for carbon credits has been called this type of "colonialism" and deceptive "washing." This color provides a common nickname for renewable energy.

ANSWER: **green** [accept **green** energy or **green** power; accept **green**washing; accept **green** colonialism] (African Agriculture Inc. is the company behind the land purchases.)

[10h] In a common greenwashing strategy, Boeing used one of these areas to hide contamination at the Santa Susana Field Laboratory. Land trusts and the EPA are supposed to enforce these protected areas that provide tax deductions.

ANSWER: conservation <u>easement</u>s [or conservation <u>covenant</u>s or conservation <u>restriction</u>s or conservation <u>servitude</u>s; prompt on nature <u>reserve</u>s or nature <u>preserve</u>s] (Jaimi Dowdell and Andrea Januta investigated the Boeing story.)

<Current Events>

3. This composer is generally considered to have written the first German-language opera, *Dafne*, as well as the first German-language requiem. For 10 points each:

[10h] Name this Baroque composer whose best-known works today include settings of sacred texts like *Jauchzet dem Herren* ("YOWKH-tsit dem HAIR-in") and *Selig sind die Toten*, as well as his final opus, nicknamed his "Swan Song."

ANSWER: Heinrich Schütz

[10e] Schütz's Opus 1 is his only example of these secular vocal pieces, which are contrasted with sacred motets. ANSWER: madrigals

[10m] Schütz's madrigals were published in this city, where he studied music under Giovanni Gabrieli. This city's namesake school developed the technique of "broken choruses," in which pieces were written for multiple choirs spaced around its cathedral.

ANSWER: <u>Venice</u> [or <u>Venezia</u>; accept <u>Venetian</u> school or scuola <u>veneziana</u>]

<Classical Music>

4. Answer the following about 21st-century theatre that addresses geopolitics, for 10 points each.

[10e] David Hare's play *Stuff Happens* mixes in real political transcripts to depict the onset of this war. Harold Pinter used his 2005 Nobel Prize acceptance speech to criticize the justification for this war.

ANSWER: <u>Iraq</u> War [or War in <u>Iraq</u>; or Occupation of <u>Iraq</u>; or Operation <u>Iraqi</u> Freedom; or <u>Second Gulf</u> War; reject "Gulf War"]

[10m] Willy Brandt's failed effort at German unification is the subject of this author's play *Democracy*. This playwright depicted three different performances of the play-within-a-play *Nothing On* in his comedy *Noises Off*. ANSWER: Michael <u>Frayn</u>

[10h] A playwright with this first name who wrote *The Children* depicted the aftermath of the Tiananmen Square protests in the US and China in her play *Chimerica*. Another playwright with this first name included musical numbers in her 2009 play about the Enron scandal.

ANSWER: <u>Lucy</u> [accept <u>Lucy</u> Kirkwood or Lucy Ann <u>Kirkwood</u>; accept <u>Lucy</u> Prebble] (Prebble's play is *ENRON*.)

<British Literature>

5. In March 2022, Park and Pham published a remarkably short proof of the Kahn–Kalai conjecture, which concerns expectation thresholds on these objects. For 10 points each:

[10h] Name these mathematical objects that are often studied under the Erdős–Rényi ("AIR-dish RAIN-yee") model. Percolation theory studies critical values for a class of these objects defined over the integer lattice.

ANSWER: **random graph**s [or **random network**s; prompt on **graph**s or **network**s by asking "with what additional property?"]

[10m] A simple form of the Kahn–Kalai conjecture concerns the threshold probability at which it becomes likely that a random graph will contain one of these structures, which are cycles that include all vertices exactly once.

ANSWER: <u>Hamiltonian</u> cycles [or <u>Hamiltonian</u> circuits]

[10e] The threshold probability that a graph contains a Hamiltonian cycle is this function of n divided by n. Merge sort and quicksort have average-case complexities of "n times this function of n," so they are faster than quadratic. ANSWER: natural \log rotation of n, or $\log n$; or $\log n$; or $\log n$ rotation of n.

