2022 Winter Closed

Co-Head Editors: Tim Morrison and Tejas Raje

Editors: Justine French, William Golden, Hasna Karim, Itamar Naveh-Benjamin, Hari Parameswaran, Jonathen

Settle, Ethan Strombeck, Jon Suh, and Annabelle Yang

Writers: Jacob Egol, Ganon Evans, Natan Holtzman, Aseem Keyal, Rahul Keyal, Amogh Kulkarni, Steven Liu,

Chauncey Lo, Douglas Meeker, and Kai Smith

Logistics: Aidan Leahy

Packet B

Tossups

1. In a scheme partially organized by Monica Goodling, this law was used to fire eight prosecutors during a midterm election. After being convicted under this law, Susan Lindauer was confined to a psychological institution in Carswell Air Force Base. The American Library Association honored the "Connecticut Four," who challenged this law. Confused onlookers in Washington, D.C., were read parts of this law from an ice cream truck by (*) Michael Moore. The only senator to vote against this law was Russ Feingold. Both *Doe v. Holder* and *Doe v. Gonzalez* upheld this law's provision that forced ISPs to provide information requested by NSLs. The 2015 Freedom Act renewed parts of this law, including controversially reallowing roving wiretaps. For 10 points, name this law passed in the wake of 9/11 that gave the government broad powers to curtail terrorism. ANSWER: USA PATRIOT Act [or Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act]

<Suh, American History>

- 2. This person espoused an author's aphorism praising "truth of passion, a verisimilitude of the feelings," which could be reached through "embodiment" and "experiencing" to achieve a "super objective." A student of this person proposed physical "études" like "Throwing a Stone" in a system of training that he called "biomechanics." Edward Gordon Craig's large folding screens were pitted against this person's "psychological realism" in a historic (*) production of *Hamlet*. This man's ideas, like "given circumstances" and the "magic if," were brought to the US by teachers like Stella Adler and Lee Strasberg. An "Art Theatre" co-founded by this man staged an 1898 production of *The Seagull* that anticipated his book *An Actor Prepares*. For 10 points, "method acting" was popularized by the namesake "system" of what Russian theater director? ANSWER: Konstantin *Stanislavski* [or Konstantin Sergeievich *Stanislavski*] (The first line refers to Pushkin's aphorism, and his student was Vsevolod Meyerhold.)

 <R. Keyal, Drama>
- 3. In an extravagant revival of an opera dedicated to this person, a 95-voice choir and 80 dancers helped inaugurate an opera hall that this person left unfinished. While serving this person, one composer popularized a genre whose introduction is characterized by slow, double-dotted rhythms. One composer befriended this person while dancing in the *Royal Ballet of the Night* and later wrote a grand motet that ironically celebrated this person's (*) recovery from surgery. After he consecrated this ruler's chapel organ, a composer nicknamed "Le Grand" was named court harpsichordist following this ruler's death. While premiering his *Te Deum*, this ruler's Master of Music contracted gangrene after stabbing himself with a conducting staff. For 10 points, name this king who employed François Couperin ("coop-RAN") and Jean-Baptiste Lully at Versailles. ANSWER: Louis XIV ("the fourteenth") [prompt on Louis] (The opera in the first sentence is Lully's *Persée*.) <Egol, Classical Music>

4. Devices that perform this process are stable to the right of the surge line on namesake "maps" in which mass flow is plotted on the x-axis. This process is performed continuously in devices built with many alternating stator and rotor airfoils. In one class of devices, saturated R134a or R22 is the input to a component that performs this process. Jet engines perform this process immediately before combustion, and thus this process occurs immediately prior to isobaric heating in the (*) Brayton cycle. A factor named for this process is equal to the quotient of the two sides of the ideal gas law. A gas increases in temperature when undergoing this process adiabatically, which is demonstrated by performing this process to ignite flash cotton in a syringe. For 10 points, name this process that reduces the volume of a gas.

ANSWER: gas **compress**ion [or air **compress**ion; accept **compressor**s or **compressor** maps or **compressibility** factor; prompt on <u>pressurize</u> or <u>pressurizing</u>] (The second sentence refers to axial compressors. The third sentence refers to vapor-compression refrigeration.)

<Liu, Physics>

5. Graduates of this city's schools often continue to wear its standard unisex dark blue sweatpant uniforms. "Book malls" in this city include one built into a cultural center consisting of four wide, red, arch-like buildings. The architecture firm Urbanus developed this city's OCT-Loft art district, whose urbanist artists want to preserve leftover fishing communities nicknamed "villages in the city." In 2017 this city developed the world's first fully electric bus fleet. This city's KK100 and Ping An IFC skyscrapers went up during a period of (*) 4,200-percent population growth since 1980. It's not in Taiwan, but pirated electronics called *shānzhài* ("shahn-jye") are produced in this city's Huaqiangbei ("hwah-ch'yong-bay") stores, which replicate products made nearby at Foxconn's first factory. China's first special economic zone was, for 10 points, what city in Guangdong Province home to Huawei and Tencent that directly borders Hong Kong?

