

2023 ACF Regionals

Packet K by Georgia Tech B, Gettysburg, Iowa A, Kenyon A, Tennessee A, Western A

Edited by Nick Jensen, Alexandra Hardwick, Rahul Keyal, Allan Lee, Tim Morrison, Kevin Park, Grant Peet, Graham Reid, and Chris Sims

Tossups

1. A novel from this country includes swaddling bands, blank paper, and breast milk in a list of 65 objects used to explore the death of the narrator's baby sister. It's not Russia, but an author from this country depicted a wife who drugs the narrator with Adalin in the novella *The Wings* and wrote the poetry sequence *Crow's Eye View*. In a novel from this country, a video artist films his sister-in-law, who has a petal-shaped birthmark. An author born in this country used English, French, collage, and fragmented text in her book *Dictée* ("deek-TAY"). Deborah Smith has translated novels from this country, including *The White Book* and a 2007 novel whose protagonist stops eating meat. *The Vegetarian* is a novel from this country, where a publisher awards the Yi Sang Literary Award. For 10 points, what country was the birthplace of Theresa Hak Kyung Cha and Han Kang?

ANSWER: South **Korea** [or **ROK** or Republic of **Korea** or **Daehanminguk**; accept **Chosŏn** or **Chosen**; accept **Hanguk**; reject "North Korea" or "Democratic People's Republic of Korea"]

<World Literature>

2. A principle named for this concept is critiqued in H. J. McCloskey's "sheriff scenario." A notoriously dubious "proof" of a statement named for this concept reasons that the only way to know "that an object is visible, is that people actually see it." That principle named for this concept recognizes how "nature has placed mankind under the governance of two sovereign masters," as stated in *An Introduction to the Principles of Morals and Legislation*. To critique this concept's ambiguity, Robert Nozick imagined a scenario in which it is more readily acquired by a "monster." A theory named for this concept has "act" and "rule" forms and a variant that prioritizes it for the worst-off. For 10 points, what concept names an ethical theory advanced by J. S. Mill that advocates the greatest happiness for the greatest number of people?

ANSWER: **utility** [accept **utilitarianism**; accept **utility** monster; accept principle of **utility**; prompt on **pleasure**; prompt on greatest **happiness** until read]

<Philosophy>

3. A curve number that is used to quantify this process ranges between 30 and 100 and is highest for group D materials with high swelling potential. Hortonian flow is a form of this process that dominates in arid areas. The SELDM ("SELL-dum") mass balance model can be used to estimate the rate of this process and evaluate mitigation methods like sand media filters and bioswales. Materials are less susceptible to this process when they have a high porosity. This process can occur in humid areas due to excess soil saturation, but it often occurs due to precipitation exceeding infiltration capacity. This process is increased in areas with impervious surfaces like pavement. For 10 points, name this process in which excess precipitation is not absorbed into the ground.

ANSWER: surface **runoff** [or **overland flow**; accept saturation excess **overland flow** or infiltration excess **overland flow**; prompt on **flow** of water; prompt on **erosion** by asking "what process causes the erosion in this case?"]

<Other Science>

4. The snorkeling “Fantastic Grandmothers” found sea snakes in this territory’s Baie des Citrons. This territory’s Pindai Caves held fossils of birds like *Sylviornis*, the pile-builder megapode, and the kagu. A September 24th “Citizenship Day” celebrates the 1853 annexation of this territory, whose huts, topped with flèches faïtières (“flesh fet-YAIRS”), inspired Renzo Piano’s Jean-Marie Tjibaou (“chee-BAO”) Cultural Centre. The type site of the Lapita culture is in this nickel-exporting archipelago, whose penal colony held Communards like Louise Michel and the Kabyle (“kah-BEEL”) “Algerians of the Pacific.” This *sui generis* collectivity is home to intelligent qua-qua crows and the Kanak people, who boycotted its 2021 independence referendum under the Nouméa (“noo-MAY-uh”) Accord. For 10 points, what overseas French territory in Melanesia is named for a Latin term for Scotland?
ANSWER: **New Caledonia** [or **Nouvelle-Calédonie**; accept **New Caledonian** crow; accept **Grande Terre**; accept **Loyalty Islands** or **Îles Loyauté**; accept **Chesterfield Islands** or **Îles Chesterfield**; accept **Belep** archipelago; accept **Isle of Pines** or **Île des Pins** or **Kunyié**]
<Geography>

5. Three silver lamps hang outside an altar to a man with this name, with the middle one containing seven more lamps inside to represent the seven gifts of the Holy Spirit. The corpse of a man with this name was put out to sea, after which God guided the body to its entombment place in Iria Flavia, according to *The Golden Legend*. A city with this name was visited by the bishop Godescalc, who names the Le Puy (“pwee”) route. In a national myth, a man with this name was reimagined at the Battle of Clavijo as a “Moor Slayer.” The *Codex Calixtinus* provides advice for pilgrims traveling to a city with this name on a route lined with scallop shells as markers leading to the tomb of its eponymous saint. For 10 points, give this name of the patron saint of Spain and a Galician city appended with “de Compostela.”
ANSWER: **Santiago** [or **Santo Iago**; accept **Santiago** de Compostela; accept Camino de **Santiago**; accept **Santiago** Matamoros; prompt on **James**, Saint **James**, **Iago**, Saint-**Jacques**, Way of Saint **James**, or Chemin de Saint-**Jacques** by asking “what is the full Spanish-language name?”] (Godescalc of Le Puy was the first recorded pilgrim to Santiago de Compostela.)
<European History>

