

ACF Fall 2019

Packet by Delaware, MSU B, NYU A, UBC A

Edited by Rahul Keyal, Ganon Evans, Justin French, Halle Friedman, Katherine Lei, Caroline Mao, Ben Miller, Tracy Mirkin, Clark Smith, Kevin Yu

Tossups

1. Nationalists in this country believe in a conspiracy that numbers representing the Basmala were code for a Muslim coup. Alleged members of Ata Ullah's "Faith Movement" in this country were targeted during the Inn Din massacre. This country replaced citizenship for Arakanese people with a National Verification Card. Ashin Wirathu ("WEE-rah-thoo") and other Buddhist monks in the 969 ("nine-six-nine") Movement attempted to classify a minority in this country as Bengali as justification for a mass exodus from its Rakhine ("ruh-KYNE") State to Bangladesh. For 10 points, name this country where the National League of Democracy under Aung San Suu Kyi ("owng SAN soo CHEE") opposes the forced migration of the Rohingya ("ro-HIN-jah") people.

ANSWER: **Myanmar** [or **Burma**; or Republic of the Union of **Myanmar**]

<CE/Geo/Other/Pop Culture>

2. One method of analyzing this process involves finding the intersection of the Q line and two operating lines; that method is named for McCabe and Thiele ("TEEL-uh"). This process is equivalent to a series of flashes, and one can calculate an equivalent number of theoretical stages for this process using the Fenske equation. Some of the products of this process are returned to it in reflux. Vapor-liquid equilibrium is considered when designing apparatuses for this process, whose "fractional" form is used to refine petroleum. Solutions that cannot be separated by this process are called azeotropes. For 10 points, what process separates compounds by their boiling points?

ANSWER: **distillation** [accept binary **distillation** or fractional **distillation**]

<Chemistry>

3. The protagonist of a story by this author sees stars "grouped in strange constellations" and hears "whispers in an unknown tongue" as he travels through a forest. In that story by this author, a disguised scout tricks a man by mentioning a "great quantity of driftwood." This author calls a lawyer "one skilled in circumvention of the law" in a satirical collection that was first published as *The Cynic's Word Book*. "A stunning blow" ends Peyton Farquhar's ("FAR-quar's") vision of himself escaping his hanging by Union soldiers in a story by this author. For 10 points, name this author of *The Devil's Dictionary* and "An Occurrence at Owl Creek Bridge."

ANSWER: Ambrose **Bierce** [or Ambrose Gwinnett **Bierce**]

<American Literature>

4. During this conflict's "August Round-Up," the head of one political organization ordered the execution of a group of young women known as the "Thirteen Roses." The "Twenty-Seven Points" served as the official ideology of one faction in this conflict, which later merged with the Traditionalist Communion. The paramilitary Blueshirts were largely responsible for executing the White Terror during this conflict. After the deaths of Emilio Mola and José Sanjurjo ("sahn-HOOR-ho") in a pair of plane crashes, the eventual winner of this conflict was able to consolidate his position in the Falange party. For 10 points, name this conflict in which the Republicans were defeated by the Nationalist coalition led by Francisco Franco.

ANSWER: **Spanish Civil War** [accept *Guerra Civil Española*]

<European History>

5. In 2018, the MiniBooNE ("mini-boon") experiment confirmed the earlier LSND observations that these particles can have changing quantum numbers. In 2018, one of these particles emitted by a blazar in Orion was detected by an Antarctic observatory. These are the only particles in the standard model that may be Majorana ("ma-yo-RA-na") fermions. Fewer of these particles than expected were detected from the sun, a problem partially resolved by the

Super-Kamiokande experiment, which provided evidence for their flavor oscillation. Along with a neutron and positron, one of these particles is emitted in beta-plus decay. For 10 points, name these neutral leptons with very little mass.

ANSWER: **neutrinos** [accept electron **neutrino**, but do not accept or prompt on “electron”]

<Physics>

6. Upon death, the souls of these individuals were believed to join a pair of “indestructible” stars that circled the North Pole. The “Cannibal Hymn” describes a ritual in which these figures posthumously hunt and eat other gods to guarantee their eternal divinity. According to Jan Assmann (“yahn AHS-mahn”), these religious figures held the ultimate responsibility of dispelling chaos, or *isfet* (“ISS-fet”), and maintaining harmony, or *ma’at*. Early examples of these figures were interred in a necropolis at Abydos (“uh-BY-doss”), preceding a different locale of burial for these individuals, such as Khufu. For 10 points, name these religious and political leaders whose bodies were commonly stored in pyramids.