ANSWER: **Shenzhen** ("shun-jun") [or **Shēnzhèn**; or **Sham Chun**] <Evans, Geography>

6. The assassins of one member of this organization were exposed by Ruben Chanax's testimony, as recounted in the documentary *The Art of Political Murder*. At a 1968 conference in Medellín ("meh-deh-YEEN"), members of this organization were urged to endorse the Pastoral Constitution by Hélder Câmara ("EL-der KUH-mah-rah"), who had earlier founded Banco de Providência ("pro-vee-DEN-see-ah"). Under Juan Gerardi ("heh-RAR-dee"), this organization created the REMHI Project, which systematically catalogued genocide during the Guatemalan Civil War. Inspired by (*) Paulo Freire's ("FRAY-ree's") "Pedagogy of the Oppressed," a member of this organization named Gustavo Gutiérrez authored a seminal work inspiring its members in Latin America. El Salvador's military was heavily criticized by Óscar Romero, a member of this organization. For 10 points, liberation theology was promoted by what organization's followers after the Second Vatican Council? ANSWER: Catholic Church [accept the Vatican or the Papacy until "Vatican" is read; prompt on the Church; prompt on Dominicans or Dominican Order by asking "what broader organization are they part of?"] (Gutiérrez's work is called *A Theology of Liberation*.)

<Parameswaran, World History>

7. Richard Levins and David Culver showed that a population displaced by this interaction can have a stable equilibrium if the population's patch colonization rate is high enough. One model of this interaction exhibits a stable equilibrium when "K-sub-one over alpha-sub-one-two" is greater than K-sub-two, and "K-sub-two over alpha-sub-two-one" is greater than K-sub-one. In that model of this interaction, the term "population size plus a coefficient times the other population size all over the carrying capacity" appears in each coupled (*) differential equation. This interaction was studied in two *Paramecium* species by G. F. Gause ("GOW-zee"). It's not predation, but this interaction is modeled by the Lotka–Volterra equations. An ecological law posits that this interaction drives species to occupy distinct niches. For 10 points, name this interaction in which organisms fight over resources.

ANSWER: (interspecific) **competition** [accept any form of **competition**; accept **competitive** exclusion principle; accept organisms **competing** for resources] (The second and third sentences both refer to the competitive Lotka–Volterra equations.)

<Settle, Biology>

8. This poem describes "bats with baby faces in the violet light" in a section about a "woman" who "drew her long black hair out tight." In this poem, the speaker "looks ahead up the white road" and sees a mysterious figure "gliding wrapt in a brown mantle, hooded." This poem describes an "empty chapel" in a "decayed hole among the mountains" in a section inspired by Jessie Weston's From Ritual to Romance. An anecdote from (*) Ernest Shackleton's Antarctic expedition inspired this poem's question, "Who is the third who walks always beside you?" The last stanza of this poem quotes the subtitle of The Spanish Tragedy, "Hieronymo's mad againe." This poem quotes the words "Datta," "Dayadhvam," and "Damyata" from the Upanishads in its final section, "What the Thunder Said." For 10 points, the line "April is the cruellest month" opens what modernist poem by T. S. Eliot? ANSWER: The Waste Land

<French, Poetry>

9. This figure was told to "bow down in prayer with those who bow down," and thus originated the practice of ruku'. A group of weavers mocked this figure when asked the location of a dried-out date tree that later bore fruit for this figure. While in terrible pain, this figure wished that they were "a thing long forgotten." Per Muhammad, this figure and Isa were the only children of Adam untouched by Satan at birth. A being disguised as a "perfectly formed" man tells this figure, "Your Lord says, 'It is (*) easy for Me... It is a matter already decreed,'" in response to her shock. Hannah and Imran miraculously conceived this figure in old age. This figure's infant son spoke to defend her from accusations of impropriety after she took a vow of silence. That son was born after Jibreel appeared to this woman to announce her pregnancy. The greatest woman per the Qur'an is, for 10 points, what mother of Jesus?

ANSWER: <u>Maryam</u> bint Imran [or the Virgin <u>Mary</u>] <Karim, Religion>

10. A thinker from this country criticized philosophers who conjecture a pre-social state of humanity, since historical records show that we have always lived in a society, in his *Essay on the History of Civil Society*. It's not India, but Bradley's regress attacks a theory of identity developed by a thinker from this country that opposes the existence of substances. A school of thought from this country supported by the author of *Essays on the Intellectual Powers of Man* sought to found philosophy in self-evident "principles of (*) common sense." Another thinker from this country argued that morals are based on the passions, not reason, and rejected that "claims about what ought to be" can be derived from "claims about what is" in his *Treatise on Human Nature*. For 10 points, name this home country of Thomas Reid and David Hume.

