Penn Bowl 2021: Flenn Bowl

Packet 2

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Tossups

1. This thinker claimed that political stability is independent of economic progress in a 1968 book that identified "praetorian" societies where social mobilization outpaced political institutionalization. This scholar argued that expertise in the management of violence made the officer corps "professionals" in a foundational text on civil-military relations. This author of *Political Order in Changing Societies* and *The Soldier and the State* cited the (*) Carnation Revolution as the beginning of a "third wave of democratization." This scholar labeled the central axis of world politics in the future as "the West versus the Rest" in an essay that marked the northern border of Islam within the disintegrating Yugoslavia. For 10 points, name this American political scientist who identified post-Cold War fault lines in "The Clash of Civilizations."

ANSWER: Samuel <u>Huntington</u> <Nitin Rao, Social Science>

2. An anonymous chronicler of this conflict possibly named Ansbert described a *Curia Christi* in its lead-up that saw Moses ha-Cohen lobby for Jewish protections. Gerald of Wales claimed that a ruler's death shortly before this conflict was divine retribution for a massive 10% tax he issued before it. Prior to this campaign, a ruler personally gave water to just one of his two captives to avoid offering that man protection, according to (*) Bahā' al-Dīn. *Audita tremendi* was issued prior to this conflict, which was set off by a battle named for the dual peaks of an extinct volcano, the "Horns of Hattin." While Acre and Jaffa were successfully taken, Jerusalem was not re-captured during this conflict, whose leaders included Philip Augustus and Frederick Barbarossa. For 10 points, name this crusade that pitted Richard the Lionheart against Saladin.

ANSWER: Third Crusade [or Kings' Crusade; prompt on crusade]

<Adam Robbins, European History>

3. In a novel by this author, a woman crawls under her house looking for the marbles that her daughter uses to win gifts for a love interest that she meets every day in an abandoned lighthouse. The title character of a novel by this author gets in trouble for writing "the great man can no longer just get up and go" under a schoolbook picture of Christopher Columbus, and erases family photos while deathly ill during the "Long Rain." The protagonist departs for nursing school in (*) England at the end of a novel by this author that details that title character's love for Gwen and the Red Girl. The title character leaves the West Indies to work as an *au pair* in this author's novel *Lucy*. For 10 points, name this author of *Annie John*, a writer from Antigua who took part of her pen name from another Caribbean island.

ANSWER: Jamaica Kincaid [or Elaine Potter Richardson]

<Jordan Brownstein, World Literature>

- 4. Witige narrates a poem titled for one of these locations owned by the dwarf Laurin which is surrounded by a golden thread before the Gothic king Dietrich cuts the thread and destroys that location. The Hero Twins offer the Lords of Xibalba a gift from one of these locations which was retrieved by ants who snuck past men guarding that location. Dionysus met King Midas after the former went looking for Silenus in one of these locations belonging to (*) Midas. Some inhabitants of one of these places first turn into dust and then trees after being approached by the Argonauts. The serpent Ladon guarded that location of this type until Heracles slayed it during one of his labors. Atlas is tricked into holding up the Earth again after Heracles asks for his help in obtaining some golden apples from one of these locations. For 10 points, the Hesperides tended what fruit-bearing locations? ANSWER: garden [accept rose garden of the Hesperides]

 NourEddine Hijazi, Belief>
- 5. This musician combined "All the Things You Are" with Rachmaninoff's C-sharp-minor prelude in an early concert at the Café Bohemia. In 2020, a recording was released of this musician's 1964 concert in Bremen with Eric Dolphy, who died shortly after that tour with him. Holiness churches inspired this musician and his long-time drummer Dannie Richmond to perform gospel-like shouts on tracks like "Wednesday Night Prayer Meeting." A Pepper Adams baritone sax solo opens a track from this musician's album (*) Blues and Roots. An album by this musician opens with "Better Git It In Your Soul" and features a track written to protest a Southern governor, "Fables of Faubus." For 10 points, name this bassist who included "Goodbye Pork Pie Hat" on a namesake album partly titled Ah Um.

ANSWER: Charles <u>Mingus</u> [or Charles <u>Mingus</u> Jr.] (The fourth clue refers to "Moanin'.") <Michael Yue, Other Arts>

6. This quantity scaled by its value outside the boundary layer is contained in the integrands for both the displacement thickness and the momentum thickness defined from Von Kármán's momentum integral. The integral of the square of the curl of this quantity is called enstrophy. Partial derivatives of the stream function give components of this quantity, and streamlines are parallel to this quantity. For laminar pipe flow, the (*) profile of this quantity is parabolic. Fluid behavior is commonly expressed as conditions on this quantity: its partial time derivative is zero for steady flows, its curl is zero for irrotational flows, and its divergence is zero for incompressible flows. As this vector quantity increases for a fluid, fluid pressure decreases by Bernoulli's principle. For 10 points, name this quantity, the rate of change of a fluid element's position.

