

Early Fall Tournament 2018: I guess Brexit really does mean Brexit

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Tossups

1. **An inept prime minister from this party was nicknamed “Billy the Leak” for his tendency to overshare with the media and was elected after his predecessor chose to resign after a tie vote. This party’s first leader dealt with an international incident after the defection of Vladimir Petrov. A member of this party got his country involved in the Vietnam War by declaring himself “all the way with LBJ” and likely (*) drowned while swimming in 1967. The longest-serving Prime Minister from this party often gave radio speeches extolling the “Forgotten People.” For its entire existence, this party of Robert Menzies (“MING-iss”) has been in a coalition with the agrarian National Party. For 10 points, name this right-wing Australian political party, the opponents of the Labor Party.**

ANSWER: **Liberal** Party of Australia

<DM, Other History>

2. **Ulric Neisser authored a namesake foundational text for a field of psychology described by this adjective. It’s not “negative,” but this adjective names a triad that models how views about the world, the self, and the future contribute to depression, which was created by Aaron Beck. The book *The Blank Slate* explains how biology and culture began bridging together in the 1950s, when the field of psychology witnessed a revolution named for this adjective, which grew out of critical responses to (*) behaviorism. Albert Ellis developed a type of therapy named for the word “behavioral” and this adjective. This adjective partially names a phenomenon in which an individual experiences discomfort when they hold two conflicting beliefs. For 10 points, name this adjective that names a branch of psychology that studies mental processes and modifies the word “dissonance” in a theory of Leon Festinger.**

ANSWER: **cognitive**

<BN, Social Science - Psychology>

3. **The protagonist of Charles Chesnutt’s *The House Behind the Cedars*, John Warwick, holds this profession. The preface to one novel quotes Charles Lamb saying that members of this profession “were, I suppose, children once.” Gavin Stevens holds this profession in Yoknapatawpha County. This is the profession of Ellis Burden while he was with his wife in *All The King’s Men*. Another member of this profession tells his son that he wants him to see that courage is something other than “a man with a (*) gun in his hand,” and sends his son to read to the morphine-addicted Mrs. DuBose. That member of this profession employs Calpurnia and lives next door to Boo Radley in Maycomb, Alabama. For 10 points, name this profession held by Atticus Finch.**

ANSWER: **lawyer** [or **law** or **attorney**; or The **Scholarly Attorney**; prompt on **district attorney** with “What’s the general profession?”]

<RR, Long Fiction>

4. **Quantum projection noise limits the highest-precision devices for measuring this quantity; those devices use optical lattices filled with strontium. Another type of device for measuring this quantity uses two vertically-oriented lasers to produce a fountain-like effect. That type of device for measuring this quantity relies on observing ground-state hyperfine transitions in extremely cold atoms of (*) cesium-133.** The zeroth component of a four-vector is said to be “like” this quantity because that component will transform like this scalar quantity does under the Lorentz transformations. For objects traveling at high speeds, this quantity is “dilated,” according to special relativity. For 10 points, name this quantity that Einstein unified with space.

ANSWER: time

<BB, Physics>

5. **The earliest surviving marble building in Rome is an unusually circular temple in the Forum Boarium dedicated to this figure. While on his way to visit Ceyx (“SEE-ix”) in Trachis, this figure killed the bloodthirsty Cynus; that episode was described in a poem attributed to Hesiod that was titled for one of this figure’s possessions. As punishment for killing Iphitus, this man spent three years in Lydia serving Queen (*) Omphale, who made him wear women’s clothing. After Hylas was kidnapped, this man left the Argonauts. Iolaus was another companion of this man, who redirected the rivers Alpheus and Peneus in order to clean the Augean stables. For 10 points, name this Greek hero who, after killing his children with Megara, was forced to serve Eurystheus by performing a dozen labors.**

ANSWER: Heracles [or Hercules]