ANSWER: <u>Scotland</u> [prompt on Great <u>Britain</u> or the <u>United Kingdom</u> or the <u>UK</u>; reject "England"] (The philosopher in the first sentence is Adam Ferguson.) <French, Philosophy>

11. The term "grotesque" was coined to describe art in one of these buildings that inspired Raphael's decoration of the Vatican loggias ("LOH-jahs"). Paul Zanker argues that these buildings imitated so-called "picture galleries" by including frescoes in the Fourth Style, such as one of Priapus weighing his phallus against a basket of fruit. Twelve well-preserved mythological scenes decorate one of these buildings owned by a pair of freedmen brothers named (*) Vettii ("VEH-tee"). Frescoes by Famulus adorned a lavish "golden" one of these buildings erected after the Great Fire of Rome. A floor mosaic of Alexander the Great's victory at Issus was found at one of these buildings in Pompeii named for its bronze statue of a dancing faun. Sculptures often decorated the central atria of these urban buildings. For 10 points, domus were Roman examples of what domestic buildings? ANSWER: Roman houses [or Roman homes or residences; accept domus until read; accept palace complex; accept house in Pompeii; accept House of the Vettii or House of the Faun; accept Domus Aurea or Golden House; reject "villa"]

<R. Keyal, Painting and Sculpture>

12. The Kornblum oxidation converts unreactive instances of these compounds to tosylates before dissolving them in DMSO. Oxidative addition of one of these compounds to a transition metal catalyst is the first step of the Suzuki reaction and many other cross-coupling reactions. Reacting one of these compounds with potassium phthalimide ("THAL-ih-mide") and treating the product with hydrazine ("HIGH-dra-zeen") gives a primary amine ("AY-meen") in the (*) Gabriel synthesis. One type of these compounds is synthesized by starting with a compound with benzylic or allylic hydrogens and treating it with NBS in the presence of a peroxide and heat. Adding magnesium to these compounds in a flask containing diethyl ether produces Grignard reagents. These compounds are polar because of the electron-poor carbon in a C–X bond. For 10 points, name these organic compounds containing a group 17 element.

ANSWER: organic <u>halide</u>s [or alkyl <u>halide</u>s or <u>haloalkane</u>s; or <u>halocarbon</u>s; accept aryl <u>halide</u>s; accept organic <u>halogens</u>; accept <u>halogenated</u> compounds or <u>halogenated</u> hydrocarbons; accept organic or alkyl <u>fluoride</u>s, <u>chloride</u>s, <u>bromide</u>s, or <u>iodide</u>s; accept <u>fluoroalkane</u>s, <u>chloroalkane</u>s, <u>bromoalkane</u>s, or <u>iodoalkane</u>s]

<Settle, Chemistry>

13. After a king of these people was murdered by his brother Bezprym, these people launched a 1030s peasant rebellion in response to that king's suppression of pagan religion. With the assistance of the shoemaker Skuba, a legendary king of these people tricked the dragon Smok into swallowing a sheep's skin filled with hay and sulfur, causing that creature to explode near a river. These people believed that a Black Madonna in Jasna Góra ("YAS-nah GOO-rah") saved them during a 1650s conflict known as "The (*) Deluge." Wawel ("VAH-vel") Castle became the seat of power for a kingdom ruled by these people under Casimir the Great, the last ruler from the Piast Dynasty. With the Holy Roman Empire, these people disputed the territories of Silesia and Pomerania, which respectively contain the cities of Breslau and Danzig. For 10 points, name this ethnic group whose king Krakus lends his name to the city of Kraków ("KRAH-koof").

ANSWER: <u>Poles</u> [or <u>Polish</u>; or <u>Polacy</u>; accept <u>Lechites</u>; prompt on <u>Slavs</u>] <Parameswaran, European History>

that a person keeps for the future.

14. While in this city, the engineer Raymond repeats the word "hernia" 57 times to open a 1964 Esquire essay whose title follows this city's name with the parenthetical aside "(Can't hear you! Too noisy)." The protagonist of a book set in this city recalls watching a "high and beautiful wave... finally [break] and [roll] back," signaling the end of 1960s counterculture. While in this city, a man is told to throw a radio into a tub at the end of the song "White Rabbit." (*) Ralph Steadman illustrated a book mostly set in this city that begins "somewhere around Barstow on the edge of the desert." After covering the Kentucky Derby, an author was hired to write about a race in this city, inspiring a drug-fueled piece in Rolling Stone and a subsequent novel about Raoul Duke and Dr. Gonzo. For 10 points, Hunter S. Thompson wrote about "Fear and Loathing" in what city? ANSWER: Las Vegas [accept Fear and Loathing in Las Vegas; accept "Las Vegas (What?) Las Vegas (Can't Hear You! Too Noisy) Las Vegas!!!!"]