<Other Science>

6. Bruce Bueno de Mesquita and Alistair Smith coined this term in their 2003 book *The Logic of Political Survival*, and reused it in their 2011 popular-press book *The Dictator's Handbook*. For 10 points each:

[10h] Name this subset of a society's population with some say in picking its leader. The ratio of its size to that of a "winning coalition" within it affects how much a leader must pay off supporters to hold power.

ANSWER: <u>selectorate</u> [accept nominal <u>selectorate</u> or real <u>selectorate</u>; reject "electorate"]

[10e] Drawing on selectorate theory, Bueno de Mesquita and Smith argue that these transfers from rich country governments to poorer ones are essentially bribes traded for policy concessions.

ANSWER: foreign <u>aid</u> payments [accept international <u>aid</u> or development <u>aid</u> or development <u>assistance</u>; reject "remittances"]

[10m] This Columbia economist and author of *The End of Poverty* has a less cynical view of foreign aid. William Easterly has long criticized this man, who formulated the doctrine of "shock therapy" after the collapse of the Soviet Union.

ANSWER: Jeffrey Sachs [or Jeff Sachs or Jeffrey David Sachs]

<Social Science>

7. The fifth ruler with this name abolished prostration in royal ceremonies and tasked Gustave Rolin-Jaequemyns ("ro-LAN-jahk-MAN") with modernizing his country's Thammasat judicial system. For 10 points each:

[10e] Give the regnal name of all Chakri monarchs of Thailand, the fifth of whom instituted reforms that were blocked after the Front Palace Crisis. The tenth king of this name revived his country's lèse-majesté laws in 2020.

ANSWER: Rama [accept Rama V or Chulalongkorn; accept Rama X or Vajiralongkorn]

[10m] Under Rama V, Rolin-Jaequemyns upheld the power of brahmin legal experts to interpret the "dharma" genre of these texts. This Sanskrit term follows a word for "prosperity" in the title of a Mauryan manual on statecraft by Kautilya.

ANSWER: **shastra**s [or **śāstra**s; accept *Arthashāstra*; accept *Dharmashāstra*; prompt on treatises, manuals, books, or compendiums]

[10h] This term is prefixed by "raja" ("rah-JAH") in an international system introduced in the Arthashāstra.

Rama V's reforms created a system of regional units named for a Thai translation of this term, which describes the hierarchy of *mueang* ("moo-ung") states.

ANSWER: <u>mandala</u>s [accept Raja<u>mandala</u>s; accept <u>monthon</u>s; prompt on <u>vantra</u>s or <u>circle</u>s; prompt on <u>subdivisions</u> or <u>Thesaphiban</u> or <u>Thesaban</u>]

<World History>

8. In a photograph by this artist, a non-binary muxe ("MOO-shay") wears a dress and holds a mirror up to their head. For 10 points each:

[10h] Name this Mexican artist of the photo essay *Juchitán*, which includes the photograph "Magnolia." A woman wears several lizards on her head in this artist's photograph "Nuestra Señora de Las Iguanas."

ANSWER: Graciela Iturbide

[10m] In *Juchitán*, Iturbide documented a matriarchal society among this Indigenous group in Oaxaca ("wah-HAH-kah"). At the site of Monte Albán, this culture produced stones that depict dead captives with their names between their legs called danzantes ("dahn-SAHN-tays").

ANSWER: Zapotec culture [or Bën za or Be'ena'a]

[10e] In an Iturbide photograph titled for this sort of figure, a woman holds a boombox in the Sonoran Desert. These winged figures often surround the Virgin Mary in paintings, especially in depictions of her Assumption.