6. An author’s experiences of this conflict form the basis of the novella *Robert Helmont*. Six authors set out to depict this war realistically in the collection *Evenings at Médan*. A story set during this conflict ends with the words “a sob which she could not repress broke out between two couplets in the darkness.” An officer in this conflict makes a mine out of a teapot after shooting the eyes out of a portrait, before later being stabbed with a cheese knife by a Jewish sex worker named Rachel. In another story, a group of people fleeing this conflict by stagecoach refuse to share food with the title character, while Cornudet ironically whistles the Marseillaise. For 10 points, “Mademoiselle Fifi” and “Ball of Fat” were set by Guy de Maupassant during what 19th-century conflict?
ANSWER: **Franco-Prussian** War [or **Franco-German** War, Guerre de **1870**, Guerre **franco-allemande** de 1870, or **Deutsch-Französischer** Krieg]
<European Literature>

7. According to Herodotus, a person with this title was deposed in 496 BCE after minting his own coins. A “Northern” version of this title was held by Rājuvula, who ruled Mathura in the early 1st century CE. Nectanebo I and Nectanebo II supported people with this title during a disunited event that historians following Diodorus called their “Great Revolt.” Mitrobates, who held this title, was supposedly killed by another holder named Oroetes. A number of positions of this name were established around 530 BCE and were recorded in the Behistun Inscription. Regions controlled by people with this title were connected by a system of “express messengers” and the Royal Roads, which linked them to administrative centers like Sardis and Susa. For 10 points, what title was held by provincial governors in the Achaemenid Empire?

ANSWER: **satraps** [or **satrapy** or **satrapies**; accept Great **Satrap**’ Revolt or Revolt of the **Satrap**; accept Northern **Satrap** or **Ksatrapa** or Mahak**satrapa**; prompt on local **governors** or **vassal** rulers or **tyrants**]
<Other History>

8. Al Hansen attended a London symposium that promoted this action, the DIAS. After he performed this action on items arranged into ten categories, Michael Landy described the process in an “inventory.” This action titles a readymade that Man Ray created by clipping a photograph of Lee Miller’s eye to a metronome. A 1970 “project” by John Baldessari involved doing this action en masse and baking cookies from the results. This action was partially done at the MoMA in Jean Tinguely’s piece *Homage to New York*. Jasper Johns captioned a work for which Robert Rauschenberg did this action to a Willem de Kooning drawing. During a 2018 Sotheby’s auction, a custom frame was used to perform this action, creating *Love is in the Bin*. For 10 points, identify this action that occurred after the sale of Banksy’s *Girl with Balloon*.

ANSWER: **destroying** art [or word forms like being **destroyed**; accept means of destruction such as **breaking**, **cremating**, **erasing**, or **shredding** art; accept auto-**destruction** or self-**destruction**; accept *Erased de Kooning Drawing*; accept *Object to Be Destroyed* or *Indestructible Object*; accept *Break Down*; prompt on art **intervention**]
<Painting/Sculpture>

9. This type of group titles a 2021 book by Amanda Montell that analyzes their use of “customized” language and “semantic stop signs.” Colin Campbell wrote that these groups exhibit deviance relative to “dominant cultural orthodoxies” and thrive on “seekership” in his formulation of their “milieu.” Ted Patrick targeted these groups with an “awareness network” that aimed to discredit them, sometimes via kidnapping. Margaret Singer and Janja Lalich’s book on these groups “in our midst” popularized the term “love bombing.” This term is often applied to secular devotions that idealize leaders like Saparmurat Niyazov for their “personality.” For 10 points, a humorous equation claims that a religion results from time plus what type of group led by a charismatic leader like Jim Jones?

ANSWER: **cults** [accept **cults** of personality; accept *Cults in Our Midst*; accept **Cult** Awareness Network; accept **cultic** milieu; accept *Cultish: The Language of Fanaticism*; prompt on **new religious** movements or **NRMs**; prompt on **fanatics**] (“Semantic stop signs” is another term for thought-terminating clichés. Ted Patrick is the “father of deprogramming.”)
<Religion>

10. “Xeno-free” types of this substance are described in Freshney’s Manual. A type of this substance that was first reported by Jane Hinton and John Howard Mueller is exploited in disc diffusion. Another type of this substance activates the salvage pathway of hybridomas in HAT selection. A “complete” form of this substance was the positive control in the experiment that codified the “one gene, one enzyme” hypothesis, which was performed by Beadle and Tatum. M9 salts are found in a “defined,” “minimal” type of this substance used to screen auxotrophs. Tryptone and yeast extract are components of a “rich,” “complex” type of this substance named for Luria and Bertani or lysogeny. For 10 points, a glycan from red algae confers a semisolid structure to what type of substance used to culture cells?

ANSWER: culture **media** [or growth **media**; accept nutrient **broth**, **agar**, minimal **media**, complete **media**, complex **media**, rich **media**, defined **media**, lysogeny **broth**, Luria **broth**, LB **medium**, Luria–Bertani **medium**, HAT **medium**, or hypoxanthine-aminopterin-thymidine **medium**; prompt on **culture** until read; prompt on **substrates**, **aminopterin**, **hypoxanthine**, **deoxythymidine**, **dT**, or **deoxyribosylthymine** by asking “found in what complex type of substance?”]

<Biology>

11. An equivalence named for this word is obtained if two pitch class sets become transpositional equivalents when you take each class in one of the sets and subtract it from 12. Besides “double,” a form of this word names a type of counterpoint in which the upper and lower voices can be exchanged without creating dissonances. This non-numeric word describes a “nonexistent” musical feature that Schoenberg controversially used in *Verklärte Nacht*. Along with retrograde, this word names one of the basic transformations of the original statement of a tone row. Superscripts like “4 3” and “6 5” indicate that a chord has a property denoted by this word, contrasted with root position. For 10 points, what word describes the relation between a major third and a minor sixth by indicating that one interval is an “upside-down” version of the other?

