

2021 ACF Nationals

Packet 3 by the Editors

Edited by Matt Bollinger, Jordan Brownstein, Andrew Hart, Ike Jose, Jack Mehr, Eric Mukherjee, Derek So, Jerry Vinokurov, Ryan Westbrook, and Jennie Yang

Tossups

1. An employee of this company, Arch Patton, conducted a survey which inspired the meteoric rise in executive compensation after World War II. Robert Waterman and Tom Peters popularized this company's namesake 7S model of management in the book *In Search of Excellence*. In 2007, this company published an influential global greenhouse gas abatement cost curve which led to the use of marginal abatement cost curves in climate policy. Enron was founded by a longtime employee of this company, Jeff Skilling. After the assassination of Jamal Khashoggi, the *New York Times* reported that this company had identified dissidents on Twitter who were subsequently repressed by Saudi Arabia. For 10 points, name this massively influential consulting firm whose work helping Canadian grocery stores fix bread prices caused a scandal for its former employee Pete Buttigieg.

ANSWER: **McKinsey** & Company

2. A 2016 Anne Curzan book examines this position's history and builds on work by Deborah Cameron that expands this position to a broader notion of "hygiene." According to Jean Aitchison, the negative feelings that lead people to adopt this position can be explained by metaphors involving "damp spoons," "crumbling castles," and "infectious diseases." In a 2001 volume about "social factors," the appeal of this position is linked to belief in a fall from a past state of perfection in the "golden age hypothesis." A Henry Hitchings book about "wars" describes how adherents to this more conservative position were outraged by the publication of the 1961 *Webster's Third New International Dictionary* and its entry for "ain't." Adherence to existing rules and resistance to language change are key features of, for 10 points, what linguistic position contrasted with descriptivism?

ANSWER: linguistic **prescriptivism** [or linguistic **prescriptivists**; or linguistic **prescription**; or **prescriptive** grammar; accept linguistic **purism** or **purists** or linguistic **protectionism** or **protectionists**]

3. *Description acceptable*. Beckwith's group at Novartis showed that JTE-607 inhibits one protein that triggers this process. In yeast, a factor that triggers this process, CFI, competes with Npl3 for binding sites. A gene involved in this process is often fused to PDGFRA in clonal eosinophilia; that gene is FIP1L1. Expression vectors often use a signal for this process from bovine growth hormone or the SV40 late element. It's not clotting, but the prothrombin G20210A mutation occurs in a recognition site critical for this process. Alternative signals for this process allow B-cells to express either membrane-bound or secreted antibodies. This process requires CPSF to recruit CstF, which recognizes a GU-rich element downstream of a cleavage site. This process occurs almost simultaneously with 5' ("five-prime") capping and splicing. For 10 points, name this process in which a string of a particular nucleotide is added to the 3' ("three-prime") end of mRNA.

ANSWER: **polyadenylation** [accept anything that mentions **synthesizing** or **adding a poly-A tail**; prompt on **cleavage**, or **cleaving mRNA**, or **mRNA processing**, or 3' ("three prime") **RNA processing**, or 3' **processing**; do not accept or prompt on "splicing"]

4. One writer from this country claims his opponents are an insular group of elites like the “sons of the sun” that ruled the Incas in his tract *Our Differences*. After a prisoner in this country was flogged 25 times for failing to doff his cap to a general, a jury trial acquitted the lady who snuck into that general’s office with a Bulldog pistol hidden in her cloak. That woman was tutored by a man from this country who wrote the 26-paragraph manifesto *Catechism of a Revolutionary*. The “Going to the People” campaign was endorsed by this country’s Narodism (“nay-ROAD-ism”) movement, which led to the “Trial of the 193.” Another man who authored *The Development of the Monist View of History* organized a group in this country called the Black Repartition. For 10 points, name this country where the “Land and Liberty” faction led by Mark Natanson eventually spawned the terrorists of the People’s Will.

ANSWER: **Russia**

5. In a novel by this author, the narrator meets a man digging around a lemon tree with grafted branches that produce oranges. In a story by this author, the protagonist sticks a finger down his throat to vomit up the title fruit after witnessing his grandfather extort his neighbor Masood. A novella by this writer begins with a milkseller cheating Amna, who is shocked by the news that a village idiot with two teeth is marrying the beautiful Nima. This author set many of his works in the village of Wad Hamid, including the story “A Handful of Dates” and the novella *The Wedding of Zein*. In a novel by this author, Isabella Seymour, Sheila Greenwood, and Ann Hammond all commit suicide after affairs with an African-born economist, who proclaims, “Othello is a lie” while recounting his murder of his wife Jean Morris. For 10 points, name this Sudanese author of *Season of Migration to the North*.