<RC, Mythology>

6. **Ectopic tissue of the type found in this organ is found in struma ovarii. The Burch–Wartofsky score is used to diagnose a condition in which this organ is overactive. It’s not the heart, but a protein that stimulates this organ is measured after diagnosing atrial fibrillation. A complication of one disease of this organ is this organ’s namesake “storm”; that autoimmune disease is treated by PTU or methimazole and commonly causes exophthalmos, or (*) eye-popping. Graves’ disease affects this organ, which regulates serum calcium levels via the hormones PTH and calcitonin and produces other hormones controlling metabolic rate. Iodine is required for the function of, for 10 points, what gland in the neck that’s enlarged in goiters?**

ANSWER: thyroid

<Eric M, Biology>

7. **In a translation by Clive James, a character from this book states that “the pope pops” another character, while that character “pips the pope.” When first encountered, a character from this book is described as having a “mighty strength” that “gives you the link between his two lives.” An untranslatable chant spoken by Plutus in this book mentions a character’s name after the word “pape” (“pah-pay”). A set of illustrations by Gustave Doré for this book displays a character’s large wings, which are flapped to create gusts that (*) chill Caina, Antenora, Ptolomea, and Judecca, a region that he inhabits. That character in this book-length poem is depicted devouring Brutus, Cassius, and Judas when Virgil shows him to the narrator. For 10 points, name this poem in *terza rima*, the first in Dante’s *Divine Comedy*.**

ANSWER: *The Inferno* [prompt on *The Divine Comedy*]

<IJ, Poetry>

8. One of this choreographer's works was the last work revived by Rudolf Nureyev before his death. Another work choreographed by this man features a scene in which the main character defeats a giant spider, revealing a garden of dryads that is revealed to be a hallucination. An oft-excerpted scene from a work by this choreographer is a depiction of an opium-induced dream of the shade of Nikiya, the title character, dancing in the (*) Himalayas. With Lev Ivanov, this man choreographed a revival of a famous work that included an *apotheosis* dance after the suicides of Prince Siegfried and Odette. For 10 points, name this ballet master of the St. Petersburg Imperial Theaters who choreographed *Don Quixote*, *La Bayadère*, and a famous revival of *Swan Lake*.

ANSWER: Marius Ivanovich Petipa

<DM, Other Arts - Dance>

9. The loser of this war had an ill-prepared navy in part because its leader's Grand Tutor suggested cutting military funding. That leader of one side in this war attempted to fire the admiral of his Northern Fleet after receiving advice from his concubine's cousin. A decade before this war, Li Hongzhang ("lee hung-jong") made an agreement with the other side's prime minister to inform each other of troop movements, though this balance was broken following the Donghak ("dohng-hahk") peasant revolt. The winners in this war captured King Gojong before going on to defeat the Beiyang ("bay-yong") Fleet and capture (*) Pyongyang. This war was ended by the Treaty of Shimonoseki, which granted the Liaodong peninsula and Taiwan to its winners. For 10 points, name this conflict mostly fought in Korea by two nearby Asian powers.

ANSWER: First Sino-Japanese War [or Japan-Qing War, or War of Jiawu; prompt on Sino-Japanese War; do not accept "Second Sino-Japanese War"]

<TR, World History>

10. One book by this philosopher disputes Anaxagoras's claim that man is the most intelligent animal since he has hands. That book by this philosopher uses the example of a snake having no penis and no testicles to illustrate a view often summarized as "nature does nothing in vain." This philosopher criticized Democritus's view that necessity drives change in a passage that was the first to use the word *telos*. This philosopher's book *On the Parts of (*) Animals* is one of many to promulgate a view of nature based on finality, and which is an extension of this philosopher's belief that "formal," "material," "final," and "efficient" are the four causes of nature. For 10 points, name this ancient Greek philosopher who wrote *Physics*, which he followed up with his *Metaphysics*.