ANSWER: **inversion** [or word forms like **inversional**, **inverted**, **invertible**, or **invert**; accept **inversional** equivalent; accept **invertible** counterpoint; accept **inverted** ninth chord or **inverted** chord]

<Classical Music>

12. These bonds can be formed using the phosphonium salt reagent PyCloCk. N–pi-star and pi–pi-star transitions in these bonds give rise to UV absorption peaks between 190 and 220 nanometers. Resonance gives these bonds a partial double bond character, inhibiting rotational conformation changes around them. Oxyma and DCC are coupling agents used in forming these bonds after the removal of a protecting group such as Boc (“bock”) or Fmoc (“F-mock”). A beaded resin support is used in a phase-separated method for forming these bonds pioneered by Robert Merryfeld. To break these bonds, a catalytic triad that includes a nucleophilic residue attacks the adjacent carbonyl group in the active site of chymotrypsin, a protease enzyme. For 10 points, name these bonds formed by dehydration reactions between amino acids.

ANSWER: **peptide** bonds [accept **europeptide** bonds; accept **isopeptide** bonds; accept solid-phase **peptide** synthesis; prompt on **amide** bonds]

<Chemistry>

13. The “ballooning body” of one of these people is likened to a “stretched yellow rag” in a poem narrated by Jessie Mitchell. In a ballad on the death of Emmett Till, one of these people “loiters in Mississippi” while another “burns bacon.” One of these people finds a shoe among “bits of glass and brick” at the end of Dudley Randall’s “Ballad of Birmingham.” One of these title people says “even in my deliberateness I was not deliberate” and promises “Believe me, I loved you all” while reflecting on events that “will not let you forget” in a poem by Gwendolyn Brooks. In another poem, one of these people describes “a-climbin’ on” a path with tacks and splinters and says “Life for me ain’t been no crystal stair.” For 10 points, a Langston Hughes poem is addressed from what type of person to a son? ANSWER: **mothers** [or **mom**s; accept “the **mother**”; accept “A Bronzeville **Mother** Loiters in Mississippi. Meanwhile, a Mississippi Mother Burns Bacon”; accept “Jessie Mitchell’s **Mother**”; prompt on parents or women] <American Literature>

14. A 2009 Kevin Washburn report cited ambiguities with the 1951 Johnson Act as one of several reasons why this industry was loosely regulated by the NIGC. This industry flourished after the Supreme Court’s reinterpretation of Public Law 280 in the case *Bryan v. Itasca County*, which set the precedent for a 1987 ruling in favor of the Cabazon Band. A lobbying scandal in this industry implicated Interior Secretary J. Steven Griles after he was named as a conspirator by Jack Abramoff. The IGRA grants this industry three classes of licenses. A 1981 Supreme Court ruled that this industry’s Florida state prize limits were not applicable on Seminole reservations. For 10 points, in May 2021, the Mohegan Sun opened a facility for what type of entertainment in Las Vegas? ANSWER: **casinos** [accept **gambling** houses or **gaming** houses; accept specific games, such as **slot** machines, **card** games, **dice** games, **poker**, **roulette**, **bingo**, or **pull tabs**; accept National Indian **Gaming** Commission; prompt on entertainment until read; prompt on resorts or hotels by asking “for what type of entertainment?”; reject “lotteries”] <American History>

15. In quantum tomography, this quantity names a form of functional analysis applied to pulsed local oscillators for homodyne detection. A distributive operator that orders the products of operators by this quantity is used to derive the LSZ reduction formula. A unitary operator named for this quantity is rewritten by expanding the Schrödinger equation with the Dyson series, if the Hamiltonian does not commute for different values of this quantity. This quantity’s Euclidean form replaces inverse temperature in a Wick rotation. In the Heisenberg picture, fields and operators, but not quantum state vectors, depend on this quantity, which has an uncertainty relationship with energy. For 10 points, quantum dynamics is described by the form of the Schrödinger equation that is dependent on what quantity? ANSWER: **time** [or **t**; accept **time**-dependent Schrödinger equation; accept **time** evolution or unitary **time** evolution operator; accept Euclidean **time** or imaginary **time**; accept **time**-ordering operator or **time**-ordered; accept **time** domain or **time**-domain homodyne detection] <Physics>

16. Two of these animals fight and presage (“PRESS-idge”) a flood in *Strange Stories from a Chinese Studio*. The edible monster Fēng (“fung”) resembles this animal’s liver. A talking yellow animal of this kind is cooked by the evil stepmother in the story of Beauty and Pock Face. Shūjūn (“shoo-jwin”) masters this animal, which tells humans that if they work hard they can eat thrice a day, so the Jade Emperor forces it to serve humans. A man who owns these animals represents the star Altair in the Qīxī (“chee-shee”) Festival, which celebrates his reunion with the weaver girl. This animal, which lets the rat ride on its back and gets second in the great race, is said to be honest and diligent but incompatible with the goat and horse in the Chinese zodiac. For 10 points, in the Vietnamese zodiac, what strong draft animal is replaced by the related water buffalo?

ANSWER: **cattle** [accept **oxen**, **bulls**, **bullocks**, **cows**, **zebus**, **calf**, **calves**, **niú**, or *Bos taurus*; accept **bovines** or **bovids**; accept “The **Cow**herd and the Weaver Girl” or “**Niú**láng Zhīmǔ”; prompt on **ruminants** or **artiodactyls**] (The ox is supposed to tell humans that they can eat every three days if they work hard.)