<R. Keyal, Misc. Literature>

15. The capital coefficient beta equals this quantity over g according to Thomas Piketty's second fundamental law of capitalism. By setting K-dot equal to [read slowly] "this quantity times Y minus delta times K," a textbook model derives a capital intensity proportional to this quantity to the "one over one minus alpha." Individuals raising this quantity can cause it to lower nationally in a paradox that Keynes illustrated via *The Fable of the Bees.* Dynamic inefficiency ensues when this quantity exceeds its (*) "Golden Rule" value derived by Edmund Phelps. This quantity varies endogenously in the Ramsey–Cass–Koopmans model but is fixed in the Solow growth model. This quantity is the "20" in the "50/30/20 rule" for budgeting, with 50 percent for "needs" and 30 percent for "wants." For 10 points, name this quantity written lowercase s, the percentage of disposable income

ANSWER: <u>savings</u> rate [or <u>saving</u> rate; accept <u>savings</u> ratio or <u>savings-income ratio</u>; accept <u>amount</u> of income <u>saved</u>; accept <u>percent</u> of income <u>saved</u>; prompt on <u>s</u> until read]
<Morrison, Social Science>

- 16. Stainless steel imitations of these objects dubbed "artificial" comprise an ongoing series by sculptor Zhan Wang. Mi Fu was deemed "mad" for his interest in collecting these objects and categorized their wrinkled, thin, or open appearances with the terms shòu ("show"), zhòu ("joe"), lòu ("low"), and tòu ("tow"). These objects may represent tiger cubs crossing water at a site designed by Sōami, where they are arranged so that visitors cannot see all fifteen at once. Gōngshi ("gohng-shurr"), suseok ("soo-suck"), and suiseki ("soo-ee-seh-kee") refer to aesthetic examples of these objects (*) collected by East Asian literati. These objects may symbolize dried rivers and waterfalls in the artform of kare sansui. At the temple of Ryōan-ji ("ryoh-ahn-jee"), these objects, which can come in a "scholar's" variety, are surrounded by gravel or sand that monks rake into intricate patterns. For 10 points, what objects feature in namesake minimalist Zen gardens?

 ANSWER: rocks [or stones; accept scholar's rocks; accept gōngshi or suseok or suiseki until read]

 <R. Keyal, Other Arts>
- 17. The "female stasis" of a novel by this author undergoes "sexual cancellation" in a passage about a male "weaver-god," according to Camille Paglia's Sexual Personae. Eve Kosofsky Sedgwick's Epistemology of the Closet analyzes the "natural depravity" of a character created by this author who, after a man spills some soup, exclaims "handsomely done!" A possibly-gay New Yorker passes off his half-sister Isabel Banford as his wife in a novel that this author aptly subtitled "The Ambiguities." This author of (*) Pierre wrote of men using "A Squeeze of the Hand" to preserve sperm in the 94th chapter of a novel that he dedicated to his possible partner Nathaniel Hawthorne. A tattooed man created by this author declares a marriage to his "bosom friend" as they share a bed at the Spouter Inn. For 10 points, what author's sexuality may have informed the title of his novel Moby-Dick? ANSWER: Herman Melville

 <R. Keyal, Long Fiction>
- 18. A type of these objects that is named for "turns" in caña flecha leaves is common in the Magdalena River basin. One of these objects was surrounded by white flowers on the coffin of the performer of the song "Volver Volver" who died in 2021. One of these objects covers the faces of performers to close a dance composed by Jesús González Rubio, called the Jarabe Tapatío ("ha-RAH-bay tah-pah-TEE-oh"). A type of these objects named for a conical sweet called catite originated in Andalusia and is made of (*) wool. Mounds of brown sugar inspired the name of the piloncillo ("pee-lon-SEE-yo") design for these objects, which is more commonly named for Emiliano Zapata. A sarape poncho and an embroidered suit accompany one of these objects in the outfits of charro cowboys from the state of Jalisco ("ha-LEESE-ko"). For 10 points, name these wide-brimmed hats common in Mexico.

ANSWER: **sombrero**s [prompt on <u>hat</u>s or Mexican <u>hat</u>s] (The second clue refers to Vicente Fernández.) <Evans, Other Academic>

19. For an analytic function f, this function applied to the modulus of f at the origin is related to the zeroes of f via Jensen's formula. The derivative of this function of f is integrated along a closed contour on the left-hand side of the argument principle. Because this function cannot be defined uniquely on the complex plane, one typically defines it by making a branch cut along the negative real axis, in which case this function of z equals this function of its modulus plus i times its argument (*) theta. Asymptotically, n divided by this function of n approximates the number of primes less than or equal to n. The Taylor series of this function is the alternating sum of one-over-n times "x minus one" to the n, which when shifted up by one gives the Mercator series. The derivative of this function is one-over-x. For 10 points, name this inverse of the exponential function.

ANSWER: \underline{log} arithm [accept $\underline{log} x$ or $\underline{log} n$ or $\underline{log} z$, etc.; accept \underline{ln} or natural \underline{log} arithm; accept complex \underline{log} arithm] <Morrison, Other Science>

20. This city's government built a highway to the A. Murray Mackay Bridge after forcing out the residents of Africville. While visiting New Glasgow, a resident of this city named Viola Desmond was arrested and fined for refusing to move from the segregated section of a movie theater. British forces violated a treaty with the Mi'kmaq by establishing this city, leading to Father Le Loutre's War. Cable ships from this city were dispatched to collect survivors of the (*) *Titanic* sinking. This is the capital of the province where more than 3,000 Black Loyalists moved after the American Revolution. In 1917, around 2,000 people died when the SS Imo collided with the SS Mont Blanc in this city's harbor on the Atlantic, causing the deadliest accidental non-nuclear explosion in history. For 10 points, name this capital of Nova Scotia.