ANSWER: Aristotle

<IJ, Philosophy>

11. This man's harsh disciplinarian policies are examined in a book about his "legion," Alan Gaff's *Bayonets in the Wilderness*. William Hogeland used a nickname of this man to title his book *The Autumn of the Black Snake*, which describes how this man was put in charge after a military disaster known as "St. Clair's defeat." After this man's greatest victory, he was unjustly criticized by his bitter rival, James Wilkinson, who was passed over when this man was put in charge of the (*) Legion of the United States, America's first standing army. The Treaty of Greenville was signed after this general defeated the Shawnee chief Blue Jacket's Western Confederacy in 1794 near present-day Maumee, Ohio. For 10 points, what early American general won the Battle of Fallen Timbers and was nicknamed "Mad Anthony"?

ANSWER: "Mad" Anthony Wayne

<AH, American History>

12. A text sacred to this religion contains appropriately-named “short,” “medium,” and “long” prayers, and was amended with a series of 107 questions and answers. A leader of this religion documented its first century of existence in the book *God Passes By*. Followers of this religion who promote dissenting doctrine are labelled “covenant-breakers” by its central governing body. There are only two extant (*) photographs of this religion’s founder, who wrote works like the *Seven Valleys*. Translations of the scriptures of this religion are overseen by the Haifa-based Universal House of Justice. The Book of Certitude is a sacred text of, for 10 points, what religion whose adherents believe that figures like Buddha, Jesus, and Bahá’u’lláh are all Manifestations of God?

ANSWER: Bahá’í Faith

<DM, Religion>

13. This author critiqued a certain genre of writing for insisting that it is a human being’s “categorization alone which is real and cannot be transcended.” This author wrote about going to see the movie *This Land Is Mine* and throwing a pitcher of water at a waitress at the “American Diner” in one book. This author spoke about realizing that the American flag “has not pledged allegiance to you” in a debate with William F. Buckley. This author criticized the character of (*) Bigger Thomas for perpetuating racist stereotypes of African-Americans in “Everybody’s Protest Novel,” an essay in a collection named after a Richard Wright novel. This author’s essay “Letter to My Nephew” inspired Ta-Nehisi Coates’s *Between the World and Me*, and his words were used for the film *I Am Not Your Negro*. For 10 points, name this African-American author of *Notes of a Native Son* and *The Fire Next Time*.

ANSWER: James Baldwin (The genre in the lead-in is “protest novel.”)

<RR, Misc Literature>

14. This algorithm’s runtime can be improved in some cases by using the “bucket queues” data structure. Dial’s implementation is one way to write this algorithm, which can be thought of as applying the “reaching method” to successive approximations of a dynamic programming problem. Most pseudocode descriptions of this algorithm start by assigning a tentative value of infinity to the candidate solution set. When using a Fibonacci heap, this algorithm has a worst-case runtime of “big-O of (*) E plus V times log V.” The Bellman–Ford algorithm is a variant to this algorithm when there are negative edge cycles in the problem specification. For a starting node and every reachable end node, this algorithm finds the all the associated shortest paths. For 10 points, name this graph algorithm named for a Dutch computer scientist.

ANSWER: Dijkstra’s algorithm

<IJ, Other Science - Computer Science>

15. This instrument plays a solo “Interlude” midway through Britten’s *A Ceremony of Carols*. This instrument plays a cadenza right after the opening violin solo of Ravel’s orchestral *Tzigane* (“tsee-GAHN”). This instrument and flute accompany a string orchestra in Vaughan Williams’s *Fantasia on Greensleeves*. This is the first non-wind instrument to play in Debussy’s *Prelude to the Afternoon of a Faun*. This instrument accompanies the violin solos in Rimsky-Korsakov’s (*) *Scheherazade*. In *The Nutcracker*, this instrument has a long cadenza near the beginning of the “Waltz of the Flowers.” Players of this instrument play tremolos with their thumbs and are often asked to *glissando* over their entire six-and-a-half octave range. Seven pedals control the pitch of 47 strings in—for 10 points—what plucked instrument?