<Mythology>

17. Two poets with this first name were founding members of the Field Day Theatre. A poet with this first name dedicated the sequence “Singing School” to a fellow poet with this first name who wrote the novel *Reading in the Dark* and had the surname “Deane.” A poet with this first name connected his need to “rhyme / to see myself, to set the darkness echoing” to how “as a child, they could not keep me from wells” in his poem “Personal Helicon.” That poet with this first name described “a straining rump among the flowerbeds” and a “bottle corked sloppily with paper” in a poem that analogizes his own use of a “squat pen” to how his father “could handle a spade.” For 10 points, give this first name of an Irish poet who included the poem “Digging” in his collection *Death of a Naturalist*.

ANSWER: **Seamus** (“SHAY-mus”) [accept **Seamus** Heaney or **Seamus** Justin Heaney; accept **Seamus** Deane]

<British Literature>

18. Heller and Salzman’s book on the “hidden rules” of this status discusses its closed set of “forms” fixed by the *numerus clausus* principle. A Latin doctrine that derives the jurisdiction of newly formed sovereign states from this status was affirmed in the 1986 case *Burkina Faso v. Mali*. James K. Beggan found that the “mere” fact of this legal status causes more positive evaluations. A person is wrongfully deprived of this status in the tort of conversion. Chapter 11 bankruptcy lets a debtor retain this status with DIP financing. A “naked” type of this status is contrasted with usufruct. Bailees temporarily gain this status, which is acquired via “adverse” occupation in “squatter’s rights.” For 10 points, an adage claims that “nine tenths of the law” is what status protected by the right to property?

ANSWER: **possession** [or **ownership** or **owning** or word forms; accept **possession** of territory, adverse **possession**, debtor-in-**possession** financing, common **ownership**, naked **ownership**, home **ownership**, or mere **ownership** effect; accept *uti possidetis juris*; prompt on **property** rights until read; prompt on **have** something or equivalents; prompt on **title**; prompt on **occupation** or word forms until read] (The book in the first line is *Mine!: How the Hidden Rules of Ownership Control Our Lives*.)

<Social Science>

19. Thousands of legal marriage disputes filed in this country's capital informed Christine Hünefeldt's book *Liberalism in the Bedroom*. The clash between the Civilistas and Pierolistas in this country convinced Juan Bustamante to launch an 1867 Indigenous uprising. Agustín Gamarra consolidated power over this country after its confederation with an eastern neighbor was dissolved after the Battle of Yungay ("yoon-GUY"). Ramón Castilla presided over this country's Guano Era, during which Fujianese laborers arrived en masse to its port of Callao ("kah-YOW"). This country ceded its territory of Tarapacá after a humiliating ceasefire with Chile that ended the War of the Pacific. This country's independence was secured after the Battle of Ayacucho. For 10 points, name this country governed from Lima.

ANSWER: **Peru** [or Republic of **Peru** or República del **Perú** or **Piruw** Suyu; prompt on Peru–Bolivian Confederation or Confederación Perú-Boliviana]

<World History>

20. In a black-and-white shot by this director, a woman ignores a restaurant brawl behind her and sadly notes that she no longer makes the beds or gets "emotionally involved" with her partners. That film by this director ends with a mute, smoking man giving her a motorcycle ride in this director's characteristic "step-printing" effect. This frequent collaborator of cinematographer Christopher Doyle directed a film in which a policeman buys 30 cans of pineapple after a breakup, while another policeman doesn't notice his apartment being redecorated by a girl who often dances to "California Dreamin'." This man directed *Fallen Angels* and a loose romantic trilogy that includes *Days of Being Wild* and *2046*. For 10 points, name this Hong Kong director of *Chungking Express* and *In the Mood For Love*.

ANSWER: **Wong** Kar-Wai [or **Wáng** Jiāwèi]

<Other Fine Arts>

21. Studies based on this psychologist's work informed a 1996 meta-analysis by Bond and Smith that investigated heterogeneity across 17 collectivist and individualistic societies. In work on impression formation, this psychologist found massive differences in perceived personality based on substituting "cold" for "warm" in a list of seven characteristics. A 1951 experiment by this psychologist involved a "perceptual" task that was completed with nearly 100 percent accuracy outside of the group setting it was conducted in. In his best-known study, this psychologist had student confederates at Swarthmore College misidentify the length of three lines displayed on cards. For 10 points, name this social psychologist who carried out experiments on conformity.

ANSWER: Solomon **Asch** [or Solomon Eliot **Asch**]

<Social Science>

Bonuses

1. Paintings by Fernand Léger, Jean Metzinger, and others decorated an architectural installation at the 1912 Salon d'Automne of a “Cubist” one of these things. For 10 points each:

[10m] What structures were reduced to brown, geometric outlines in a 1908 painting by Georges Braque, prompting Louis Vauxcelles to disparagingly coin the term Cubism?

ANSWER: **houses** [accept **Houses** at *L'estaque* or **Maisons** à *l'Estaque*; accept *Cubist House* or *La Maison Cubiste*]

[10h] The facade of *La Maison Cubiste* was designed by this sculptor, who is best known for a machine-like bronze sculpture of a horse's head titled *The Large Horse*. He led the Puteaux Group with his brothers Jacques and Marcel.

ANSWER: Raymond **Duchamp-Villon** [prompt on **Duchamp**]

[10e] André Mare, who designed the house's interior, later pioneered this movement with his textiles. Cubism informed its emphasis on streamlined geometry, as in the designs of the Chrysler and Empire State Buildings.