ANSWER: flow <u>velocity</u> [or fluid <u>velocity</u>; accept <u>velocity</u> profile; accept <u>velocity</u> field; do not accept or prompt on "speed"]

<Jonathen Settle, Physics>

7. Ralph Sellers attacked this agency for practicing "facade" management that prioritized aesthetics, such as with its decade-long Mission 66 project. This agency's first director feuded with Ralph H. Cameron over monopolistic toll-charging. Edward Abbey's memoir *Desert Solitaire* was based on his time working for this agency. William Kent sponsored this agency's creation, after which it was led by Stephen Mather. This agency runs places covered in a Ken Burns documentary subtitled (*) *America's Best Idea*. John Muir and the Sierra Club pushed to establish places now run by this agency, whose powers were amended by the Redwood Amendment. For 10 points, name this agency tasked with overseeing places like the Grand Canyon and Yosemite. ANSWER: National Park Service [or NPS]

ANSWER. INAUGHAI FAIR SERVICE [OI INFS]

<Emmett Laurie, American History>

8. In the Hammett equation, a quantity denoted by this letter is a substituent-specific factor that may be calculated from its linear correlation with core-electron binding energy. Wilkinson's catalyst forms a complex named after this letter with a dihydrogen ligand prior to base catalyzed heterolytic cleavage. Both the Carroll rearrangement and the Cope rearrangement belong to a class of (*) pericyclic reactions named after this letter. Another set of compounds named after this letter include arenium ("air-EEN-ee-um") ions which are also called Wheland intermediates. A molecular orbital denoted by this letter has no nodal planes intersecting the internuclear axis. For 10 points, identify this Greek letter that denotes a bond formed between head-on overlapping orbitals whose capital form denotes a sum.

ANSWER: <u>sigma</u> [accept <u>sigma</u>tropic; accept <u>sigma</u> bonds] <Sam Botterbusch, Chemistry>

9. In this film, a man references the title of a novel "no one has" read by saying that he "anticipates the terminus of gravity's rainbow." As a woman tries to recall her employer's instructions in this film, his voiceover tells her to park "be-after-fore the carved elephant." Upon returning a baseball her husband had thrown out of a window, a woman in this film finds a letter in invisible ink revealing his affair. This film ends with a woman sipping from a mug reading "My (*) house. My rules. My coffee." That nurse in this film is variously called Ecuadorian, Paraguayan, and Uruguayan by Richard and Linda. In this film, Michael Shannon's character Walt is fired by his father, a prolific mystery novelist. For 10 points, Benoit Blanc ("BEN-wah blonk") investigates characters played by Jamie Lee Curtis and Chris Evans for Harlan Thrombey's murder in what 2019 Rian Johnson whodunnit?

ANSWER: <u>Knives Out</u>

<Michael Yue, Miscellaneous>

- 10. A poem titled for one of these events contrasts "frolic architecture" with "slow structures, stone by stone / Built in an age." Another poem describes the end of one of these events with the lines "We felt the stir of hall and street, / The pulse of life that round us beat." One of these events is "Announced by all the trumpets of the sky" in a poem by Ralph Waldo Emerson. The speaker of a poem set during one of these events announces "That Life is ever lord of Death, / And Love can never lose its own" shortly before an unnamed mother describes the Cocheco Massacre while knitting. A (*) Massachusetts family stays inside and shares nostalgic tales about hunting and Quakers in a long narrative poem set during one of these events. For 10 points, what kind of winter event causes several characters to be "bound" in a long poem by John Greenleaf Whittier? ANSWER: snowstorm [accept blizzard; accept answers indicating that it is snowing or snowfall; accept being Snowbound; prompt on storm or similar answers by asking "of what kind?"; prompt on winter | Taylor Harvey, American Literature>
- 11. Several late Morton Feldman works were written for percussion, piano, and this instrument, including Why Patterns? and For Philip Guston. Pierre Boulez's ("boo-LEZZ's") The Hammer without a Master ends with a duet for percussion and a low-register variety of this instrument. Luciano Berio's first Sequenza is written for this instrument. A 1936 work for this instrument pioneered the use of plus signs above the staff to denote keyclicks, and was written to show off an unusual one of them owned by Georges (*) Barrère ("bah-RAIR"). A Pierrot ensemble adds clarinet and this instrument to a piano trio. Debussy's Syrinx pioneered this instrument's solo repertoire, and he began his Prelude to the Afternoon of a Faun with a chromatic solo for it. For 10 points, name this high woodwind instrument whose players might double on piccolo.