ANSWER: harps

<JR, Music>

16. In 2017, this country invented a statistic called the GNI* (“G-N-I-star”) that they use as a replacement for normal GDP metrics. A trial in this country involving the use of BEPS instruments like the “green jersey” ended with the payment of a 13-billion-euro fine. A whopping 20 percent of this country’s GDP is held by Apple, who have been criticized for using this country’s corporate structure to hide billions in (*) tax

payments. A recent bill in this country was passed with support of its openly gay head of government, Leo Varadkar, despite opposition from multiple Catholic organizations. For 10 points, name this country whose recently-passed 36th Amendment fully legalized abortion, with the support of voters in Dublin.

ANSWER: Republic of Ireland [do not accept or prompt on “Northern Ireland”]

<DM, Current Events>

17. A per-fluorinated derivative of this compound is used to prepare an activated ester for use in peptide synthesis. A polymer of formaldehyde and this compound was used to derive the early thermoplastic bakelite. This compound can be tri-nitrated to form picric acid, hydroxylated to form catechol, or carboxylated to form salicylic acid. The main industrial method for producing this substance also forms acetone as a byproduct and reacts oxygen with (*) cumene. This compound was known as “carbolic acid” during its use as an early antiseptic. This alcohol’s pKa of around 10 is very low due to resonance delocalization. For 10 points, name this compound comprised of a benzene ring with a hydroxyl substituent.

ANSWER: phenol [or hydroxybenzene or phenyl alcohol or carbolic acid before mentioned]

<EM, Chemistry>

18. The campaign of Grodno was fought between two powers supporting different contenders to this position, one of whom became the Duke of Lorraine after abdicating in 1736. Holders of this position detailed their reforms in a *pacta conventa* in a tradition started by the signer of the Henrician Articles, who gave up this position to intervene in the French Wars of Religion. A holder of this position led a large cavalry charge to end the Battle of Vienna. Members of the Swedish (*) Vasa dynasty held this position after a conflict over who would succeed Stephen Bathory. For over 200 years, holders of this position were elected by a national parliament called the Sejm. The Union of Lublin united this position and the Grand Duke of Lithuania under one crown. For 10 points, name this royal position whose holders ruled from Krakow and Warsaw.

ANSWER: King of Poland [accept Grand Duke of Lithuania until mentioned, since all kings clued in the question ruled as both]

<KS, European History>

19. A painting by this artist of a politician on his deathbed was sold to the subject’s daughter Louise, who likely destroyed it and all the engravings she could get her hands on. This artist depicted a naked 14-year-old boy dying on the ground in his unfinished painting *The Death of Joseph Bara*. A letter reading “Given that I am unhappy, I have a right to your help” is held on top of a green (*) cloth in a painting by this artist whose upper half consists of nothing more than a blank wall. In that painting by this artist, a man with a towel wrapped around his head slouches over in his bathtub, having just been stabbed by Charlotte Corday. For 10 points, name this painter of a trilogy dedicated to martyrs of the French Revolution, including *The Death of Marat*.

ANSWER: Jacques-Louis David

<WN, Painting>

20. This novel’s opening paragraph notes that “we’ve got to live, no matter how many skies have fallen” after stating that “ours is essentially a tragic age, so we refuse to take it tragically.” This novel emphasizes the class divide between its main setting and the nearby town of Tevershall. Philip Larkin’s poem “Annus Mirabilis” mentions this novel just before mentioning “the Beatles’ first LP.” This novel’s protagonist visits (*) Venice with her sister Hilda, allowing her to claim that she had a love affair there. In this novel, Clifford’s paralysis from the waist down contributes to Constance’s decision to have an affair with Oliver Mellors. For 10 points, an obscenity trial against Penguin Books resulted from the publication of what D. H. Lawrence novel?

ANSWER: Lady Chatterley’s Lover

<WN, Long Fiction>

Bonuses

1. This essay posits that “the test of a first-rate intelligence is the ability to hold two opposed ideas in the mind at the same time, and still retain the ability to function.” For 10 points each:

[10] Name this essay that begins “of course all life is a process of breaking down,” written about the author’s mental breakdown at 39. Part II of this essay, titled “Pasting It Together,” details how the author began to recover.