ANSWER: Art **Deco**

<Painting/Sculpture>

2. In a short story, the narrator compares these animals to “Chinese figurines of milky glass” and muses that “larva means disguise and also phantom.” For 10 points each:

[10m] Name these animals whose “eyes of gold” and “terrifying purity” fascinate the narrator. The narrator then transforms into one of these animals in the *Jardin des Plantes* (“jar-DAN day PLANT”).

ANSWER: **axolotls** [or **ajolotes**; or **āxōlōtl**; prompt on **salamanders** or **amphibians**]

[10e] This author's short stories include “Axolotl” and “Blow-Up,” which inspired a film by Michelangelo Antonioni. This author wrote the novel *Hopscotch*.

ANSWER: Julio **Cortázar** [or Julio Florencio **Cortázar**]

[10h] This Cortázar story was published in the same collection as “Axolotl.” In this metafictional story, a man sits in a high-backed green velvet chair to read a novel in which another man enters his house to kill him.

ANSWER: “The **Continuity of Parks**” [or “**Continuidad de los parques**”]

<World Literature>

3. In a 2022 result, the research group of Jun Ye (“joon yeh”) at JILA measured the gradient due to this effect in a millimeter-scale strontium optical lattice atomic clock. For 10 points each:

[10m] Name this effect that was first observed in the Pound–Rebka experiment using gamma radiation from iron-57 by balancing the Mössbauer effect and Doppler effect in a moving sample about 20 meters below the emitter.

ANSWER: **gravitational redshift** [prompt on **redshift**]

[10e] Gravitational redshift was a seminal prediction of this theory, which describes gravity in terms of curved spacetime.

ANSWER: **general relativity** [or **GR**; prompt on **relativity**; reject “special relativity”]

[10h] *Two answers required.* In another precision test of general and special relativity, these two scientists flew around the world with atomic clocks, and found that the different times measured by west-moving, east-moving, and ground-based clocks were explained by relativistic effects.

ANSWER: Joseph **Hafele** AND Richard **Keating** [accept answers in either order; accept **Hafele–Keating** experiment; accept Joseph Carl **Hafele** in place of “Joseph Hafele”]

<Physics>

4. An architect from this city was inspired by Émile Zola to plan his *Cité industrielle*, which would have supported 35,000 residents had it been realized. For 10 points each:

[10h] Name this city where Tony Garnier designed the Grange Blanche Hospital and the Stade de Gerland. Jean Nouvel designed a semi-cylindrical opera house in this city.

ANSWER: **Lyon** [or **Lyons**; accept Opéra National de **Lyon**]

[10e] Garnier's *Cité industrielle* was to be made entirely of the "reinforced" form of this building material, which uses embedded rebar to strengthen it. Le Corbusier designed the Villa Savoye using this material.

ANSWER: **concrete** [accept reinforced **concrete** or ferro**concrete** or **béton** armé]

[10m] Garnier won this prestigious arts scholarship for his design of a national bank. In 1968, André Malraux abolished this award, which allowed winners to stay in its eponymous foreign capital for three to five years.

ANSWER: **Prix de Rome** [or Grand **Prix de Rome**]

<Other Fine Arts>

5. This man names a holiday – created in the 19th-century by indentured Indo-Caribbean Muslims – whose Guyanese ("guy-uh-NEEZ") and Surinamese name references the colorful model tombs built in his honor. For 10 points each:

[10m] Name this historical figure whose martyrdom during the Second Fitna is commemorated with ta'zīya passion plays during the Mourning of Muharram.

ANSWER: **Husayn** [or **Husayn** ibn 'Alī; or Abū 'Abd Allāh al-**Husayn** ibn 'Alī ibn Abī Ṭālib; accept **Hosay**] (The holiday is called Hosay, Tadjah, or Taziya and is partially derived from 'Āshūrā'.)

[10e] Aliyah Khan's book *Far From Mecca* argues that Trinidad's observance of Ḥusayn's martyrdom, Hosay, became secularized and creolized, taking on aspects of this annual Caribbean festival held before Lent.

ANSWER: **Carnival** [accept **Mardi Gras** or **Fat Tuesday**; accept **J'ouvert**]

[10h] *Allah in the Islands* fictionalizes Carnival songs about a 1990 coup attempt led by a group of Muslims named for this word in Trinidad. Abūl-A'īlā al-Maudūdī founded a Pan-Islamic group named for this word followed by "e-Islami."

ANSWER: **jamaat** [accept **Jamaat**-e-Islami; accept **Jamaat** al Muslimeen or al-**Jamā'at** al-Muslimīn or **Jama'at** al-Muslimeen; prompt on society, assembly, gathering, party, community, or school] (In *Far from Mecca*, Khan uses the novel to frame her analysis of Muslims in Trinidad.)

<Religion>

6. *Chinese term required.* One of these people named Shǐ Sīmíng (“shuh suh-MING”) declared himself the emperor of the Yān (“yen”) state after he murdered Ān Lùshān’s son and successor. For 10 points each:

[10h] Name these regional military governors whose appointment by the Táng dynasty eroded state control of frontier regions. Ān Lùshān himself was one of these people, who also administered fānzhèn (“fon-jun”) troop settlements.

ANSWER: **jiédùshǐ** (“j”YEH-doo-shuh”) [or **jiédù**]

[10m] Many jiédùshǐ had non-Han ancestry from areas like this region of Central Asia, the homeland of Ān Lùshān’s father. This region’s namesake Iranian language was the lingua franca of Silk Road cities like Samarkand before the Islamic conquest.