ANSWER: <u>Halifax</u> <Golden, Other History>

Bonuses

- 1. The WPATH ("W-path") Standards of Care are commonly interpreted as requiring that this phenomenon be clinically diagnosed before individuals can access necessary healthcare. For 10 points each:
- [E] Name this phenomenon of distress that arises from the incongruence between one's experienced gender and their primary or secondary sex characteristics.

ANSWER: gender **dysphoria** [prompt on <u>trans</u>ness or being <u>trans</u>gender by asking "what phenomenon is experienced to a varying degree by most trans people?"]

[H] Trans activism towards this goal influenced the language of the WPATH SOC-7. This term refers to the goal of declassifying gender transition processes as mental disorders in the *DSM* and *ICD*.

ANSWER: **depathologization** of gender transition [or **depath**; or word forms] (The WHO removed trans-related diagnostic codes from the *ICD*'s "Mental and Behavioural Disorders" chapter in 2019, but the *DSM-5* retains them.) [M] A meta-synthesis by Cooper et al. showed that hypervigilance, a chronic persistence of this state, is associated with experiencing gender dysphoria. A "dysphoric hyper-" version of this state is associated with PTSD flashbacks.

ANSWER: **arousal** [accept dysphoric hyper**arousal**]

<Settle, Social Science>

2. Robert Bunsen's hypothesis that certain igneous rocks formed from the mixing of compositionally distinct end members of this substance was initially criticized, but is now accepted by geologists. For 10 points each:

 $\left[E\right]$ Name this molten substance found beneath the Earth's surface.

ANSWER: magma [reject "lava"]

[M] The majority of the Earth's magma is produced at these features as the mantle adiabatically rises and melts as it decompresses. The tholeitic ("thoh-lee-IT-ick") basalts formed near these features are low in incompatible elements.

ANSWER: mid-ocean ridges [or MORs or ocean ridges or oceanic ridges; prompt on ridges]

[H] The release of this compound by subducted oceanic lithosphere into the overlying mantle induces magma formation via flux melting. This compound is the most common volatile component of magmas.

ANSWER: <u>water</u> [or $\underline{\mathbf{H}_2\mathbf{O}}$ or <u>water</u> vapor or <u>steam</u>]

<Settle, Other Science>

- 3. At this politician's funeral, Thomas Mann's brother Heinrich called this politician a "Champion of Civilization." For 10 points each:
- [H] Name this politician who established a "People's State of Bavaria" after forcing King Ludwig III to sign the Anif Declaration. This politician was murdered by the right-wing reactionary Count of Arco-Valley.

ANSWER: Kurt Eisner

[E] Eisner established the People's State of Bavaria in this year. Socialist movements mobilized in response to Germany's surrender during World War I in this year, one year after the October Revolution took place.

ANSWER: 1918

[M] In 1918, sailors in this German port city revolted against the orders of Admiral Franz von Hipper and issued 14 demands, including free speech and the release of political prisoners.

ANSWER: Kiel [accept Kiel Mutiny]

<Raje, European History>

- 4. An essay from *Imaginary Homelands* labels this association's "school of literature" the "very oddest of beasts" because its "supposed members deny vehemently that they belong to it." For 10 points each:
- [E] Name this association of countries whose literature "does not exist" according to that essay. Until 2014, most winners of the Man Booker Prize were from countries in this body, which includes many former British colonies.

ANSWER: **Commonwealth** of Nations [or British **Commonwealth**]

[M] This author of the essay "Commonwealth Literature Does Not Exist" and the collection *Imaginary Homelands* won two "Best of the Booker" awards for a magical realist novel. He also wrote the memoir *Joseph Anton*.

ANSWER: Salman **Rushdie** [or Ahmed Salman **Rushdie**] (The novel is *Midnight's Children*.)

[H] In *Imaginary Homelands*, Rushdie declares "we are" men who have undergone this process. Gayatri Spivak contrasted her work involving Mahasweta Devi ("muh-HAH-shway-tuh DAY-vee") and Jacques Derrida in an essay on the "politics of" this process.

ANSWER: <u>translation</u> [or word forms such as <u>translating</u>; accept politics of <u>translation</u>] (Spivak has translated many stories by Devi, as well as Derrida's *Of Grammatology*.)

<R. Keyal, Misc. Literature>

- 5. Vincent van Gogh supposedly experienced a "fresh revelation of color" after visiting this artist's studio. For 10 points each:
- [E] Name this artist who preferred the use of the term "divisionism" for his style instead of Félix Fénéon's term "pointillism." This artist consulted Fénéon when painting *Sunday Afternoon on the Island of La Grande Jatte*.