ANSWER: “The **Crack-Up**”

[10] This author wrote “The Crack-Up,” as well as the novels *This Side of Paradise* and *Tender is the Night*.

ANSWER: Francis Scott **Fitzgerald**

[10] This poet delivered a not-wholly-positive speech at Fitzgerald’s funeral, calling him a horse’s ass and an “old son-of-a-bitch,” in keeping with her reputation as a member of the “vicious circle” of the Algonquin Round Table.

ANSWER: Dorothy **Parker**

<RR, Misc Literature>

2. Answer the following about the construction of brass instruments, for 10 points each.

[10] This man helped develop a namesake tuba-like instrument designed for marching bands. This “March King” also wrote “The Stars and Stripes Forever.”

ANSWER: John Philip **Sousa** [accept **sousaphone**]

[10] Like every brass instrument, sousaphones come with these devices that get rid of condensation from the player’s breath. Brass players are often seen “emptying” their instruments by using these devices.

ANSWER: **spit valves** [or **water keys** or **water valves**]

[10] Although he didn’t invent the spit valve, this Belgian instrument maker did pioneer the use of valves in brass instruments, creating the ancestor of the modern flugelhorn in the 1830s.

ANSWER: Adolphe **Sax** [or Antoine-Joseph **Sax**] (Yes, of saxophone fame.)

<JR, Music>

3. Henry Cavendish used a torsion balance to experimentally determine the value of this constant. For 10 points each:

[10] Name this constant that appears in Newton’s law describing the attractive interaction between two point masses.

ANSWER: **big G** [or the universal **gravitational constant**; prompt on **G**; do not accept or prompt on “little g”]

[10] Precise values of Planck’s constant and the charge of an electron can be measured using the quantum metrology triangle. One “leg” of the triangle makes measurements using a version of this effect, which creates a voltage difference in a current-carrying conductor exposed to a magnetic field perpendicular to the current.

ANSWER: **Hall** effect [accept **quantum Hall** effect]

[10] In a 1937 *Nature* paper, this physicist argued that the fundamental constants of physics might not actually be constant, and argued for a cosmology where big G and the fine structure constant are inversely proportional to the age of the universe.

ANSWER: Paul **Dirac** [accept **Dirac** large numbers hypothesis]

<BB, Physics>

4. Zymology is the study of this process. For 10 points each:

[10] Name this process that is used to create many *chinmi* dishes in Japanese cuisine. Shiokara is made by doing this to the viscera and flesh of seafood.

ANSWER: **fermentation** [accept word forms]

[10] The *chinmi* dish Inago no Tsukudani consists of locusts that have been marinated in sugar and this liquid made from a certain type of fermented bean. This salty sauce is the best known product of Kikkoman.

ANSWER: **soy** sauce [or *shōyu*]

[10] This stinky Japanese “dish” consisting of soybeans fermented by a namesake *bacillus* bacteria is an example of a *chinmi* dish. It has a sticky, stringy texture and is often eaten as a standalone meal.

ANSWER: **nattō**

<IJ, Other Academic>

5. This man wrote a 1919 exposé of American newspapers titled *The Brass Check* that took William Randolph Hearst’s papers to task for circulating “yellow journalism.” For 10 points each:

[10] Name this man whose failed campaign for a 1934 gubernatorial nomination at the head of the movement End Poverty in California, or EPIC, was chronicled in his book *I, Candidate for Governor: And How I Got Licked*.

ANSWER: Upton **Sinclair** [or Upton Beall **Sinclair** Jr.]

[10] Sinclair said that he “aimed at the public’s heart and by accident I hit it in the stomach” after his publication of this book about terrible work and health conditions in Chicago meat processing plants.

ANSWER: *The **Jungle***

[10] Sinclair’s book *The Flivver King* describes the rise of this American industrialist, including his decision to implement five-dollar daily wages and to create a Sociological Department that offered financial aid to his employees.