ANSWER: <u>flute</u> [accept alto <u>flute</u>] (The 1936 work is *Density 21.5.*) <Michael Yue, Music>

12. Rabbi Hiyya ("khee-YAH") is the possible author of a midrash on this text quoted throughout the Talmud called the [enunciate] Sifra ("seef-RAH"). The earliest Biblical references to Moloch are found in this text's 18th chapter. This text's Hebrew title, Vayikra ("va-yee-KRAH"), is taken from its opening line, the often-repeated "And the Lord Called." This book narrates the deaths of Nadab and Abihu after they offered a sacrifice with a (*) "foreign fire." One bird is killed and another is let back into a field in order to cure a man of leprosy in this book. Azazel is referenced in this text as being the recipient of the scapegoat sent into the wild. This text is commonly read alongside Epistle to the Hebrews and its proscriptions against incest are read on Yom Kippur. For 10 points, laws regarding sacrifices open what third book in the Pentateuch ("PEN-ta-tyook") which follows Exodus?

ANSWER: Book of <u>Leviticus</u> [accept <u>Vayikra</u> until read] <NourEddine Hijazi, Belief>

13. The dairy cooperative Amul is based in this Indian state, which contains a city whose namesake process for turning buffalo milk into skim milk was reproduced nationally by Operation Flood. This state is the headquarters of the Hindu sect BAPS, which was accused of using forced labor in New Jersey, which contains the largest segment of this state's diaspora. Rana Ayyub's book on this state's namesake files accused Amit Shah of masterminding an event in it. A city in this state names the case Indira Gandhi brought against George Fernandes for allegedly smuggling dynamite to blow up infrastructure. This state was added next to its (*) Marathi-speaking neighbor during the 1965 partition of the state of Bombay. A train burning at Godhra station in this state triggered rioting. For 10 points, name this state in which 2002 anti-Muslim rioting occurred under Chief Minister Narendra Modi.

ANSWER: <u>Gujarat</u> (The case is the Baroda Dynamite Case.) <Emmett Laurie, World History>

14. In this region, nobility would often wear or be buried with four-cornered hats shaped like a cube with a peak at each top corner. Embroidery fragments from a culture in this region depict a figure that is also shown in their Raimondi stele. It's not Egypt, but Intermediate Periods separate three "horizons" in the periodization of cultures from this region. In works like *Wall Hanging*, Anni Albers was influenced by the (*) geometric patterning in artworks from this region created with backstrap looms by cultures like the Wari. A hummingbird and monkey are depicted in the enormous geoglyphs created by the Nazca culture of this region, which was also the site of record-keeping devices called *quipu*. For 10 points, the textiles of what South American mountain range often used alpaca and llama wool?

ANSWER: <u>Andes</u> [prompt on <u>South America</u>; anti-prompt on <u>Peru</u>] <Aseem Keyal, Painting>

15. This kingdom grew out of an early culture that often featured the "double disc and z-rod" symbol on their stele ("stee-lee"), which also displayed a seahorse-like "Beast." John Barbour wrote a long narrative poem about a ruler of this kingdom that concludes with the burial of his heart, which would later be taken on crusade. The French renaissance poets La Pléiade inspired this kingdom's Castalian Band, a poetic circle patronized by a king who participated in a series of 1590 witch trials after sailing to Denmark to (*) marry his wife. This kingdom's 12th-century "Davidian Revolution" saw the foundation of its first burghs and patronage of the monastery at Holyrood. The makar Blind Harry described the flaying of Hugh de Cressingham following the Battle of Stirling Bridge by this kingdom's independence leader, William Wallace. For 10 points, which kingdom's James VI organized its 1603 unification with England?

ANSWER: <u>Scotland</u> [accept Kingdom of <u>Alba</u>; accept <u>Fortriu</u>; prompt on <u>United Kingdom</u> or <u>U.K.</u>; prompt on Great <u>Britain</u>; do not accept or prompt on "England"] <Tracy Mirkin, Other History>

16. Amie Thomasson has argued against using Eli Hirsch's theory of the "variance" of these terms to critique "neo-Quinean" ontologies. The "Geach-Kaplan" example of critics who "admire only one another" has been used to argue for the use of "plural" types of these expressions. Ruth Barcan's namesake formula establishes that one of these operators is commutative with the necessity operator in modal logic. One type of these operators can be (*) removed from a statement via "Skolemization." These expressions bind variables to a "domain of discourse." An upside-down "A" and a turned "E" represent these expressions "universal" and "existential" types. For 10 points, name these logical expressions that take the form of phrases like "all X" or "there is an X." ANSWER: quantifier [accept existential quantifier] or universal quantifier or second-order logical operators until "operators" is read]