ANSWER: Georges Seurat

[M] Seurat's influence on Fauvism can be seen in this Henri Matisse painting, which depicts several bathers in the town of Saint-Tropez. It takes its title from a line in *Le Fleurs du Mal*.

ANSWER: Luxe, Calme et Volupté [or Luxury, Calm, and Pleasure]

[H] Seurat also inspired this [emphasize] *much later* artist, who copied Seurat's *The Bridge at Courbevoie* ("koor-buh-VWAH") for her pointillist *Pink Landscape*. This artist's later works, like *Fall* and *Movement in Squares*, exemplify her shift to painting geometric patterns.

ANSWER: Bridget Riley

<Parameswaran, Painting and Sculpture>

- 6. Answer the following about metafictional literature exams within postmodern fiction, for 10 points each.
- [E] In chapter 14 of a Julian Barnes novel about this author's "parrot," Geoffrey Braithwaite quizzes the reader on topics like an epitaph of this author's lover Louise Colet and a psych evaluation of his character Emma Bovary. ANSWER: Gustave **Flaubert** ("flow-BAIR") [accept **Flaubert**'s Parrot]

[M] Alejandro Zambra used this country's national aptitude test to structure his novel *Multiple Choice*. An author from here charted femicides in Mexico and a hunt for the writer Benno von Archimboldi in a huge five-part novel. ANSWER: **Chile** [or Republic of **Chile**] (The novel is *2666* by Roberto Bolaño.)

[H] The "Final Exam" that concludes Marisha Pessl's *Special Topics in Calamity Physics* notes that Gareth used an alias inspired by this subject while murdering people. In a 1992 novel, an elite clique studying this subject at Hampden College murders their friend "Bunny" Corcoran.

ANSWER: <u>Classics</u> [or <u>classical</u> studies; accept <u>Greek</u>; accept <u>Ancient</u> or <u>Greek</u> or <u>Classic</u>al literature or philosophy; prompt on <u>literature</u> or <u>philosophy</u> by asking "of what era?"; reject "history"] (Gareth uses the name Socrates, and the novel is Donna Tartt's *The Secret History*.)

<R. Keyal, Long Fiction>

7. In 2014, this country's president cited a 1996 paper by Youssef Mroueh ("m'roo-eh") to claim that Muslims had discovered America before Columbus. For 10 points each:

[M] Name this country. In the 1930s, this country's president promoted the completely bogus Sun Language theory to legitimize Arab and Persian loanwords in its national language.

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

[H] David Powel promulgated the myth that a prince of this ethnicity discovered the Americas in 1200. Another pseudo-historical theory holds that the Americas were named after a man of this ethnicity who funded John Cabot's voyage.

ANSWER: Welsh [prompt on British or Celtic] (The people are Prince Madoc and Richard Amerike.)

[E] Most historians maintain that this Viking was the first European to set foot in America when he established the settlement of Vinland in present-day Newfoundland.

ANSWER: Leif Erikson

<Parameswaran, Other History>

8. In one episode from this text, the cooking pots complain to their owners that "our mouths are sooty, our faces are sooty... since we felt no pain, you try it. We shall burn you." For 10 points each:

[M] Name this text in which household objects take revenge on an early race of humans. In this text, a "breaker of mountains" dies after eating a gypsum-poisoned bird given to him by the children of Blood Moon.

ANSWER: **Popol Vuh** [or **Popol Wuj** or **Pop Vuj**] (These quotations are from Dennis Tedlock's translation.)

[E] In the Huarochirí ("hwa-ro-chee-REE") Manuscript from Peru, this celestial object disappears for several days while people are eaten by mortars and pestles and herded by llamas. The Inca represented Inti, god of this celestial body, with gold.

ANSWER: sun

[H] An artistic motif of this culture features a Priestess presiding over a "Revolt of the Objects." Other motifs from this culture include blood offerings to the fanged Ai Apaec ("eye ah-peck") and the half-jaguar Decapitator holding a sacrificial knife.

ANSWER: **Moche** [or **Mochica**]

<Yang, Mythology>

9. These phenomena can be observed where water from a faucet hits a sink. For 10 points each:

[H] Name these phenomena in which open channel laminar flow rapidly changes in depth and becomes turbulent. Civil engineers use these phenomena to dissipate energy in stilling basins.

ANSWER: hydraulic **jump**s

[E] Hydraulic jumps can only occur when this quantity for the flow is greater than its value for waves in the fluid. This vector quantity is measured in meters per second.

ANSWER: velocity

[M] The energy dissipated by a hydraulic jump is measured as a loss in this quantity. This quantity, which is the sum of pressure and elevation components, relates the energy of a fluid to the height of an equivalent static column.

ANSWER: hydraulic **head** [or piezometric **head**; accept **head** loss]

<Liu, Physics>

10. Stahlhammer ("STALL-hah-murr") manufactures a specialty one of these devices that improves on a design for them called the "Tortelier ("tor-tel-YAY") Spike." For 10 points each:

[M] Name these rods that act as support for cellos. The bent one of these devices became popular after Paul Tortelier gave one of them to Mstislav Rostropovich to put on the Duport Stradivarius.