ANSWER: **pharaohs** [prompt on ancient Egyptians; prompt on rulers of ancient Egypt or synonyms; prompt on Egyptian gods or Egyptian deities]

<Religion>

7. The fourth movement of a non-symphonic piece by this composer is often interrupted by quotations of “Da geh’ ich zu Maxim” (“dah GAY ish tsoo MOCK-sim”), a song from Franz Lehár’s (“LAY-harr’s”) operetta *The Merry Widow*. A side drum solo begins and ends the *allegretto scherzando* second movement of a piece by this composer whose introduction and third movement *Elegia* are in the “night music” idiom. In a piece by this composer that contains an “interrupted intermezzo,” two bassoons play a minor sixth apart to begin a “Game of Pairs”; that piece is named for featuring every instrument in the ensemble. For 10 points, name this composer who used elements of the folk music of his native Hungary in his *Concerto for Orchestra*.

ANSWER: Béla **Bartók** [accept names in either order]

<Classical Music>

8. In a story [emphasize] *titled* for one of these animals, a “fifteen-minute nag” wins her races due to her “cavorting and straddling up” near the ends of the races. A character mocks his rival by interrupting him with the phrase “lost his bottle of oil” in a play titled for these animals. Quail shot is poured down one of these animals’ throats, which loses Jim Smiley a 40-dollar bet. Dionysus seeks to retrieve Euripides from the underworld as these animals repeat the refrain “Brekekekéx-koáx-koáx” in a play by Aristophanes. For 10 points, Calaveras County is the setting of a Mark Twain story about a “Celebrated Jumping” example of what amphibian?

ANSWER: **frogs** [or **batrachoi** or **ranae**; accept *The Frogs* or “The Celebrated Jumping **Frog** of Calaveras County” or “Jim Smiley and His Jumping **Frog**” or “The Notorious Jumping **Frog** of Calaveras County”]

<World/Other Literature>

9. This book contrasts the pluralism of Margaret Mead’s study of Papuan temperament with her narrow “feminine protest,” blaming the latter on a “freezing” adherence to strict functionalism. Other chapters in this book question the “Solipsism of Sigmund Freud” and “The Forfeited Self.” An interview series for Smith College grads prompted this book, whose first paragraph poses the “silent question, ‘Is this all?’” Later, this book laments Maslow’s prediction that the group in question will only reach self-actualization through other people and says that the title concept has buried millions of American women. For 10 points, name this 1963 book on “the problem with no name” by second-wave feminist Betty Friedan.

ANSWER: *The **Feminine Mystique***

<Philosophy>

10. In this colony, the Zappo Zap people allied with Europeans to crush the Kuba (“KOO-bah”) Kingdom and continue slave trading. Outcry over the summary execution of trader Charles Stokes in this colony helped motivate

investigations of its affairs by E. D. Morel and Roger Casement. George Washington Williams coined the term “crimes against humanity” in an exposé denouncing abuses committed in this colony by groups like the *Force Publique* (“poo-BLEEK”), who enforced rubber quotas. At the Congress of Berlin, this colony was personally awarded to Leopold II of Belgium. For 10 points, name this central African colony that names a modern-day nation whose capital is Kinshasa.

ANSWER: **Congo** Free State [or Belgian **Congo**; accept Democratic Republic of the **Congo** or **DRC** or **Congo**-Kinshasa; do not accept or prompt on “Republic of the Congo” or “Congo-Brazzaville”]
<World History>

11. This word describes galaxies that are classified by the Fanaroff–Riley system based on their luminosity distribution and include Centaurus A and Cygnus A. Signals in this region of the electromagnetic spectrum are combined in a method developed by Martin Ryle called aperture synthesis. Astronomers use the “Very Large Array” to study this type of radiation. In 1932, Karl Jansky (“JAN-skee”) first detected emissions in this region of the electromagnetic spectrum from the Milky Way. Supermassive black holes surrounded by accretion disks are known as “quasi-stellar” sources of this radiation. For 10 points, name this form of electromagnetic radiation with the longest wavelength.