ANSWER: Henry **Ford**

<AH, American History>

6. One of this man’s books seeks the basic “structures” of stories by analyzing Balzac’s story “Zambinella.” For 10 points each:

[10] Name this French post-structuralist and author of *S/Z*. He analyzed the structures of “modern myths” in his book *Mythologies*.

ANSWER: Roland **Barthes** (“roh-LAWN BART”)

[10] One of Barthes’s essays proclaims the “death of” this kind of person, which results in “the birth of the reader.” In literary theory, the intentional fallacy occurs when the thoughts of this person are given undue weight in analyzing a text.

ANSWER: **author** [or *The **Death of the Author***]

[10] This autobiography by Barthes claims that the critic needs to be interrogated like a text. It begins with the author “indulging himself” by showing the reader a set of pictures that he later analyzes.

ANSWER: **Roland Barthes** by **Roland Barthes** [or **Roland Barthes**]

<IJ, Philosophy>

7. When a ridge or mountain is surrounded by one of these structures, it is known as a nunatak. For 10 points each:

[10] Name these structures that contain a large portion of the Earth's fresh water. Leftover debris from their movements form moraines.

ANSWER: **glaciers**

[10] The most recent period of mass glacial movement in North America is commonly named for this US state. Most of the Driftless Area, a region of little glaciation, lies in this state.

ANSWER: **Wisconsin**

[10] The Driftless Area is home to many regions that exhibit this landscape, formed from dissolving limestone. Regions of this type are often home to underground caves.

ANSWER: **karst** topography

<KH, Other Science - Earth Science>

8. This man lost a controversial 1990 election to Fernando Collor de Melo and this leader of the Workers' Party was eventually elected president on his fourth attempt. For 10 points each:

[10] Name this former world leader who was succeeded by Dilma Rousseff in 2011. In 2018, he was arrested on corruption charges and later dropped out of his country's October presidential elections.

ANSWER: Luiz Inácio **Lula** da Silva

[10] Lula served as president of this South American country which has recently been rocked by corruption scandals related to Operation Car Wash.

ANSWER: **Brazil** [or Federative Republic of **Brazil**]

[10] Lula's social reforms included this program which sends cash transfers to poor families conditioned on their children's school attendance.

ANSWER: **Bolsa Família** [or **Family Allowance**]

<TR, World History>

9. In an essay for his web project "The Year of Magical Reading," the critic Ted Gioia claims that this author is the first "magical realist." For 10 points each:

[10] Name this author who was put on trial for being a magician, an episode described in his *A Discourse on Magic*. He wrote a novel in which Lucius accidentally transforms himself into a donkey, *The Golden Ass*.

ANSWER: Lucius **Apuleius** Madaurensis

[10] This man translated Apuleius's *The Golden Ass*, and defended his "sedate" English translation as a way of conveying Apuleius's "odd" Latin prose. His other Roman-inspired works include the novel *I, Claudius*.

ANSWER: Robert **Graves**

[10] Graves praised Apuleius for depicting the "progress of the rational soul toward intellectual love" in an extended sequence in *The Golden Ass* that centers on these two characters.

ANSWER: **Cupid** AND **Psyche** [accept answers in either order; accept **Eros** in place of Psyche]

<IJ, Long Fiction>

10. You want to become a Christian theologian when you grow up. Answer the following about some things you might study, for 10 points each.

[10] As a budding hamartiology student, your primary area of focus would be this concept. The seven deadly examples of this concept include lust and gluttony.

ANSWER: **sin**

[10] Sin starts to bore you, so you instead settle on this subfield of Christian theology that is concerned with the end of the world.

ANSWER: **eschatology**

[10] You eventually take great interest in the writings of Luis del Alcázar. You therefore align yourself with this view that some of the apocalyptic events prophesied (“PROFF-uh-sighed”) in the Bible have already occurred.

ANSWER: partial **preterism**

<DM, Religion>

11. This writer criticized the American education system in *The House of Intellect* and worked with Lionel Trilling to design his university’s Great Books curriculum. For 10 points each:

[10] Name this French-American historian who summarized the last 500 years of Western history in his book *From Dawn to Decadence*.