<Jordan Brownstein, Philosophy>

17. Near the end of this novel, one character seeks out a bench with his surname carved into it with the blood of his father. A soldier in this novel fails to kill a Nazi scientist in Bulgaria who cries blood during World War II. That soldier and his best friend bring their wives to O'Connell's pub for the first time at the end of this novel. (*) Irie ("EYE-ree") has sex with a family friend on his prayer mat 25 minutes before she sleeps with his twin brother at the house of Joyce and Marcus Chalfen in this novel. At the end of this novel, a member of the Islamic fundamentalist group KEVIN attempts to shoot FutureMouse but is stopped by Archie Jones. For 10 points, name this novel about Bangladeshi and Jamaican immigrant families in London by Zadie Smith.

ANSWER: White Teeth
<Nitin Rao, British Literature>

18. A lattice element in this kind of cell comprises a vinculin–talin–integrin system and a complex of glycoproteins associated with a rod-shaped protein. The architecture of a structure in these cells is regulated by heteropolymers of synemin and vimentin or desmin. The cytoskeleton of these cells is connected to the extracellular matrix by the costamere, which may become defective when (*) dystrophin is deficient. The membranes of these cells form projections called T-tubules, which help to regulate the release of calcium from the sarcoplasmic reticulum. Z-lines form the borders between structural units found in these cells, whose sliding thick and thin filaments of myosin and actin form myofibrils. For 10 points, name these cells whose contractile force is created by sarcomeres.

ANSWER: <u>muscle</u> cells [or <u>myocyte</u>s; or <u>muscle</u> fibers; accept cardiac <u>muscle</u> cells; accept skeletal <u>muscle</u> cells; accept striated <u>muscle</u> cells; do not accept or prompt on "smooth muscle cells"] <Talia Coopersmith and Deniz Gedik, Biology>

19. A child in this city is described as "simply taking flight" after "his parents dispatched him into life with a kick." A man in this city asks "Now, whom are we to eat?" after being broken out of prison by his gang, who unknowingly enlist the help of his son. A novel's section "The Intestine of the Leviathan" criticizes this city for creating 25 million tons of waste annually; that digression about this city's (*) sewer system is among the many such digressions in a novel that also spends several chapters examining this city's criminal street urchins. A group of students who meet at the Musain, a café in this city, punningly call themselves the Friends of the ABC; that group, whose members include Jehan and Courfeyrac, die after the fall of a barricade during the June Rebellion. For 10 points, name this city that provides the primary setting of Les Misérables.

ANSWER: Paris

<Margaret Tebbe, European Literature>

20. If a function has this property between two contours, the integrals of the function over the two contours are equal. Runge's theorem gives conditions that guarantee that a sequence of rational functions converges to a function with this property on a compact subset. If a function has this property along and inside of a simple closed curve, its values along that curve uniquely determine its values in the interior. Functions with this property can be extended over removable singularities as described by Riemann's theorem. An (*) entire function has this property over the whole complex plane, and must be constant if it is bounded according to Liouville's theorem. The Cauchy integral theorem can be used to prove that this property is the same as being complex analytic. For 10 points, name this property of functions that are complex-differentiable in some open set. ANSWER: holomorphic functions [accept complex analytic functions until read; prompt on complex-differentiable functions; do not accept or prompt on "real analytic functions"]

<Shan Kothari, Other Science>

Bonuses

1. The artist who put forth this goal tried to fulfill it by creating a series of collages depicting flamenco dancers that incorporated sandpaper and nails. For 10 points each:

[10h] Name this goal stated by an artist who also expressed a desire to "break their guitar" when describing the Cubists. That artist also produced a series of *Burnt Canvases* late in his career in an effort to accomplish this goal.

ANSWER: "I want to <u>assassinate painting</u>" [or word forms]

[10e] That quote's author, Joan Miró, was commissioned to paint the mural *The Reaper* shortly after the outbreak of this conflict, which inspired Salvador Dalí's *Soft Construction with Boiled Beans* and Pablo Picasso's *Guernica*.

ANSWER: Spanish Civil War

[10m] Miró painted an abstract series depicting the *Head of a Catalan [one of these people]*. Dalí used his paranoiac-critical method to reinterpret *The Angelus*, a Jean-François Millet painting of two of these people praying. ANSWER: **peasant**s [or **serf**s; prompt on <u>farmers</u>]

<Aseem Keyal, Painting>

2. This island is home to the Buddhist Muara Takus temple complex, in addition to other *candis* which are commonly divided into two different styles emblematic of a "central" or "eastern" ethnic group located here. For 10 points each:

[10m] Name this island. While in the Srivijaya kingdom, the monk Yijang visited this island's city of Palembang where he studied Sanskrit grammar in order to translate Buddhist sutras into Chinese.