ANSWER: **Sogdia** [or **Sogdiana**; accept **Sogdian** language; prompt on Greater **Khorāsān**; prompt on **Fergana** Valley; prompt on **Transoxiana**, **Farā-rūd**, **Mā Warā’ an-Nahr**, or **Hézhōng** by asking “what language did the people of Transoxiana mostly speak?”]

[10e] Sogdian merchants helped two followers of this religion to smuggle silkworms out of China. This religion’s Nestorian branch helped suppress Ān Lùshān’s rebellion and was condemned at the 451 CE Council of Chalcedon (“KAL-suh-don”).

ANSWER: **Christianity** [or **Christians**; accept **Jǐngjiào**; prompt on the **Church**]

<World History>

7. The brother of the author of a 2016 novel titled “Welcome to” this city produced the rom-com *Who’s the Boss* in this city. For 10 points each:

[10m] Name this city, the setting of the soap opera *Mirror in the Sun* and the sitcom *Papa Ajasco*. The world’s second-largest film industry, which made *30 Days in Atlanta* and *The Wedding Party*, is this city’s “Nollywood.”

ANSWER: **Lagos** [or **Èkó**; accept *Welcome to Lagos*] (The author is Chibundu Onuzo.)

[10e] Nollywood actress Iyabo Ojo co-stars in Lagos’s 2022 spinoff of this franchise, which has featured women from Durban, Cape Town, and Joburg. This franchise includes Bravo shows set in Orange County and Atlanta.

ANSWER: *The **Real Housewives*** [or **RHO**; accept answers that include specific cities]

[10h] Netflix’s popularity with this generation, the first post-apartheid cohort of South Africans, has led MultiChoice’s streaming service Showmax to invest in African content like local *Real Housewives* spinoffs.

ANSWER: **born-frees** [or **Born Free** Generation]

<Pop Culture>

8. The narrator of a short story leaves for this place after her uncle throws a pack of firecrackers into her room at 6:30 AM, believing she mocked the pink kimono he wears for the photographer Mr. Whitaker. For 10 points each:

[10m] Identify this place in China Grove where a woman gets a job with the help of Papa-Daddy, who comes to believe she doesn’t like his “long-long beard” due to the narrator’s lying sister.

ANSWER: the **P.O.** [or the **post office**; accept “Why I Live at the **P.O.**”]

[10e] Eudora Welty captured life in this state in both stories like “Why I Live at the P.O.” and her many photographs. Much of William Faulkner’s work is set in this state’s fictional Yoknapatawpha (“YOK-nuh-puh-TAW-fuh”) county.

ANSWER: **Mississippi** [or **MS**]

[10h] Welty was inspired by a photograph she took of a woman performing this activity at a post office. In a story by Tillie Olsen, the narrator feels guilt over her missteps raising her daughter Emily while doing this household activity.

ANSWER: **ironing** clothes [accept “I Stand Here **Ironing**”]

<American Literature>

9. This quantity is plotted on the *x*-axis of Frost diagrams, which show how free energy varies with it. For 10 points each:

[10m] Name this quantity that corresponds to the hypothetical charge of an atom in a compound if all its bonds were fully ionic, effectively describing how many more or fewer electrons the atom has compared to its neutral state.

ANSWER: **oxidation state** [or **oxidation number**]

[10h] These diagrams show the standard redox potentials for an atom, starting with the most oxidized form possible, and moving to successively lower oxidation numbers.

ANSWER: **Latimer** diagrams

[10e] The standard redox potentials shown in Latimer diagrams are conventionally given in this SI unit, which is used to measure the potential difference of an electrochemical cell.

ANSWER: **volts** [or **V**; accept **voltage**; prompt on **joules per coulomb** or **J/C**]

<Chemistry>

10. A 1999 book by Thomas Bodenheimer and Robert Gould titled for this policy distinguished between the idealist “global” and the realist “selective” forms of it. For 10 points each:

[10h] Name this policy that necessitated arming “freedom fighters” in communist countries according to Jeane Kirkpatrick. First enacted during the Korean War, this policy is more extreme than *détente* and containment.

ANSWER: **rollback** [accept selective **rollback** or global **rollback**; accept **Rollback!**: *Right-wing Power in U.S. Foreign Policy*; prompt on **regime change**]

[10e] With Kirkpatrick as UN Ambassador, this president’s foreign policy embraced rollback during Afghanistan’s mujahideen insurgency. His Defense Secretary Caspar Weinberger resigned amidst the Iran–Contra investigations.

ANSWER: Ronald **Reagan** [or Ronald Wilson **Reagan**; accept **Reagan** Doctrine]

[10m] The Reagan Doctrine also applied rollback policy in aiding the anti-communist UNITA party in this country. Analysts from the Heritage Foundation frequently visited this country to provide intelligence to Jonas Savimbi.

ANSWER: **Angola** [or Republic of **Angola** or República de **Angola** or Repubilika ya **Ngola**]

<American History>

11. This thing, which is personified by Tekaniva in Tuvalu, is made from the body of Riki in a myth from Nauru and Kiribati (“keer-ih-boss”). For 10 points each:

[10m] Name this thing that, in Māori myth, is formed by the shark Te Māngōroa or the basket Te Ikaroa, which is placed on Rangi’s body. In a Greek myth, Herakles causes Hera to create this thing.

ANSWER: **Milky Way** [or **via lactea** or **galaktikos kýklos**; accept **Great Rift** or **Dark Rift** or **Dark River**; prompt on outer **space**, the night **sky**, the **heavens**, **galaxy**, or the **stars**]

[10h] An “oral map” from Tonga that likens the Milky Way to a “flower girdle” functioned like these mnemonic objects used by Marshallese wayfinders. They are made of shells tied to palm ribs.