ANSWER: cello endpins

[E] Bent endpins allow cellos to be played at a more horizontal angle, making it easier to play in the high position named after this finger. This finger typically supports handheld instruments while the other fingers manipulate the strings or keys.

ANSWER: **thumb** [accept **thumb** position]

[H] When this string quartet overdubbed itself to record Mendelssohn's Octet, both instruments that David Finckel played were outfitted with bent endpins. This American string quartet plans to disband in 2023.

ANSWER: **Emerson** String Quartet

<Egol, Classical Music>

11. An author who acted "in obedience to [this character's] will" became "so frail and weak" that his friends grew concerned. For 10 points each:

[H] Identify this character who first confronts the narrator of *La Vita Nuova* while clothed in a fiery cloud. In a mostly incomprehensible speech, this character tells the speaker, "Ego dominus tuus," or "I am your master."

ANSWER: **Love** [or **Amor**]

[E] Love hounds this poet throughout his early collection of mixed prose and poetry, *La Vita Nuova*. In a vision, Love feeds this poet's heart to his beloved, Beatrice Portinari.

ANSWER: **Dante** Alighieri [or Dante **Alighieri**]

[M] In Canto V ("five") of the *Inferno*, Dante asks this woman to relate how "Love conceded that you should know your dubious desires." This woman shares an adulterous kiss while reading about "Lancelot, how Love did him enthrall."

ANSWER: <u>Francesca</u> da Rimini [or Francesca da <u>Polenta</u>; or Francesca da <u>Rimini</u>] <Naveh-Benjamin, Poetry>

12. This thinker wrote that the modern world has lost faith because it believes in an anthropomorphic God of "theological theism," but the true God transcends this misconception. For 10 points each:

[H] Name this thinker who contrasted the "spiritual" anxiety of emptiness and loss of meaning felt in the modern era with the "ontic" anxiety of death in late antiquity and the "moral" anxiety of damnation in the late Middle Ages.

ANSWER: Paul **Tillich** (These clues are from *The Courage to Be.*)

[M] Paul Tillich is considered part of this broad movement, which uses religious thought to address the anxiety of being in a world that seems absurd. The author of *Repetition* and *Three Upbuilding Discourses* is usually considered part of this movement.

ANSWER: Christian existentialism [prompt on existentialism] (The unnamed author is Søren Kierkegaard.)

[E] In a book on *The Dynamics of* this thing, Tillich defined it as "the state of being ultimately concerned" in something, such as God. Søren Kierkegaard proposed taking a "leap" of this thing to hold beliefs without rational support.

ANSWER: **faith** [accept *The Dynamics of Faith*] or leap of **faith**] <French, Philosophy>

- 13. Surgeons insert EVDs directly into one of these regions by drilling through Kocher's point. For 10 points each:
- [H] Identify these regions, outlets for which include the foramina of Munro, Luschka, and Magendie. The SFO,

OVLT, and area postrema are grouped as some of the sensory "organs" located around these regions.

ANSWER: brain **ventricle**s

[E] The brain's ventricles are filled with this substance, which is produced by the choroid plexus. It is collected for diagnostic testing by a lumbar puncture.

ANSWER: **cerebrospinal fluid** [or **CSF**]

[M] In Dandy–Walker syndrome, this structure's vermis doesn't fully form, allowing the fourth ventricle to connect to the posterior fossa. The medulla's climbing fibers synapse directly with this structure.

ANSWER: cerebellum

<Naveh-Benjamin, Biology>

- 14. Dizzy Gillespie ran as an independent candidate in the 1964 presidential election, proposing to rename the White House to the Blues House if he won. For 10 points each:
- [E] Gillespie's proposed cabinet included Miles Davis, a player of this instrument, as the director of the CIA. Gillespie himself played a bent type of this brass instrument.

ANSWER: trumpet

[H] Gillespie wanted this musician as his Secretary of Defense. This founder of the ensemble M'Boom collaborated with Duke Ellington and Charles Mingus on the album *Money Jungle*.

ANSWER: Max Roach

[M] The lyrics to a standard by Gillespie named for a type of this food were changed to become his campaign song. Stan Kenton recorded a version of a Cuban song named for a vendor of this food.

ANSWER: **peanut**s [accept "Salt **Peanut**s" or "The **Peanut** Vendor"; accept "El **manisero**" or **maní**] <Golden, Other Arts>

- 15. A multi-racial rebellion in this state that opposed the World War I draft took its name from the food that participants intended to eat while marching to Washington, D.C. For 10 points each:
- [E] Name this state where the Green Corn Rebellion took place. This present-day state was the final destination of Cherokee traveling along the Trail of Tears.

ANSWER: Oklahoma

[M] Among the Native American tribes who participated in the rebellion was this one, whose "Red Stick" faction had earlier fought a war in which they were defeated at the Battle of Horseshoe Bend.