ANSWER: **Sumatra** [or **Sumatera**]

[10h] Yijang translated the Golden Light Sutra, which exalts these deities led by Vaiśravaṇa. It describes how they protect kingdoms, which led to monasteries reciting it during an invasion.

ANSWER: Four Heavenly Kings [or Lokapāla; or Tiānwáng]

[10e] The Indonesian Candi Sukuh temple has a relief of the Dancing form of this elephant-headed Hindu deity, the son of Shiva and Parvati, who is worshipped in Buddhism as Vinayaka.

ANSWER: Ganesha [or Ganapati]

<NourEddine Hijazi, Belief>

3. Answer the following about the Kritios Boy, which British art historian Kenneth Clark considered the "first beautiful nude" in light of the destruction of almost all Greek bronzes, for 10 points each.

[10m] The Kritios Boy is often considered to be part of the transitional Severe style, which is part of this period of Greek sculpture that followed the Archaic period and preceded the Hellenistic period.

ANSWER: Classical period [or Early Classical period]

[10e] The Kritios Boy was excavated along with the rest of the so-called "Persian rubble" found at this site, a hill in Athens that is home to the caryatids of the Erechtheion and the Parthenon.

ANSWER: the **Acropolis** of Athens

[10h] Along with the Kritios Boy, the "Persian rubble" also contained the *Moschophoros* ("moss-ko-FOR-ohs"), an older Archaic statue of a smiling man carrying one of these animals.

ANSWER: a <u>calf</u> [or <u>cow</u>; or <u>cattle</u>; or *The <u>Calf Bearer</u>*]

<Aseem Keyal, Other Arts>

4. This author asked, "and you tried to change didn't you? / closed your mouth more / tried to be softer / prettier" in a poem titled "For women who are 'difficult' to love." For 10 points each:

[10h] Name this British-Somali poet of *Teaching My Mother How to Give Birth*, who wrote "I tore up and ate my own passport in an airport hotel" in "Conversations about Home."

ANSWER: Warsan Shire ("SHY-er")

[10e] This singer of "Sorry" and "Formation" smashed a car and recited Warsan Shire's poetry on her visual album *Lemonade*.

ANSWER: **Beyoncé** [or Beyoncé **Knowles**; or Beyoncé Giselle Knowles-**Carter**]

[10m] Another British poet who has collaborated with Beyoncé, Yrsa Daley-Ward, rose to fame with her work in this medium. Sales of the 2014 collection *Milk and Honey* were driven by the author's popular work in this medium.

ANSWER: <u>Insta</u>poetry [or anything indicating poetry posted on <u>Insta</u>gram; prompt on internet <u>posts</u>, <u>internet</u> poetry, or <u>social media</u> poetry by asking "on what website?"] (The second author is Rupi Kaur.)

<Margaret Tebbe, World Literature>

5. Plutarch states that at this battle's end, women in black hurled their children beneath the wheels of wagons while men, "for lack of trees," fastened their necks to cattle horns so that they could be dragged to death. For 10 points each:

[10h] Name this battle, a massive defeat for the king Boiorix ("bo-ee-OR-icks") during the Cimbrian War. Before it began, captured Teuton nobles were paraded by a commander who would be considered part of a group with Romulus and Camillus for his actions here.

ANSWER: Battle of Vercellae

[10e] The Cimbrian War ended with this "Third Founder of Rome's" victory at Vercellae. This seven-time consul lost a brief civil war to Sulla before returning and publicly murdering most of Sulla's supporters anyway.

ANSWER: Gaius Marius

[10m] Plutarch credits Marius with updating the design of the *pilum*, one of these objects. One of these weapons called the *hasta* lends its name to the *hastati*, but was only used by wealthy *triarii* soldiers under the Polybian system.

ANSWER: **spear**s [accept **javelin**s; prompt on <u>weapons</u>]

<Tracy Mirkin, Other History>

6. Routine use of Grignard reagents was cited as one of the most pressing environmental and safety-related issues at the 2011 ACS Pharmaceutical roundtable. Answer the following about handling Grignard reagents, for 10 points

[10e] Grignard reagents are typically synthesized by treating this metal with an organic halide. This alkaline-earth metal has an atomic number of 12.

ANSWER: magnesium [or Mg]

[10m] Due to its high reactivity with water, Grignard reagents are typically handled in this cyclic ether with four carbons devoid of water. This solvent is also commonly used for hydroboration reactions.