ANSWER: **radio** waves [accept **radio astronomy**; accept **radio emissions**; accept **radio galaxies**]
<Other Science>

12. A church in this city has a tall, Roman-style temple façade overlapping a second, wider portico. The façade of another building in this city features patterns in pink marble above a two-story *loggia* (“LO-juh”) whose arches combine Gothic and Islamic influences. A church in this city is nicknamed the Church of Gold due to its ornate mosaics, which were likely originally created by Byzantine artisans. A palace in this city is linked to an adjacent prison by the Bridge of Sighs. This city is the site of Palladio’s San Giorgio Maggiore. For 10 points, name this city home to the Basilica San Marco and the Doge’s Palace, as well as many canals.

ANSWER: **Venice** [or **Venezia**]
<Other Arts>

13. While passing through this state, the 6th Massachusetts suffered the first Union casualties of the Civil War while suppressing riots that began at its President Street Station. The Lincoln administration rejected a ruling by Roger Taney (“TAW-nee”) that a citizen of this state could not be held without habeas corpus in the case *Ex Parte Merryman*. After capturing a copy of Robert E. Lee’s Special Order 191, George McClellan fought a battle in this state that ended the first Confederate invasion of the North and led to the announcement of the Emancipation Proclamation. For 10 points, the Battle of Antietam was fought in what border state where federal troops blocked secessionist efforts in Baltimore?

ANSWER: **Maryland** (The first line refers to the Pratt Street Riots.)
<American History>

14. An editorial interlude from this novel describes the Farmer Lad murdering his replacement so that he cannot marry his employer. In this novel, characters play a game in which a woman hits them on the ear each time they make a mistake while counting. This novel shifts to third-person narration after its central character ends his correspondence with Wilhelm. After resigning as an ambassador’s assistant, a character in this novel returns to Walheim and passionately reads from his translation of Ossian (“OSH-in”). The title character of this novel borrows two pistols from Albert and kills himself after he fails to win the love of Lotte (“LAW-tuh”). For 10 points, name this epistolary novel by Goethe (“GUR-tuh”).

ANSWER: *The Sorrows of Young Werther* [or *Die Leiden des jungen Werthers*]
<European Literature>

15. This hormone is co-secreted with amylin, which can lead to amyloid deposition in cells that secrete it. Detemir is an analog of this hormone, which causes the phosphorylation of tyrosine residues on IRS-1. This hormone consists of A and B chains joined by two disulfide bridges, and it is synthesized by the removal of C-peptide by PC1 and PC2. This protein was first sequenced using FDNB by Frederick Sanger. GLUT4 (“gloot-four”) is regulated by this hormone, whose action is counteracted by glucagon. Beta cells in the islets of Langerhans secrete this hormone. For 10 points, what pancreatic hormone decreases blood glucose and is deficient in people with diabetes?

ANSWER: **insulin**

<Biology>

16. An old woman mysteriously “bans” this character shortly before his death in a ballad preserved in the Percy folio. Two plays by Anthony Munday originated the legend that this character was the Earl of Huntingdon. In another legend, this character utters a quick prayer to the Virgin Mary before killing Guy of Gisbourne, mutilating his head, and presenting it to the Sheriff of Nottingham. This character roams Sherwood Forest alongside Friar Tuck, Little John, and the rest of his “Merry Men.” For 10 points, name this English folk hero who stole from the rich and gave to the poor.

ANSWER: **Robin Hood** [or **Robyn Hode**; prompt on partial answer; accept Robin of **Locksley**]

<Mythology>

17. This thinker concluded that a society and the god that it worships are functionally equivalent after studying totemism among Australian Aboriginals. Ruth Benedict’s definition of culture as “personality writ large” riffs on this thinker’s definition of God as “society writ large.” This scholar proposed that religion was defined by creating a dichotomy of sacred and profane. This author of *The Elementary Forms of the Religious Life* instructed followers to “treat social facts as things.” Another of his studies contrasts the *anomie* (“ah-no-MEE”) of Protestant life with more communal Catholic societies, which have lower rates of self-slaughter. For 10 points, name this French sociologist who authored the monograph *Suicide*.