ANSWER: Muscogee [or Creek; accept Creek War]

[H] This historian recounted her father's participation in the Green Corn Rebellion in her memoir *Red Dirt: Growing Up Okie*. She also wrote *An Indigenous Peoples' History of the United States*.

ANSWER: Roxanne **Dunbar-Ortiz**

<Raje, American History>

16. In the title story of an 1897 collection, a farmer from this ethnic group feels a rare sense of excitement when he attends a ball with Zaïda and fights her intended husband. For 10 points each:

[H] Name this ethnic group. The story "The Storm," which depicts an affair between two members of this ethnic group, is a sequel to a story set at a ball for this group.

ANSWER: Louisiana <u>Acadian</u>s [accept <u>Cajun</u>s; accept "At the '<u>Cadian</u> Ball" or "A Night in <u>Acadie</u>"; prompt on Louisiana <u>Creoles</u>]

[M] In a novel by the same author, a "mild-faced Acadian" boy offers water to this woman after she nearly faints at mass. This woman then rests at the home of the Acadian woman Madame Antoine before returning to Grand Isle.

ANSWER: **Edna** Pontellier [or Edna **Pontellier**]

[E] This author's French Creole heritage informed her depiction of Louisiana Acadians in the collection *A Night in Acadie* and the novel *The Awakening*.

ANSWER: Kate <u>Chopin</u> <Morrison, Short Fiction>

17. Opponents of papal infallibility argue that Pope Honorius I's letter to Patriarch Sergius I heretically supported monothelitism, the belief that Christ had only one of these things. For 10 points each:

[E] Name these things of which Christ has two, one human and one divine, per the Sixth Ecumenical Council. The Lord's Prayer affirms that God's one of these things "be done on earth as it is in heaven."

ANSWER: wills

[H] Against monothelitism, this theologian argued that Christ had both a human will and a divine will, with the former in perfect obedience to the latter. This saint is called "Confessor" because he had his hand and tongue removed for teaching orthodox doctrine.

ANSWER: Saint Maximus the Confessor

[M] To support his view, Maximus cited a passage set in this place in which Christ prays, "Father, if you are willing, take this cup from me; yet not my will, but yours be done."

ANSWER: Garden of <u>Gethsemane</u> [prompt on the Agony in the <u>Garden</u>] <French, Religion>

18. Emel Mathlouthi rose to fame after her protest song "Kelmti Horra" became popular among protesters in this country. For 10 points each:

[E] Name this North African country where the Arab Spring began after Mohamed Bouazizi's self-immolation led to the overthrow of Zine El Abidine Ben Ali. Like its western neighbor Algeria, this country gained independence from France.

ANSWER: Tunisia [or Republic of Tunisia]

[M] Mathlouthi was inspired by this American singer and human rights activist who sang "Here's to You" for the film *Sacco & Vanzetti*. This former partner of Bob Dylan was known for her Vietnam War protest songs.

ANSWER: Joan **Baez** ("BYE-ezz")

[H] The group Rap Against Dictatorship filmed the music video for their song "Reform" during November 2020 protests against this country's military junta. Their song "My Country Has" refers to a 1976 massacre at a university in this country's capital.

ANSWER: **Thailand** [or Kingdom of **Thailand**]

<Raje, World History>

19. A first-order relativistic correction to the kinetic energy operator and the Darwin term are two of the three perturbative terms associated with this phenomenon. For 10 points each:

[M] Name this phenomenon that splits the red spectral line predicted by the Bohr model into multiple lines.

ANSWER: **fine structure** (of the hydrogen atom)

[E] The third source of the fine structure of the hydrogen atom is the coupling of orbital angular momentum to this quantity. It is the intrinsic angular momentum of a particle.

ANSWER: **spin** angular momentum [prompt on **S**]

[H] This shorthand notation labels electronic states by their spin and orbital angular momenta. In this notation, the superscript is the spin multiplicity and the capital letter represents the value of the orbital angular momentum.

ANSWER: atomic <u>term symbol</u>s [accept molecular <u>term symbol</u>s] <Settle, Chemistry>

20. Answer the following about the discovery of lost or forgotten media, for 10 points each.

[E] In 2014, Zak Penn unearthed many copies of the *E.T.* video game that this company buried in a New Mexico landfill. The Video Game Crash of 1983 caused this creator of *Pong* to lose market share to Japanese companies like Nintendo.

ANSWER: Atari [accept Atari Games Inc.]

[M] Rare media owned by this director include tapes of the bear enthusiast Timothy Treadwell's death and the abandoned film *Game in the Sand*. Klaus Kinski plays a conquistador in a 1972 film by this director.

ANSWER: Werner **Herzog** (The latter film is *Aguirre*, the Wrath of God.)

[H] The discovery of a dubbed Italian copy of the film *This Man is Dangerous* meant that the entirety of this British actor's filmography was documented. This star of Stanley Kubrick's *Lolita* appeared alongside Judy Garland in George Cukor's ("KYOO-kor's") *A Star is Born*.

ANSWER: James <u>Mason</u> <Evans, Other Academic>