ANSWER: <u>angel</u>s [or <u>ángel</u>es; accept <u>cherub</u>s or <u>cherub</u>im; accept <u>putto</u> or <u>putti</u>; accept "<u>Angel</u> Woman, Sonoran Desert"]

<Other Fine Arts>

9. Two Black businessmen in this state, E. C. Regnier and Roger Ewalt, had the Lincoln Hills resort built in the 1920s as a getaway for Black families. For 10 points each:

[10e] Name this state where Barack Obama gave a 2008 convention speech at the current Mile High Stadium. Many of this state's Black residents are moving east from its capital to the suburban city of Aurora.

ANSWER: **Colorado** [or **CO**]

[10m] Before relocating from Denver, Colorado, to Indianapolis, the Black entrepreneur Sarah Breedlove married and took this name, under which she made millions of dollars selling hair care products.

ANSWER: Madam C. J. Walker

[10h] Justina Ford served Black Denverites as Colorado's first licensed African American woman in this field. The so-called "father" of this field, J. Marion Sims, performed experiments without anesthesia on enslaved people.

ANSWER: **gynecology** [or **obstetrics**; or word forms like **gynecologist**; or **OB/GYN**; prompt on <u>medicine</u>, <u>doctor</u>, <u>physician</u>, <u>surgery</u>, or <u>surgeon</u>; prompt on <u>women</u>'s health or <u>health</u> care; reject "nursing" or "midwife" or "doula"] <American History>

10. Answer the following about depictions of women's lives and relationships in African novels, for 10 points each. [10m] This country's gender norms and traditional polygamy informed the epistolary novel *So Long a Letter* by Mariama Bâ. The novel *The Black Docker* is by this country's author Ousmane Sembène ("ooz-MAN sem-BEN").

ANSWER: Senegal [or Republic of Senegal or République du Sénégal or Réewum Senegaal]

[10h] This author depicted misogyny in Somalia in his debut novel, *From a Crooked Rib*, which accidentally caused many readers to assume that this Somali author was female.

ANSWER: Nuruddin **Farah** [or Nuuradiin **Faarax**]

[10e] In the article "For Nuruddin Farah" in *World Literature Today*, Kwame Anthony Appiah argues that "the tragedy of men who do not respect the feminine" is a central piece of this Chinua Achebe novel about Okonkwo.

ANSWER: Things Fall Apart

<World Literature>

11. This politician curated a namesake "list" of perpetrators of tax fraud with undeclared holdings at HSBC, before controversially handing the list to the Greek government. For 10 points each:

[10h] Name this politician who became the first to head two of the institutions that make up the Troika. This politician's unpopularity with the Greek public sank Antonis Samaras and New Democracy.

ANSWER: Christine <u>Lagarde</u> [or Christine Madeleine Odette <u>Lagarde</u>; or Christine Madeleine Odette <u>Lallouette</u>] (After heading the International Monetary fund for almost a decade, Lagarde was appointed to lead the European Central Bank in 2019. The IMF, ECB, and European Commission form the Troika.)

[10m] Samaras's administration attempted to destroy the "Lagarde List" and evidence of corruption investigations before this party formed a government in 2015 under Alexis Tsipras's denunciation of Troika-enforced austerity measures.

ANSWER: <u>Syriza</u> [or <u>Coalition of the Radical Left</u> – Progressive Alliance; or <u>Synaspismós Rizospastikís</u> <u>Aristerás</u> – Proodeftikí Simachía]

[10e] The Lagarde List exposed the HSBC branch in this Swiss city, the location of a set of post-World War II agreements that afforded humanitarian rights to civilians during wartime.

ANSWER: <u>Geneva</u> [or <u>Genève</u>; accept <u>Geneva</u> Convention] <European History>

12. This molecule is degraded by the "rosettasome," a synthetic analog of enzymatic complexes from bacteria like *Acetivibrio* and *Clostridium thermocellum*. For 10 points each:

[10m] Name this insoluble dietary fiber that is considered non-fermentable by the gut microbiota. Xyloglucans and arabinoxylans are called "hemi" analogs of this linear molecule, which is composed of beta-1,4-linked glucose.