ANSWER: THF [or tetrahydrofuran]

[10h] Dialkyl magnesium compounds can be precipitated out from Grignard reagents dissolved in ethers by adding this six-membered heterocycle in an equilibrium reaction described by Wilhelm Schlenk.

ANSWER: dioxane [or 1,4-dioxane]

<Paul Lee, Chemistry>

7. This character tells Bill Guarnere "Oh, Sergeant? I'm not a Quaker" after drinking alcohol for the first time while peeking under the canvas of a convoy truck. For 10 points each:

[10h] Name this character who won a Distinguished Service Cross for leading the destruction of an artillery battery at Brécourt ("bray-KOOR") Manor earlier in the episode.

ANSWER: 1st Lieutenant Richard "Dick" <u>Winters</u> [or Captain <u>Winters</u>; or Major <u>Winters</u>] (The episode is "Day of Days.")

[10e] Dick Winters leads Easy Company from D-Day to the capture of the Eagle's Nest in the HBO miniseries *Band of Brothers*, produced by Tom Hanks and this man, who also directed *Saving Private Ryan*.

ANSWER: Steven Spielberg

[10m] This English actor who plays the radicalized Marine Nicholas Brody in *Homeland* played Captain Winters in *Band of Brothers*. This actor also plays opposite Paul Giamatti as hedge fund manager Bobby Axelrod in *Billions*.

ANSWER: Damian <u>Lewis</u> <Nitin Rao, Miscellaneous>

8. The coming-of-age novel *Paper Fish* focuses on people of this ethnicity living on Taylor Street in Chicago. For 10 points each:

[10h] Name this ethnicity of a group of stonecutters living in Granitetown in the novel *Like Lesser Gods*. A family of this ethnicity endures the Great Depression in the novel *The Fortunate Pilgrim*.

ANSWER: **Italian**-American [accept **Sicilian**-American]

[10e] Mario Puzo was sad that his favorite of his own novels, *The Fortunate Pilgrim*, never achieved the success of this later novel, which he believed was too commercial and sensational. This novel introduced the character Michael Corleone.

ANSWER: The Godfather

[10m] Another classic mid-century novel focusing on working-class Italian-Americans is a Pietro di Donato novel titled [this man] in Concrete. In a Lew Wallace novel, this man gives water to Judah Ben-Hur before Ben-Hur is sent to become a galley slave.

ANSWER: <u>Jesus Christ</u> [accept either underlined portion; accept <u>Christ</u> in Concrete] <Taylor Harvey, American Literature>

9. A mixture of honey and linseed was used in the creation of this structure by Andreas Schlüter and Gottfried Wolfram, which would later be expanded by Francesco Rastrelli under Empress Elizabeth. For 10 points each: [10h] Name this opulent chamber gifted by Frederick William I to Peter the Great. Covering it with wallpaper failed to stop the Nazis from looting it and shipping it to Königsberg, where it was likely destroyed during an air raid.

ANSWER: <u>Amber Room</u> [accept <u>Yantarnaya Komnata</u>; accept <u>Bernsteinzimmer</u>]

[10m] Unlike the Amber Room, the Nazis stored tons of stolen artworks in the Altaussee salt mine complex, where they were nearly blown up before being saved and repatriated by this Allied cultural preservation group after World War II.

ANSWER: the "Monuments Men" [accept Monuments, Fine Arts, and Archives program]

[10e] Apocryphally, the Nazis hid a never-discovered art-and-gold-filled train in this country. Items that were really stolen from this country include the Jagiellonian tapestries that decorated Wawel ("VAH-vell") Castle in Kraków.

ANSWER: **Poland** [or *Rzeczpospolita* **Polska**; accept **Polen**]

<Tracy Mirkin, European History>

10. T. M. Scanlon used this thinker as the namesake of the principle that restrictions on free expression can't be justified by the consequences caused by those expressions. For 10 points each:

[10h] Name this thinker who introduced the example of a mob being riled up against a corn dealer. This thinker used Marcus Aurelius in his argument that "silencing of discussion" is motivated by the "assumption of infallibility."

ANSWER: John Stuart Mill [accept the Millian principle]

[10m] Mill's corn dealer example frames the free speech issue in the context of this principle that defines when power can be "rightfully exercised" over an individual, which Mill introduced in *On Liberty*.

ANSWER: harm principle

[10e] Rae Langton and Daniel Jacobson have both claimed Mill as an ally in their dispute over whether this medium "silences" women. Andrea Dworkin argued extensively for restrictions on this obscene form of media.

ANSWER: **porn**ography [prompt on erotica]

<Jordan Brownstein, Philosophy>

11. The sizes of brain regions like the robust nucleus of the arcopallium are often dimorphic in species that show strong sexual dimorphism in this behavior. For 10 points each:

[10h] Identify this behavior that, in the order Passeriformes, is controlled by an anterior forebrain pathway and a posterior descending pathway that both begin from the HVC.