ANSWER: **stick charts** [or **navigation charts**; accept **meddo** or **mattang** or **rebelib**; prompt on **charts** or **maps**; prompt on **sticks** or **wood**]

[10e] The Euahlayi (“yoo-ah-LYE-eye”) people map sites from this “everywhen” with a 1,700-mile songline that follows the Milky Way. Tomoko Masuzawa’s “quest for the origin of religion” is titled for this primordial Aboriginal Australian “time.”

ANSWER: **Dreamtime** [or the **Dreaming**; accept **Dreaming**-tracks or **Dream** maps; accept *In Search of Dreamtime: The Quest for the Origin of Religion*] (M. R. O’Connor’s book *Wayfinding* discusses the Euahlayi’s Black Snake/Bogong Moth Songline.)

<Mythology>

12. This movement emphasized Gordon Willey and Philip Phillips's mantra that their discipline "is anthropology, or it is nothing." For 10 points each:

[10h] Name this 1960s academic movement pioneered by Lewis Binford, who developed "middle-range theory" linking modern human behavior to historical patterns.

ANSWER: **processual archaeology** [accept "**New Archaeology**"; accept **processualism** in **archaeology**; prompt on **processualism**; reject "post-processual archaeology"]

[10e] In his processual archaeology of the Middle Paleolithic, Binford applied methods from this anthropological subfield by living among Alaska's Nunamiut. Research in this subfield relies heavily on participant observation.

ANSWER: **ethnography** [or **ethnographic** research; reject "ethnology"]

[10m] Responding to Binford, Kent V. Flannery introduced a theory based on this concept to increase the generalizability of archaeological findings. Immanuel Wallerstein is best known for his theory about the "world" type of this concept.

ANSWER: **systems** [accept **systems** theory or **systems** thinking; accept world-**systems** theory]

<Social Science>

13. Answer the following about Argentinian classical composers, for 10 points each.

[10h] This contemporary Argentinian composer participated in the *Passion 2000* project, for which he composed a text based on the Gospel of Mark that calls for a massive percussion section and a dancer during orchestral passages.

ANSWER: Osvaldo **Golijov** ("GO-lee-hoaf") [or Osvaldo Noé **Golijov**]

[10e] Astor Piazzolla is best-known for inaugurating the "nuevo" form of this Argentinian dance style, which is often played to the music of a bandoneón.

ANSWER: **tango** [accept nuevo **tango**]

[10m] This teacher of Piazzolla divided his own output into phases like "Objective Nationalism," during which he drew heavily on the gauchesco tradition. This composer wrote the ballet *Estancia* and three *Danzas Argentinas* for solo piano.

ANSWER: Alberto **Ginastera** [or Alberto Evaristo **Ginastera**]

<Classical Music>

14. This mission includes the SWEAP instrument, which uses a Faraday cup to measure charged particles. For 10 points each:

[10h] Name this probe that uses a highly elliptical orbit to pass within 0.05 AU of the Sun. This probe includes instruments to study reconnection in the electromagnetic field.

ANSWER: **Parker** Solar Probe [prompt on **Solar** Probe; prompt on **PSP** by asking "what does that stand for?"]

[10e] The Parker Solar Probe mainly studies this outermost layer of the Sun. This layer consists mostly of plasma, and is by far the hottest visible part of the Sun.

ANSWER: solar **corona**

[10m] The Parker Probe's WISPR experiment has observed these phenomena, including dense regions corresponding to the core of the flux ropes that drive them. These phenomena are sometimes observed coincidentally with solar flares but are distinct from them.

ANSWER: **coronal mass ejections** [or **CMEs**]

<Other Science>

15. Karl Dönitz pushed for the use of these submarines during the Battle of the Atlantic. For 10 points each:
[10e] Name these submarines that Dönitz continued to deploy against Allied convoys when he became admiral of the *Kriegsmarine*.

ANSWER: **U-boats** [or **U-boot** or **Unterseeboot**]

[10h] Dönitz's predecessor, Erich Raeder, had steered the *Kriegsmarine* to military success in the Battle of the Atlantic during two periods given this nickname by prideful U-boat crews.

ANSWER: **happy time** [or **glückliche Zeit** or **golden time**; accept First **Happy Time** or Second **Happy Time**]

[10m] While a prisoner of war during World War I, Dönitz reportedly devised this formational tactic that U-boats used to great effect during World War II, bucking conventional wisdom that submarines operated alone.

ANSWER: **wolfpack** tactic [or **Rudeltaktik** or **pack** tactic]

<European History>

16. The genre of the “villain play,” in which evil characters are given leading roles, flourished in popularity during the Elizabethan era. For 10 points each:

[10e] This playwright used villains as the protagonists of his plays *The Jew of Malta* and *Doctor Faustus*.

ANSWER: Christopher **Marlowe** [or Kit **Marlowe**]

[10h] Philip Massinger's *A New Way to Pay Old Debts* is best remembered for this villain who scams his nephew Frank Welborn into poverty. Edmund Kean's performances helped repopularize this character, whose name hints at his selfishness and greed.

ANSWER: Sir Giles **Over-reach** [or Sir **Giles** Over-reach]

[10m] A genre of tragedy named for this action often included an archetypal villain, such as Lorenzo in Thomas Kyd's *The Spanish Tragedy*. Vindice is the title performer of this action in a tragedy once thought to be by Cyril Tourneur but now attributed to Thomas Middleton.

ANSWER: **revenge** [accept **revenge** tragedy; accept *The **Revenger's** Tragedy*]

<British Literature>

17. This prefix precedes “true” to describe true statements in every possible world in a paradigm introduced by Bas van Fraassen in which this prefix precedes “valuationism.” For 10 points each:

[10m] Give this prefix that precedes “venience” in a term that describes a property X relative to a property Y if a change in X necessitates a change in Y.