ANSWER: Émile **Durkheim**

<Social Science>

18. A man breaks a rod over his knee on the right of this painter’s *The Marriage of the Virgin*, which features an octagonal shrine modeled after a similar one in the background of his teacher’s painting *The Delivery of the Keys*. In a painting by this artist, doctors of the church are identified by their names written in halos; that painting by this student of Perugino is part of a project that also includes his *Parnassus* and *La Disputa*. The Stanza della Segnatura houses a fresco by this artist that features elaborate arches and depicts Plato pointing upward at its center. For 10 points, name this Italian Renaissance painter of *The School of Athens*.

ANSWER: **Raphael** [or Raphael **Sanzio** da Urbino]

<Painting/Sculpture>

19. When the narrator hears the name of this location, he remarks that it has “such magic power” that “the phantoms of those haunted late years began to take flight.” A man makes the sign of the cross on his deathbed after returning from Italy to die at this estate. A Christmas holiday spent at this estate is ruined by the presence of Mr. Samgrass, who was hired to control the drinking of a man who brought his teddy bear Aloysius to Oxford. After being invited by Lady Marchmain and her son, Sebastian Flyte, this estate is visited by the narrator, Charles Ryder. For 10 points, name this house that is “Revisited” in a novel by Evelyn Waugh (“EEV-lin WAH”).

ANSWER: **Brideshead** [accept **Brideshead** *Revisited*]

<British Literature>

20. Undisciplined troops under this ruler’s commander, Philibert of Châlon (“sha-LON”), murdered the captain Kaspar Röist as part of an event often cited as ending the Renaissance. After initially ridiculing one controversy as “an argument between monks,” this ruler presided over the opening of the Council of Trent. Long before his

abdication to a monastery due to his gout, this ruler called Martin Luther to defend his views at the Diet of Worms (“vurms”). Victorious at Pavia, this first son of Joanna the Mad inherited the Netherlands, Austria, Aragon, and Castile into his domain. For 10 points, name this 16th-century Catholic monarch, the first Habsburg to rule over both the Holy Roman Empire and Spain.

ANSWER: **Charles V** [or **Charles I** of Spain; accept **Carlos I** or **Carlos V**; prompt on Charles or Carlos] (The event in the first sentence is the 1527 Sack of Rome.)

<European History>

Bonuses

1. At the end of one of this composer's operas, a group of singing nuns is reduced in number, one by one, by the sound of a guillotine until only two remain. For 10 points each:

[10] Name this French composer and member of Les Six ("lay SEESE") who wrote *The Breasts of Tiresias*. He only wrote operas late in his career, and his *Dialogues of the Carmelites* reflects his late religiosity and depression.

ANSWER: Francis **Poulenc** ("frawn-SEESE poo-LANK")

[10] *The Breasts of Tiresias* was premiered at the Opéra-Comique, which has staged this Georges Bizet ("bee-ZAY") opera over 2,500 times. Its numbers include a "Toreador Song" and a "Habanera."

ANSWER: **Carmen**

[10] After singing her "Habanera," Carmen throws a rose to this corporal. When she chooses the bullfighter Escamillo ("ess-ka-MEE-yo") over him, this character murders her in a jealous rage.

ANSWER: Don **José** ("zho-SAY")

<Other Arts>

2. This substance is compared to a woman who "will come / From the midst of a vast clamour / With a mist of stars about her" in Richard Aldington's poem "The Lover." For 10 points each:

[10] Name this substance. The speaker sees a man "flound'ring like a man in fire or lime" after this substance foments an "ecstasy of fumbling" in the poem "Dulce et Decorum Est."

ANSWER: poison **gas** [accept **phosgene** gas or **chlorine** gas]

[10] This author described the "froth-corrupted lungs" of a man killed by poison gas in his poem "Dulce et Decorum Est," which, like "Anthem for Doomed Youth," is one of the many poems he wrote about World War I.

ANSWER: Wilfred **Owen**

[10] This poet wrote "After two thousand years of mass / We've got as far as poison-gas" in "Christmas, 1924." This author described English military demonstrations just before World War I in his poem "Channel Firing."