ANSWER: <u>cellulose</u> [accept hemi<u>cellulose</u>s; accept <u>cellulosome</u>s, <u>cellulolysis</u>, or <u>cellulolytic</u> enzymes; accept <u>Acetivibrio cellulolyticus</u>; prompt on homo<u>polysaccharide</u>s or <u>carbohydrate</u>s or <u>glycan</u>s]

[10e] The high tensile strength of cellulose and various hemicelluloses maintains the integrity of this supportive exterior structure, which experiences turgor pressure from the protoplast of plant cells.

ANSWER: cell wall [reject "cell membrane" or "plasma membrane" or "cytoskeleton"]

[10h] Secondary cell walls in woody plants like birch contain cellulose, lignin, and xylan polymers with side chains of this sugar acid found in xanthan gum. The liver conjugates this molecule to bilirubin to permit its urinary excretion.

ANSWER: <u>glucuronic</u> acid [or <u>GlcA</u> ("glick-A"); or <u>glucuronate</u>; or beta-D-<u>glucopyranuronic</u> acid; accept <u>glucuronide</u>; accept <u>glucuronidation</u>; accept <u>glucurono</u>xylan; prompt on <u>uronic</u> acid or ald<u>uronic</u> acid]

<Biology>

13. An author with this [emphasize] *birth surname* depicted her unhappy marriage in the novel *Dance of the Demons*, which her son Maurice Carr translated into English as *Deborah*. For 10 points each:

[10m] Give this birth surname of the novelist Esther Kreitman. Her brother, who also had this surname, created a character who marries a sex worker named Elka and urinates in his village's bread supply.

ANSWER: <u>Singer</u> [accept Isaac Bashevis <u>Singer</u> or Icek Hersz <u>Zynger</u>; accept Hinde Ester <u>Singer</u> Kreytman] [10h] Another Singer sibling, Israel Joshua Singer, wrote *The Brothers Ashkenazi*, which is often compared to this Bashevis Singer novel. Asa Heshel is trapped during the bombardment of Warsaw in this novel, which was published in Israel's honor after his death.

ANSWER: The Family Moskat

[10e] Isaac, Israel, and Esther primarily used this Germanic language to depict their Ashkenazi Jewish upbringing, although Isaac self-translated his works into English.

ANSWER: <u>Yiddish</u> <European Literature>

14. Jane Fortune's book on the "Forgotten Artists of Florence," *Invisible Women*, devotes a chapter to the all-women workshop of Sister Plautilla Nelli. For 10 points each:

[10e] Nelli's 21-foot version of this scene was restored by Fortune's Advancing Women Artists group, which raised funds by allowing donors to "adopt" each of the 12 apostles who sit at a table with Jesus.

ANSWER: <u>Last Supper</u> [or <u>Ultima Cena</u> or <u>Cenacolo</u>]

[10m] Nelli and other nuns were encouraged to paint by this man, whose portraitist Fra Bartolomeo was often copied by Nelli. This friar inspired Sandro Botticelli's shift to religious subjects in paintings like *The Mystical Nativity*.

ANSWER: Girolamo **Savonarola** [or Jerome **Savonarola**]

[10h] Many of Nelli's restored works reside at a San Salvi museum that houses this artist's Last Supper. The AWA also restored Irene Parenti Duclos's copy of this artist's lunette fresco *Madonna del Sacco*, for which his wife may have modeled.