ANSWER: Jacques **Barzun**

[10] Barzun studied and taught at this New York university whose other 20th-century historians include Eric Foner, the author of *Reconstruction: America’s Unfinished Revolution*. This university administers the Pulitzer Prize.

ANSWER: **Columbia** University

[10] Foner won the Pulitzer Prize for History for *The Fiery Trial*, a history of this conflict. Other books about this conflict include James McPherson’s *Battle Cry of Freedom* and Doris Kearns Goodwin’s *Team of Rivals*.

ANSWER: American **Civil War**

<TR, Other History>

12. This type of testing is used to determine the number of genes in a biochemical pathway. For 10 points each:

[10] Name this type of genetic test in which two mutant strains with the same phenotype are crossed to determine whether they produce wild-type offspring.

ANSWER: **complementation** testing [do NOT accept “complement” or “complement testing”]

[10] A mutation in tyrosinase, which is the first enzyme in the pathway that creates melanin, results in this condition in which individuals lack skin pigment.

ANSWER: **albinism**

[10] Sydney Brenner used the EMS to create around 250 mutants of this organism, which he then arranged into complementation groups. Mutations of this organism include several called *unc*.

ANSWER: **C. elegans** [or **Caenorhabditis elegans**]

<Eric M, Biology>

13. Dutch orthography uses one of these things combining the letters I and J. For 10 points each.

[10] Name these combinations of two letters used to represent a single sound or a combination of sounds different from those represented by the letters individually. Unlike in ligatures, the two letters aren't fused together.

ANSWER: **digraphs**

[10] The Dutch word for "talk," *praat* ("praht"), names a software package commonly used in this linguistic subfield. Unlike phonology, this subfield deals with the physical properties of speech sounds.

ANSWER: **phonetics** [do not accept "phonics"]

[10] In 2004, Hagoort ("hah-HORT") et al. measured N400 ERPs ("E-R-P's") in response to sentences like "The Dutch trains are white and very crowded" or "The Dutch trains are sour and very crowded." ERP, which refers to a brain response triggered by a specific stimulus, stands for this phrase.

ANSWER: **event-related potential**

<WN, Social Science - Linguistics>

14. A "book" named for this dynasty was written by the author Ban Gu, who was one of the developers of the genre of *fu* poetic prose that became popular during this dynasty. For 10 points each:

[10] Name this dynasty. During its reign, the poets Sima Xiangru ("suh-mah sh'yong-roo") and Su Wu formalized the tenets of Chinese verse that would be used by subsequent poets.

ANSWER: **Han** Dynasty

[10] Unusually for Chinese poetry, the *fu* genre makes use of this technique in its prose. In English verse, the "sight" form of this technique is often used at the end of poetic lines, such as in the words "again" and "pain."

ANSWER: **rhyme** [or sight **rhyme**]

[10] One of the most important Han Dynasty collections is a collection of this many poems all written by anonymous authors. A book by Octavio Paz examines Wang Wei's poetry in this many ways.

ANSWER: **nineteen** [or **19**]

<IJ, Poetry>

15. Two men lurk in the shadows behind two of these people standing on a balcony in a painting made around 1810. For 10 points each:

[10] Name this Spanish term for elaborately-dressed lower class women. One of these women reclines on a couch in a pair of paintings, one of which depicts her fully dressed and one of which depicts her naked.

ANSWER: **majas**

[10] *The Naked Maja* ("MAH-hah") and *The Clothed Maja* are by this Spanish artist of *The Third of May, 1808*.

ANSWER: Francisco (José de) **Goya** (y Lucientes)

[10] Goya depicted himself asleep on a desk surrounded by bats and owls in this etching from his series *Los Caprichos*.

ANSWER: *The **Sleep of Reason Produces Monsters*** [or *El **sueño de la razón produce monstruos***]

<WN, Painting>

16. Answer the following about artificial synthesis of small molecules, for 10 points each.

[10] One open field of study is the creation of a synthetic method to perform this process with comparable efficiency to biological systems, which use nitrogenase to perform this process of converting nitrogen gas to ammonia or other useful nitrogenous compounds.