ANSWER: Thomas **Hardy**

<British Literature>

3. Robert Caro won a Pulitzer Prize for profiling this man in the critical 1974 biography *The Power Broker*. For 10 points each:

[10] Name this influential New York urban planner of the mid-20th century. He organized and planned projects like the Triborough ("TRY-bro") and Verrazzano-Narrows bridges, Lincoln Center, and Shea ("shay") Stadium.

ANSWER: Robert **Moses**

[10] One of Moses's biggest achievements was bringing the headquarters of this intergovernmental organization to New York. This organization's General Assembly and Security Council convene in a complex on the East River.

ANSWER: **United Nations** [or **UN**]

[10] Moses's rise to power was aided by this governor of New York who was nicknamed the "Happy Warrior." Anti-Catholic sentiment contributed to this man's loss in the 1928 presidential election.

ANSWER: Al **Smith** [or Alfred Emanuel **Smith**]

<American History>

4. For a random variable X , this quantity is the expected value of the square of the deviation from the mean of X . For 10 points each:

[10] Name this quantity that is equal to the standard deviation squared.

ANSWER: **variance** [prompt on **sigma squared**; prompt on **s squared**]

[10] This other quantity measures the asymmetry of a probability distribution about the mean. It can be "negative" or "positive" depending on which side of the distribution has a longer tail.

ANSWER: **skewness** [or word forms such as **skewed** or **skewedness**]

[10] Variance and skewness are the “second” and “third” examples of these quantities, which quantify the shape of a distribution about its mean.

ANSWER: **moments** [accept central **moments** or standardized **moments**]

<Other Science>

5. This place names a poetic form developed by Terrance Hayes where each line ends with a word from another poem in successive order. For 10 points each:

[10] Name this location. In a Gwendolyn Brooks poem, it is occupied by seven pool players who “sing gin” and “thin gin.”

ANSWER: the **Golden Shovel**

[10] A different Gwendolyn Brooks poem titled for one of these people ends, “I knew you, though faintly, and I loved, I loved you / All.” In another poem, one of these people says to another character, “Life for me ain’t been no crystal stair.”

ANSWER: **mothers** (The poem is “Mother to Son” by Langston Hughes.)

[10] Brooks set her collection *Annie Allen* in this Midwestern city, which is called “Hog Butcher for the World” in a poem by Carl Sandburg.

ANSWER: **Chicago**

<American Literature>

6. Cicero’s *De Senectute* (“day sen-eck-TOO-tay”) is the first source for this statement’s existence, which was possibly sparked by a man seeing “lots of timber” while failing to arbitrate a war between Massinissa and this statement’s subject. For 10 points each:

[10] Give this statement, whose central sentiment was realized three years after its speaker’s death in 149 BC. This statement was appended to the end of each of its speaker’s speeches, even if they weren’t related. Either the original language phrase or an English translation is acceptable.

ANSWER: “Furthermore, **Carthage must be destroyed!**” [or “**Carthago delenda est**”; accept “**Ceterum autem censeo Carthaginem esse delendam**”]

[10] One member of this specific familial branch would oppose Cato the Elder’s blustering by ending his own speeches with “Carthage must be saved.” A general from this family defeated Hannibal at the Battle of Zama.

ANSWER: **Scipio** [accept **Cornelii Scipiones**; accept **Scipio** Africanus; accept **Scipio** Nasica Corculum; accept Publius Cornelius **Scipio** Africanus; accept Publius Cornelius **Scipio** Nasica Corculum]

[10] At Zama, Hannibal fought using the “war” variety of these huge land mammals, which were commonly captured on the Indian subcontinent in antiquity.

ANSWER: war **elephants**

<European History>

7. The Class I type of these elements includes reverse transcriptase. For 10 points each:

[10] Name these self-duplicating genetic elements, examples of which include LINEs, SINEs, and P elements. The Ac/Ds system is an example of these elements.

ANSWER: **transposons** [or **transposable elements** or **jumping genes**; accept **retrotransposons**; prompt on **TE**]

[10] Transposons and the Ac/Ds system were discovered in and make up roughly 85% of the genome of this crop. This descendant of teosinte (“tay-oh-SIN-tay”) was first domesticated roughly 10,000 years ago in Mesoamerica.