ANSWER: bird song [prompt on bird vocalization; accept "avian" in place of "bird"]

[10m] In bird species that perform male-female duets, the rapid release of this neurotransmitter can suppress HVC activity to keep partners from interrupting one another. This molecule is made by decarboxylating glutamate.

ANSWER: **GABA** [or **gamma-aminobutyric acid**]

[10e] The HVC is often compared to Broca's area in humans, damage to which causes an expressive type of this general disorder. This term refers to trouble understanding or producing language.

ANSWER: <u>aphasia</u> <Shan Kothari, Biology>

12. Like all satellite navigation systems, this system requires the receiver to have a line of sight to four satellites in order to calculate both three-dimensional location and clock deviation. For 10 points each:

[10e] Name this most widely used radio navigation system, which is enabled by a system of satellites now operated by the U.S. Space Force.

ANSWER: **GPS** [or **Global Positioning** System]

[10m] Usually, the largest source of GPS error comes from diffraction and refraction caused by passage through the F region of this entity. Its effects can be estimated using the Klobuchar model.

ANSWER: Earth's **ionosphere** [prompt on Earth's atmosphere]

[10h] Highly accurate differential GPS is now often incorporated into these surveying devices, which act as both an electronic theodolite and a distance measuring tool.

ANSWER: total stations

<Shan Kothari, Other Science>

13. A story written in this manner ends with Sophonisba deciding to turn the title place into a hospital for sick children. For 10 points each:

[10h] Identify this manner in which the 1858 story "A House to Let" was produced. This general method also produced a 1901 novel in which the Fourth Dimensionists plot to take over Earth, titled *The Inheritors*.

ANSWER: <u>collaborative</u> fiction [or word forms of <u>collaboration</u>; accept equivalents of being written by a <u>group</u> of or <u>multiple author</u>s; accept <u>chain</u> or <u>mosaic</u> writing] (*The Inheritors* is by Joseph Conrad and Ford Madox Ford.)

[10e] This author collaborated with Adelaide Procter and Elizabeth Gaskell on "A House to Let" and published it in his magazine *Household Words*. He also wrote *A Tale of Two Cities* and *Oliver Twist*.

ANSWER: Charles Dickens

[10m] This man was the fourth author of "A House to Let." He published many of his novels, including an early detective novel about Rachel Verinder's stolen diamond, in Charles Dickens's literary magazines.

ANSWER: Wilkie Collins

<Margaret Tebbe, British Literature>

14. A father-son duo named Julian are the attributed authors of a group of neo-Platonic oracles named for these people which posit that the Demiurge governs the matter in the universe. For 10 points each:

[10h] Name these people whose astrological based divination was praised by Cicero. An Iraq-based Eastern Catholic Church is named for these people.

ANSWER: <u>Chaldean</u>s [prompt on <u>Babylonian</u>s since those terms were sort of interchangeable in the Greco-Roman world]

[10m] A 14-book collection of oracles from Late Antiquity named for these female priestesses is distinct from an earlier collection of books that one of them sold to Tarquinius Superbus. One of these people advises Aeneas to get the fruit of the golden bough in order to go to the Underworld.

ANSWER: sibyls [accept Cumaean sibyl]

[10e] The Cumaean sibyl normally served this god in Cumae by interpreting messages at an oracle. Pythia served as a priestess at his oracle at Delphi.

ANSWER: Apollo

<NourEddine Hijazi, Belief>

15. A lecture on this concept describes how a gypsy dancer found Bach to "have" this concept, but Gluck, Brahms, and Milhaud ("mee-YO") did not. For 10 points each:

[10h] Name this concept that is often connected to flamenco and can be separated into the four elements of irrationality, earthiness, heightened awareness of death, and the diabolical.

ANSWER: duende

[10e] This author popularized the term *duende* in his lecture "The Theory and Play of the Duende." This Spanish playwright is better known for his *Rural Trilogy*, which includes *Blood Wedding*.

ANSWER: Federico Garcia Lorca

[10m] In *Blood Wedding*, this character converses with the beggar woman about the upcoming tragedy. In a poem by Garcia Lorca, a young boy at a forge is enthralled by this character and begs her to run away.

ANSWER: moon

<Paul Lee, European Literature>

16. The only indentured servant ever to serve in Congress, Matthew Lyon, was the first person convicted under this act. For 10 points each:

[10m] Name this act. Samuel Chase and James Callendar threatened to beat and kill each other after Chase imprisoned Callender under this act.