ANSWER: **nitrogen fixation**

[10] “Small molecules” and “biologics” are types of these compounds, whose “rational design” can be performed via ligand-based or structure-based approaches. The effects and metabolism of these compounds are studied in pharmacology.

ANSWER: **drugs** [or **medications**; prompt on **pharmaceuticals**]

[10] This industrial process takes hydrogen and carbon monoxide gas as inputs and reacts them at high temperatures and pressures with metal catalysts to produce small hydrocarbons.

ANSWER: **Fischer–Tropsch** process

<BB, Chemistry>

17. Medieval students of canon law at this university include Thomas Becket and Rodrigo Borgia. For 10 points each:

[10] Name this Italian institution, the oldest continuously-active university in the world.

ANSWER: University of **Bologna** [or Università di **Bologna**; or **UNIBO**]

[10] One of the University of Bologna’s most notable alumni is this Polish polymath who studied law and astronomy there before publishing his heliocentric theory just before his death.

ANSWER: Nicolaus **Copernicus** [or Mikołaj **Kopernik**]

[10] Another student at Bologna was this doctor and occultist who publicly burned the works of Galen and Aristotle and is sometimes called the “father of toxicology” for his rejection of the theory of humors.

ANSWER: **Paracelsus** [or Philippus Aureolus Theophrastus Bombastus von **Hohenheim**]

<TR, European History>

18. An example of this architect’s penchant for openly displaying the weight of his buildings is the clearly visible reinforced concrete of the Richards Medical Research Laboratory. For 10 points each:

[10] Name this American architect. A shallow stream of water runs down the middle of a plaza separating two symmetric concrete buildings at the Salk Institute in La Jolla (“la hoyá”) designed by this man.

ANSWER: Louis (Isadore) **Kahn** [or Itze-Leib **Schmuelowsky**]

[10] A book about a Kahn-designed museum building in this state that consists of 16 parallel vaults is titled *Light is the Theme*. A building in this state that houses 14 Rothko canvases is shaped like an octagon inscribed in a Greek cross.

ANSWER: **Texas**

[10] Kahn called the three concentric areas that make up the design for Phillips Exeter Academy’s building of this kind “doughnuts.” Two iconic stone lions sit in front of one of these buildings in New York City.

ANSWER: **library**

<YFL, Other Arts - Architecture>

19. This play concludes with Aricie (“ah-ree-SEE”) being adopted by Thésée (“tay-ZAY”), or Theseus, since he had earlier invoked Neptune to curse his son. For 10 points each:

[10] Identify this 17th-century adaptation of a work by Euripides in which the title stepmother admits her love to her stepson Hippolyte (“ee-po-LEET”), or Hippolytus.

ANSWER: **Phèdre** (“FED-ruh”)

[10] This French author wrote the historical drama *Phèdre*. His other plays inspired by the classics include *Britannicus*.

ANSWER: Jean **Racine**

[10] Racine’s tragedy *Phèdre* was written in this French verse form, which consists of 12-syllable lines with a “caesura” (“suh-ZHUR-uh”), or break, that divides up the line itself.

ANSWER: **alexandrines**

<IJ, Drama>

20. This man’s wife agrees to sleep for 14 years so that the goddess Nidra will allow this man to remain continuously awake. For 10 points each:

[10] Name this husband of Urmila, an avatar of Shesha who successfully killed Indrajit when the three weapons of the Trimurti refuse to touch him.

ANSWER: **Lakshmana** [accept **Lakhan** or **Saumitra** or **Ramanuja** or **Bharatanuja**]

[10] Lakshmana voluntarily goes into exile with his brother, a prince of Ayodhya who is the title character of this Hindu epic.

ANSWER: the **Ramayana** [or **Ramayanam**]

[10] The *Ramayana* is generally attributed to this Hindu sage, who supposedly taught Rama’s sons Kusha and Lava the story.

ANSWER: **Valmiki**

<RC, Mythology>