ANSWER: **super-** [accept **super**vene or **super**venience; accept **super**true or **super**valuationism]

[10e] Supervaluationism is an approach to handling vagueness in this philosophical subfield, whose first-order or “predicate” system allows quantifiers over objects.

ANSWER: philosophical **logic** [accept predicate **logic** or first-order **logic**]

[10h] In *Truth and Objectivity*, this philosopher defined a “superassertible” predicate as one that is justifiable given some information and any richer amount of information. This Frege (“FRAY-guh”) scholar showed that the Peano axioms are derivable in second-order logic via Hume's principle.

ANSWER: Crispin **Wright** [or Crispin James Garth **Wright**]

<Philosophy>

18. For 10 points each, answer the following about ekphrasis, in which literary works imagine scenes depicted on visual artworks, in Latin poetry.

[10h] This author included a double ekphrasis of a bowl and a cloak in the sixth book of an epic poem, in which an army is stuck at Nemea. This author of *Silvae* also wrote the incomplete *Achilleid*.

ANSWER: **Statius** [or Publius Papinius **Statius**]

[10m] In book 8 of the *Aeneid*, Aeneas uncomprehendingly views an ekphrastic depiction of the Battle of Actium on one of these objects. That scene is likely inspired by an ekphrasis on one of these objects in book 18 of the *Iliad*.

ANSWER: **shields** [accept **scutum**, **scuta**, **aspis**, or **sakos**; accept **shield** of Achilles]

[10e] A detailed ekphrasis on the tapestry woven by Arachne is included in the *Metamorphoses*, a poem by this Roman author.

ANSWER: **Ovid** [or Publius **Ovidius** Naso]

<European Literature>

19. This adjective describes the transmission of microbes by mechanisms like sex, vectors, and coprophagy, in contrast to mother-to-child transmission. For 10 points each:

[10e] Give this adjective that collectively describes processes like conjugation, transduction, transformation, and transfection. Retrotransfer reverses the directionality of this type of gene transfer.

ANSWER: **horizontal** [or word forms like **horizontally**; accept **horizontal** gene transfer or **lateral** gene transfer; accept **horizontal** transmission; prompt on **HGT** or **LGT** by asking “what does that stand for?”] (Microbes are passed from a mother to her child in vertical transmission.)

[10h] In this central task of molecular genetics, transposon-mediated horizontal gene transfer may be exploited to cause insertional mutagenesis. This task encompasses forward and reverse strategies for linking genotypes and phenotypes.

ANSWER: genetic **screens** [or word forms like **screening** or **screened**; or mutagenesis **screens**; accept forward genetic **screens** or reverse genetic **screens**]

[10m] *Two answers required.* These two logical conditions are respectively demonstrated by loss-of-function and gain-of-function screens. One describes genes that must be expressed to cause a phenotype, while the other describes genes that, on their own, can cause a phenotype.

ANSWER: **necessary** AND **sufficient** [accept answers in either order; accept **necessity** in place of “necessary”; accept **sufficiency** in place of “sufficient”; reject “essential” or “essentiality”]

<Biology>

20. J. L. Granatstein published a wide-ranging polemic asking “who killed” this country’s history and lamenting a failure to teach it “positively” at public schools too busy “fighting racism” and “teaching sex education.” For 10 points each:

[10h] Name this country where a landmark 2000 “people’s history” documentary series sought to reestablish an empathetic heritage.

ANSWER: **Canada** [accept Dominion of **Canada**; accept **Canada: A People’s History**; accept *Who Killed Canadian History?*]

[10e] Granatstein rejected the need for reevaluating interactions with Canada’s First Nations, a process exemplified by Justin Trudeau’s apology for a mass grave discovered on the site of a “residential” institution of this type.

ANSWER: residential **schools** [or Indian industrial **schools**, Indian boarding **schools**, First Nations **schools**, or **IRS** system; accept Kamloops Indian Residential **School**; prompt on **educational** institutions; reject “universities” or “colleges”]

[10m] In the similarly-named *Who Killed the Canadian Military?*, Granatstein squarely places blame on this leader in the opening sentence. This Liberal Party leader accepted the controversial deployment of the nuclear Bomarc missiles on Canadian territory.

ANSWER: Lester **Pearson** [or Lester Bowles **Pearson**]

<Other History>

21. Answer the following about Roman expeditions through the Sahara, for 10 points each.

[10h] Lucius Cornelius Balbus led the first trans-Saharan expedition, during which he attacked these people in the Fezzan in 19 BCE. The *Limes Tripolitanus* defended against these people.

ANSWER: **Garamantes** [accept **Germa**, Ancient **Garama**, Old **Jarma**, **Djerma**, or **Garamantian** civilization; prompt on **Libyans** or **Berbers** or **Amazigh**]

[10m] After capturing the Garamantian capital of Garama in 202 CE, this emperor expanded the *Limes Tripolitanus*. This emperor served for nearly two decades after the Year of the Five Emperors.

ANSWER: **Septimius Severus** [or Lucius **Septimius Severus**; prompt on **Septimius** or **Severus**]

[10e] Seneca and Pliny offer different explanations for this emperor’s expedition down the Nile in 60 CE. This emperor blamed Christians for the Great Fire of Rome that occurred during his reign.

ANSWER: **Nero** [or **Nero** Claudius Caesar Augustus Germanicus or **Nero** Caesar; or Lucius Domitius

Ahenobarbus; accept **Neronian** persecution]

<Other History>