ANSWER: Andrea <u>del Sarto</u> [or <u>Andrea</u> del Sarto; or Andrea <u>d'Agnolo</u> or Andrea <u>d'Agnolo</u> di Francesco di Luca; accept Museum of the Last Supper of Andrea <u>del Sarto</u> or Museo del Cenacolo di <u>Andrea</u> del Sarto] <Painting/Sculpture>

15. Commodore Matthew Perry is depicted as one of these shapeshifting mountain spirits in a satirical woodblock print housed at the Ryōsenji Treasure Museum. For 10 points each:

[10m] Name these wily Japanese beings whom noh actors impersonate with red-faced masks that exaggerate their long noses. Boastful people are accused of "turning into" one of these yōkai, who are often depicted as bird people.

ANSWER: <u>tengu</u> [accept dai<u>tengu</u>, karasu<u>tengu</u>, hanodaka<u>tengu</u>, or konoha<u>tengu</u>; accept <u>tengu</u> ni naru; prompt on <u>goblins</u>, <u>demons</u>, <u>kami</u>, <u>mononoke</u>, <u>ghost</u>s, or <u>spirits</u>]

[10e] A tengu legendarily taught Minamoto no Yoshitsune to master these objects, which another tengu discusses in *The Demon's Sermon on the Martial Arts*. Samurai used examples of them like ōdachi and katana.

ANSWER: **sword**s [accept **blade**s; prompt on <u>weapons</u> or <u>arms</u>]

[10h] Tengu often carry swords, fans, or these polearms that were favored by female onna-musha. Meiji-era prints depicted Tomoe Gozen with one of these weapons rather than the sword she wields in *The Tale of the Heike*.

ANSWER: **naginata** [accept ko-**naginata** or ō-**naginata**; prompt on <u>spears</u>] <Mythology>

16. Answer the following about Hungarian-American physicists, for 10 points each.

[10m] This Hungarian-American physicist worked on a theory of physical adsorption ("ad-ZORP-shin") that generalizes Langmuir ("LANG-myoor") monolayers. In the first hydrogen bomb design, this physicist incorporated insights from Stanislaw Ulam.

ANSWER: Edward **Teller** [or **Teller** Ede]

[10e] Leo Szilard ("SEE-lard") was the first to propose an information consumption resolution to this paradox. In this thought experiment developed by a Scottish scientist, an external agent sorts hot and cold particles in a gas, naïvely violating the second law of thermodynamics.

ANSWER: Maxwell's demon

[10h] Along with Max Born, this Hungarian-American names a set of boundary conditions used to ensure that a wavefunction satisfies the periodicity of a particular Bravais ("bra-VAY") lattice, a theory they applied to predict the specific heat of solids.

ANSWER: Theodore von <u>Kármán</u> [accept Born–von <u>Kármán</u> conditions; accept <u>Kármán</u> Tódor or Tivadar Mihály <u>Kármán</u> in place of "Theodore von Kármán"] <Physics>

17. This man's amateur observations of spiders may have inspired his analogies of a spider's web failing to stop a falling rock and a man holding a helpless spider over a fire. For 10 points each:

[10e] Name this preacher who delivered the fiery sermon "Sinners in the Hands of an Angry God" during the First Great Awakening.

ANSWER: Jonathan Edwards

[10h] Edwards is often anachronistically said to hold this eschatological position. Based on an optimistic reading of Revelation Chapter 20, this position holds that most of humanity will be "Christianized" before the Second Coming. ANSWER: **postmillennial**ism [or word forms like **postmillennialist**s; accept **postmillenarian**ism]

[10m] Postmillennialists do not necessarily embrace this position, which holds that all people will be saved. Origen and Hans Urs von Balthasar are often ascribed a "hopeful" version of this position, which partially names a liberal religion.

ANSWER: <u>universal</u>ism [or <u>universal</u> salvation or Christian <u>universal</u>ism; accept Unitarian <u>Universal</u>ism; accept <u>universal</u>ism; reconciliation or <u>apocatastasis</u>; accept hopeful <u>universal</u>ism or strong <u>universal</u>ism; prompt on <u>UU</u>ism by asking "what does that stand for?"; reject "unitarianism"] (Hans Urs von Balthasar examined the idea of universalism in *Dare We Hope?*, although he did not embrace the label.)
<Religion>

18. The Stobbe condensation is a variation of this reaction that requires less harsh reaction conditions because of the formation of a lactone intermediate. For 10 points each:

[10m] Name this organic reaction in which an ester is enolized and subsequently displaces the carbonyl group from another ester to form a beta-keto ester.