ANSWER: **maize** [or **corn**; or **Zea mays**]

[10] The commonality of these transposons among primates make them useful for tracking human evolution. These transposons, the most common in the human genome, are derived from 7SL RNA.

ANSWER: **Alu** (“AL-oo”) elements [or **Alu** sequences; or **Alu** repeats]

<Biology>

8. A much smaller, wooden version of this sculpture is housed at the MoMA. For 10 points each:

[10] Name this massive sculpture composed of 16 metal rhombuses stacked atop one another, which serves as a memorial for fallen soldiers.

ANSWER: The **Endless Column** [or The **Infinity Column**; or **Infinite Column**]

[10] *Endless Column* is part of a World War I memorial at Târgu Jiu, which also includes a sculpture titled for one of these objects of *Silence*, which is surrounded by hourglass-shaped seats. Judy Chicago's *The Dinner Party* includes a large, triangular one of these things.

ANSWER: tables [accept **Table of Silence**]

[10] *Endless Column* and *Table of Silence* are by this Romanian sculptor, who created the *Bird in Space* series.

ANSWER: Constantin **Brâncuși** ("brin-KOOSH")

<Painting/Sculpture>

9. This field was kickstarted by a response to Celsus's *The True Word*, which had characterized Christianity as an illegitimate cross-breed of eastern ideas. For 10 points each:

[10] Identify this branch of theology that includes Origen's *Contra Celsum*. C. S. Lewis's *The Screwtape Letters* falls under the purview of this field, which generally refers to all defenses of Christianity against its detractors.

ANSWER: Christian **apologetics** [or **apology** or **apologia**; accept **apologism**; prompt on descriptive answers that indicate arguments for or in favor of Christianity]

[10] The *Summa contra Gentiles* is a well-known work of apologetics by this Doctor of the Church, who gave five possible arguments for the existence of God in his *Summa Theologica*.

ANSWER: Saint Thomas **Aquinas** [accept Thomas of **Aquino** or Tommaso **d'Aquino**; prompt on Thomas; prompt on Doctor Angelicus; prompt on Doctor Communis]

[10] The subfield of moral apologetics, which emphasizes humans' status as sinful creatures in need of redemption, is exemplified by this violent 1741 sermon given by Jonathan Edwards during the First Great Awakening.

ANSWER: "**Sinners in the Hands of an Angry God**"

<Religion>

10. This statement is seemingly undermined by the existence of general gluts, a phenomenon that it implies to be impossible. For 10 points each:

[10] Name this economic statement. Debate persists over the accuracy of the formulation of this statement by Keynes ("canes") as "supply creates its own demand."

ANSWER: **Say's law**

[10] Advocates of Say's law are often followers of this economic philosophy with a two-word name. This philosophy asserts that the state should largely let the market be and minimize intervention.

ANSWER: **laissez-faire** ("LESS-ay-FAIR")

[10] Say's law may imply that this thing is completely neutral. Its "narrow" definition only includes currency used as legal tender.

ANSWER: **money** [accept **M0**, **M1**, or **M2**]

<Social Science>

11. During one voyage, this man crushed the Kingdom of Kotte ("KO-tay") in Sri Lanka and brought its king Alakesvara ("AH-luh-KESH-wuh-ruh") back to China. For 10 points each:

[10] Name this Chinese explorer who led a fleet of massive treasure ships in voyages to Southeast Asia, India, and the Persian Gulf in the early 15th century.

ANSWER: **Zheng He** ("jung huh") [or **Cheng Ho** **Ma He**; or **Ma Sangbao**; prompt on He or Ho or Sangbao]

[10] Zheng's explorations occurred under this Chinese dynasty that ruled from 1368 until it was toppled by the Qing ("cheeng"). Zheng's expeditions were briefly defunded amidst conflict by this dynasty against their predecessors, the Yuan ("yoo-EN").

ANSWER: **Ming** dynasty [or Empire of the Great **Ming**; or **Ming Chao**]

[10] This Ming emperor seized the throne with Zheng's help and sponsored his voyages. This ruler moved China's capital to Beijing and commissioned the Porcelain Tower and the Forbidden City.