ANSWER: Sedition Act of 1798

[10e] Lyon was the first person in American history to enter one of these events while in prison. Lyon won, unlike Eugene V. Debs, who finished behind Warren G. Harding in one of these events in 1920.

ANSWER: <u>election</u>s [or congressional <u>election</u>s; or presidential <u>election</u>s]

[10h] Lyon's later life mostly consisted of trying to secure a cotton gin for the Cherokee in this state, whose name derives from its native Quapaws. Henri de Tonti's trading post named for this state was its first European settlement.

ANSWER: Arkansas [or Arkansas Post; or Poste de Arkansea]

<Emmett Laurie, American History>

17. In a short choral work titled for one of these animals, the words "dalle" ("DAH-lay") and "beve" ("BEV-ay") are each first sung by the women and then echoed by the men as they ask for the title animal to be given a drink. For 10 points each:

[10h] Name this subject of a humorous *frottola* in a fast cut-time, its composer's most popular short work besides his 1475 "Ave Maria." That *frottola* ends by noting that this animal "sings for love."

ANSWER: a **cricket** [or "El **grillo**"]

[10m] This Renaissance composer of "El grillo," or "The Cricket," is more famous for his two masses on the *L'homme armé* ("lum ar-MAY") theme. He also wrote the *Missa Pange Lingua*.

ANSWER: Josquin des Prez ("joe-SCAN deh PRAY") [accept either underlined name]

[10e] The *frottola* is an early precursor to this Renaissance genre of secular choral music, which is often contrasted with the sacred motet.

ANSWER: <u>madrigal</u> <Michael Yue, Music>

18. Taga Castle was used as a military base during the subjugation of the Emishi people, undertaken while Yamato Japan was ruled from what is now this Prefecture. For 10 points each:

[10m] Name this prefecture that corresponds with the former Yamato Province. It shares its name with a period in Japanese history that followed Empress Genmei's establishment of *Heijo-kyo* as capital.

ANSWER: Nara Prefecture [or Nara Period]

[10h] Before subjugation, Yamato Japan attempted to assimilate the Emishi by drawing leaders into the administrative system established by this legal system, heavily influenced by Tang China. Its start is sometimes dated to the seventh century Taika reforms.

ANSWER: Ritsuryō

[10e] This military title was given to leaders of excursions against barbarians tribes. The Meiji Restoration ended the rule of Japan by military dictators with this title.

ANSWER: **shogun** [or Sei-i Tai**shōgun**]

<Emmett Laurie, World History>

19. The "mind-blindness" theory proposes this condition includes "deficits in the normal process of empathy." For 10 points each:

[10e] Name this developmental disorder in which individuals might have issues socializing or communicating. A less severe form of this set of behaviors is known as Aspergers.

ANSWER: autism [accept word forms; accept autism spectrum disorder or ASD]

[10m] This contemporary British clinical psychologist theorized mind-blindness and has worked on a "fetal sex steroid" theory of autism. Cordelia Fine has criticized his claim that the "extreme male brain" manifests as autism.

ANSWER: Simon Baron-Cohen

[10h] "Discrete trial training" for children with autism was developed by practitioners of a controversial field devoted to the "applied" analysis of this phenomenon. Lewin's equation sets this phenomenon equal to the function of person and environment.

ANSWER: <u>behavior</u> [accept Applied <u>Behavior</u> Analysis] <Harris Bunker, Social Science>

20. Answer the following about the thermodynamics of gases, for 10 points each.

[10h] For the adiabatic expansion of an ideal gas, this expression is constant because "C-sub-V times dp over p" plus "C-sub-p times dV over V" is zero. In terms of p, V, and gamma, give this expression that is generalized by the relation governing polytropic processes.

ANSWER: \underline{p} times \underline{V} to the gamma [or the product of \underline{p} and \underline{V} raised to the gamma power; or $\underline{p}V^{\gamma}$; do not accept or prompt on "quantity p times V end quantity raised to the gamma" or "(pV) raised to the gamma" or equivalents [10m] Ideal gases do not experience a temperature change during this process. In this process, a real gas irreversibly expands from high pressure to low pressure across a valve at constant enthalpy.

ANSWER: <u>Joule–Thompson</u> effect [or <u>Joule–Thompson</u> expansion; or <u>Joule–Thompson</u> throttling; accept names in either order; accept <u>Kelvin</u> in place of <u>Thompson</u>; prompt on <u>throttling</u>]

[10e] Work is done on the surroundings by the expansion of a gas or other fluid in these devices, which convert heat into work. Sadi Carnot designed a theoretical one of these devices that attains the maximum possible efficiency.

ANSWER: heat **engine**s [accept Carnot heat **engine**s]

<Adam Robbins, Physics>