ANSWER: <u>Claisen</u> condensation [prompt on <u>condensation</u>; reject "Claisen rearrangement"]

[10e] Two acetyl-CoA molecules undergo a Claisen condensation in the first step of this molecule's biosynthesis. This lipid is the precursor of steroid hormones.

ANSWER: cholesterol

[10h] In the final stages of cholesterol biosynthesis, lanosterol is converted to cholesterol via reactions studied by this 1964 Nobel laureate. This scientist demonstrated that all the carbon atoms in cholesterol originate from acetate ions.

ANSWER: Konrad Emil <u>Bloch</u> [accept <u>Bloch</u> pathway] <Chemistry>

19. This phrase is parenthetically inserted between the words "Compose" and "Invent!" in the poem "A Sort of a Song." For 10 points each:

[10h] Give this phrase that follows the exclamation "Say it!" before a description of "blank faces of the houses and cylindrical trees" in a poem's section "The Delineaments of the Giants."

ANSWER: "no ideas but in things"

[10e] This author's book-length poem *Paterson* repeats his credo of "no ideas but in things," which he illustrated with a poem about "a red wheel / barrow / glazed with rain / water."

ANSWER: William Carlos Williams

[10m] A review by Paul Auster contrasts Williams's motto with this poem's image of "a ping-pong ball / Secure on its jet of water." This long poem by John Ashbery begins by describing "the right hand / bigger than the head, thrust at the viewer."

ANSWER: "Self-Portrait in a Convex Mirror"

<American Literature>

20. Two accounts by the sailor Watkin Tench are important sources for the early history of this colony, whose European settlers arrived on the First Fleet. For 10 points each:

[10e] Name this colony to which British, Irish, and African convicts were transported in order to populate the new city of Sydney.

ANSWER: <u>New South Wales</u> [or <u>NSW</u>; accept <u>Botany Bay</u>; accept <u>Port Jackson</u>; prompt on <u>Australia</u>] [10h] New South Wales was the site of the 1804 Castle Hill uprising by Irish convicts, which ended with a battle that shares this name with the final battle of the 1798 Irish rebellion.

ANSWER: <u>Vinegar Hill</u> [accept Battle of <u>Vinegar Hill</u>; accept Second Battle of <u>Vinegar Hill</u> or Australia's <u>Vinegar Hill</u>]

[10m] Another major event in the early history of New South Wales was this staged 1808 coup against William Bligh, who was attempting to regulate colonial trading practices. During this event, Bligh was supposedly discovered hiding under his bed in full dress uniform.

ANSWER: Rum Rebellion [accept Great Rebellion]

<Other History>

21. David Lewis argued that opponents of this position, whom he called "ersatzists" ("AIR-zatts-ists"), were trying to find an abstract substitute for the concrete entities to which this position is committed. For 10 points each:

[10h] Name this position laid out in Lewis's book *On the Plurality of Worlds*, which holds that possible worlds have the same ontological status as the actual world.

ANSWER: **modal realism** [prompt on realism]

[10e] A book by Lewis uses possible-world semantics to analyze these statements. These hypothetical statements condition on a situation that is not true, such as "if I had struck the match, then it would have lit."

ANSWER: **counterfactual**s [or **contrafactual**s]

[10m] Another of Lewis's papers argues that any credible theory of mind must account for both "mad" and "Martian" forms of this concept. Philosophers of mind often debate whether this concept is equivalent to the firing of C-fibers.

ANSWER: **pain** [accept Martian **pain**; accept mad **pain**]

<Philosophy>