ANSWER: **Yongle** ("YUNG-luh") emperor [or **Zhu Di**]

<World History>

12. In a novel whose English title mentions this location, Noboru uses a peephole to spy on his mother's first night of sex with her lover Ryuji. For 10 points each:

[10] Name this location that titles a series of novels about a lawyer's encounters with the reincarnations of a friend identified by a pattern of three moles.

ANSWER: **sea** [accept *The Sailor Who Fell From Grace with the Sea* or *The Sea of Fertility*; accept **umi**]

[10] *The Sea of Fertility* was written by this Japanese author of *The Temple of the Golden Pavilion*, who committed *seppuku* on television after a failed coup.

ANSWER: Yukio **Mishima** [or Kimitake **Hiraoka**; accept names in either order]

[10] Kochan tries to hide his homosexuality in a Mishima novel titled for the *Confessions* of one of these objects. These objects are sometimes tilted to change the amount of light cast upon them in *Noh* theater.

ANSWER: **masks** [accept *Confessions of a Mask*]

<World/Other Literature>

13. A cyclic one of these compounds can be formed by reacting ethylene glycol with an aldehyde or ketone. For 10 points each:

[10] Name these compounds that contain two alkoxy groups bonded to the same carbon.

ANSWER: **acetals** ("ASS-uh-tals") [or **ketals**; do not accept or prompt on "acetyls" – ask team to spell if necessary]

[10] In acetalization, water can be trapped using molecular sieves ("sivs") that act as these materials. These materials, such as silica gel in packaged foods, absorb water to dry the surrounding area.

ANSWER: **desiccants** [or **desiccating agent**]

[10] This element, which can be chelated ("KEE-lated") by EDTA, forms sulfate and chloride compounds that are used as desiccants. This element is also found in fluorite and limestone.

ANSWER: **calcium** [or **Ca**]

<Chemistry>

14. Arturo Bonucci and Pina Carmerelli founded an ensemble of this type named for Luigi Boccherini ("BOCK-uh-REE-nee"). For 10 points each:

[10] Name this type of ensemble that plays Boccherini's "Celebrated Minuet." Variations of this string ensemble are named for whether they add an extra cello, viola, or a single guitar to a more popular ensemble.

ANSWER: string **quintet** [accept **viola quintet**; accept **cello quintet**]

[10] For the last of his pieces for guitar quintet, Boccherini rearranged the *Ritirata* movement of a quintet evoking this city. Boccherini primarily worked in this city, whose nighttime street music inspired the aforementioned quintet.

ANSWER: **Madrid** [accept *Night Music of the Streets of Madrid* or *Musica notturna delle strade di Madrid*]

[10] Mozart wrote one G minor string quintet, but his better-known G minor pieces are "Great" and "Little" examples of this genre. Mozart's forty-one pieces in this orchestral genre include "Jupiter."

ANSWER: **symphony**

<Classical Music>

15. Nietzsche ("NEE-chuh") mocked this thinker's gravitas ("GRAV-ih-toss") by saying that he believed "he and no one else was the true fulfiller... of the Delphic maxim 'know thyself.'" For 10 points each:

[10] Name this pre-Socratic thinker credited with inventing the dialectic. One of his statements is translated as "everything flows and nothing abides," reflecting his belief that "the only constant is change."

ANSWER: **Heraclitus** of Ephesus

[10] Hegel (“HAY-gull”) said that “there is no proposition of Heraclitus which I have not adopted” in the first lecture of a series on the philosophy of this concept. Hegel asserted that Africa did not have this concept because the world-spirit had not yet reached it.

ANSWER: **history** [accept *Lectures on the Philosophy of History*]

[10] The first of the three laws of dialectic by this Young Hegelian (“huh-GAIL-ee-in”) borrows from Heraclitus’s thought on the “unity and conflict” of opposites. He worked with Karl Marx on *The Communist Manifesto*.

ANSWER: Friedrich **Engels**

<Philosophy>

16. A tremendous galleon known as the *Adler*, or “Eagle,” of this city was ignobly repurposed for undertaking trade missions to Spain after not being sent on military campaigns against Sweden. For 10 points each:

[10] Name this “Free City.” This “Queen” of a certain medieval organization was considered one of the “Five Glories” of the Holy Roman Empire, along with Florence, Rome, Pisa, and Venice.

ANSWER: **Lübeck** [accept the Free City of **Lübeck**; accept the *Adler von Lübeck* or the Eagle of **Lübeck**]

[10] Lübeck served as the leading city of this trade confederation that dominated Northern Europe during the Middle Ages. This organization constructed trading posts known as *kontor* from London to Novgorod.

ANSWER: **Hanseatic** League [accept the *Deutsche Hanse* or the *Hansa Teutonica*; accept *De Hanze*]

[10] Early Hanseatic voyages often had to deal with the Victual Brothers, a guild of individuals in this profession. Charles Johnson’s *General History* of these people mentions their common usage of the Jolly Roger flag design.

ANSWER: **pirates** [accept *A General History of the Pyrates*; prompt on *privateers*]

<European History>

17. In a story by this author, a brandy-drinking “philosopher” dies of fright after a witch summons the title demon gnome. For 10 points each:

[10] Name this author of “The Viy” (“vee”). He described a man who believes he is the King of Spain in a story titled “Diary of a Madman.”

ANSWER: Nikolai **Gogol**

[10] After leaving his native Ukraine, Gogol moved to this former capital of Russia, where he set stories such as “Nevsky Prospect” and “The Overcoat.”

ANSWER: St. **Petersburg** [or Sankt-**Peterburg**; accept **Leningrad**]

[10] After asking for help to recover his overcoat, Akaky Akakievich is rudely dismissed by a nameless character identified only by this adjective. Towards the story’s end, that character identified by this adjective has his overcoat stolen by Akaky’s ghost.

ANSWER: **prominent** [accept rough synonyms such as **important** or **significant**; accept **prominent** personage; accept *znachitel’ny* or *znachitel’noye litso*]

<European Literature>

18. In circuit diagrams, these components are typically represented by coils. For 10 points each:

[10] Name these circuit components that store energy in a magnetic field. The namesake unit of these components is the henry.

ANSWER: **inductor** [accept **choke** or **reactor**; prompt on *coil*]

[10] Inductance manifests in two different ways. This form of inductance, in which two circuits are coupled by a magnetic field, is the basis for electrical transformers.

ANSWER: **mutual** inductance [or **mutual** induction]

[10] This law of electromagnetism states that the current induced in a circuit due to a change in the magnetic field will oppose the change. It explains the minus sign on the voltage drop across an inductor.

ANSWER: **Lenz**’s law

<Physics>

19. In a 1916 game, Cumberland College stopped one of this team's touchdowns with a human pyramid, but still lost to this school 222 to 0. For 10 points each:

[10] Name this ACC team who acquired coach Geoff Collins in 2018. This team still participates in the "Clean, Old-Fashioned Hate" with its in-state rival despite leaving the SEC in 1964.

ANSWER: **Georgia Tech** [or **Georgia Institute of Technology**; prompt on **GT** or **Tech**]

[10] Georgia Tech's Cumberland win occurred under this coach. Baker Mayfield and Kyler Murrey are two recent winners of a trophy named for this man, which is given to the most outstanding college football player each year.

ANSWER: John **Heisman** [accept **Heisman** Memorial Trophy]

[10] While Georgia Tech has never had a Heisman winner, the University of Georgia has had two, including this legendary Minnesota Vikings running back who competed for the U.S. men's bobsled team in 1992.

ANSWER: Herschel **Walker**

<CE/Geo/Other/Pop Culture>

20. This race was followed by a race whose members were children until they were a hundred years old and then died soon after reaching adulthood. For 10 points each:

[10] Name this first of the five races of man in Greek mythology. They lived in an idyllic ("eye-DILL-ick") age where no one worked and everyone was happy.

ANSWER: **Golden** Race [or Race of **Gold** or **chryseon genos**; accept answers indicating a race that lived during the **Golden Age**]

[10] As Hesiod ("HEE-see-id") recounted in his poem *Works and Days*, the Golden Race lived during the reign of this deity. In less peaceful stories, this king of the Titans castrated his father and swallowed his children.

ANSWER: **Kronos** [or **Cronus**]

[10] Although most mortals in Greek mythology are from the fourth race, the Race of Heroes, Apollonius of Rhodes wrote that this character was the last survivor of the Age of Bronze. This giant automaton guarded Crete until he was killed by Medea and the Argonauts.

ANSWER: **Talos**

<Mythology>