ANSWER: Tayeb **Salih**

6. In a film by this director, a shot of a man slumped over sobbing at the bottom of a staircase is followed by one of a man violently washing his hair in the shower. In another film by this director, a man goes ice skating with a girl who enjoys making mechanical toy rabbits. A shot of pink smoke above a skyline is the only color in a film by this director in which a rigged briefcase is thrown out of a bathroom window during a climactic train sequence. The final act of a film by this director follows a criminal through noisy bars and a drug den before he’s confronted by a shoe executive in prison. A character in one of this director’s films who was inspired by Ivan Ilyich builds a playground in a slum and ends the film singing “The Gondola Song” on a snowy swing set after a diagnosis of stomach cancer. For 10 points, name this director of *High and Low* and *Ikiru* who also directed many films about samurai.

ANSWER: Akira **Kurosawa**

7. Bernstein, Frieman, Kruskal, and Kulsrud developed this formalism’s namesake “energy principle” to classify instabilities that arise in its application. The double adiabatic equations for this formalism are derivable for frequencies much smaller than the critical frequency by summing the currents over the particle drifts and adding the diamagnetic current. This formalism’s equation of motion is given as the convective derivative of the velocity field equals current density crossed with a field vector minus the pressure gradient. In the limit of perfect conductivity, this formalism’s ideal variant results in “frozen” field lines that co-move with the medium. This formalism is less accurate than the two-fluid or the Vlasov formalisms, and is derivable from the latter by taking moments of the Vlasov equation. For 10 points, identify this plasma physics formalism that treats a plasma as a conducting fluid.

ANSWER: **magnetohydrodynamics**

8. R.B. Kitaj painted the art historian Michael Podro sitting in a traincar in the pose of this painting's subject. The Socinian theologian Jonas Schlichting may have inspired this painting, whose background depicts a citadel on a hill that some scholars believe is the Temple of Solomon. In 1984, Josua Bruyn started a dispute by attributing this painting to Willem Drost. Scholars have proposed Tamerlane, David, and Jonathan as possible identities of this Frick Collection painting's subject, who carries a quiver of arrows and a warhammer. In "Having a Coke with You," Frank O'Hara puts the addressee above any portrait in the world except for this one. The subject of this painting, who wears an exotic fur-fringed red cap, was identified as a *Lisowczyk* cavalryman by Stanislas Augustus. For 10 points, name this equestrian portrait generally attributed to Rembrandt and named for its subject's apparent nationality.

ANSWER: *The Polish Rider*

9. One story says this ruler's grandson gave him a cage with a lion that ate any animal who joined it, other than a goat. This man's wife was such a good hunter that she needed only six musket balls to kill four tigers while riding an elephant, and his court painter depicted her loading a musket. She also built a mausoleum called the "jewel box" for her father, who served as vizier for this ruler and was called Itmad-ud-Daula or "Pillar of the State." This ruler's court was written about by ambassador Thomas Roe, who failed to convince him to accept the British East India Company. His wife Nur Jahan ruled as co-emperor with him, since he was an opium-addicted drunk. This painting connoisseur, who put down a revolt by Prince Khurram near the end of his reign, was called the "World Seizer." For 10 points, name this king who ruled the Mughal Empire between Akbar the Great and Shah Jahan.

ANSWER: Jahangir [or Jehangir; or Nur-ud-din Muhammad Salim]

10. Columbia professor Wael Hallaq rose to prominence with a 1984 article challenging Joseph Schacht's claims about the history of this practice. In a *hadith*, Muhammad asserts that performing this practice correctly earns two rewards in heaven, and performing it incorrectly still earns one reward. The Akhbari School of Shi'a Islam formed in response to the importance placed on this practice by followers of Allamah al-Hilli. A *muqallid* is not permitted to engage in this activity, and engages in *taqlid* instead. The Arabic word for "strenuous exertion" provides the name for this activity, which may be practiced through the method of analogy called *qiyas*. Scholars who believe this practice faded in the 10th century refer to that event as the "closing of the gates" of this practice. For 10 points, name this practice in Islamic jurisprudence of applying independent reasoning to determine the law.

ANSWER: ijtihad [prompt on reasoning, or usul al-fiqh, or jurisprudence; prompt on qiyas or analogy before "analogy" is read; do not accept "jihad"]

11. *Description acceptable.* In a book on the novel in which these characters appear, Matthew Bruccoli claims that since their names are inscribed under the heading of "This schedule is in effect, July 5th, 1922," the novel confers the impression of "historical truth." Some of these characters have their names taken from those of English painters, such as a family called the Mulreadys and an argumentative bum called Ety. These characters, whose names are recorded within "empty spaces" of a "time-table" that is now "disintegrating at the folds," include Willie Voltaire and Stonewall Jackson Abrahams. These characters frequently listen to a piece by Vladimir Tostoff called "Jazz History of the World," and one of them nicknamed "Owl-Eyes" is the only one that attends the title character's funeral. For 10 points, what group of socialites attend the title's character's gatherings in a novel by F. Scott Fitzgerald?

ANSWER: party-goers of Gatsby's parties [accept synonyms for party-goers such as party guests; accept socialites before "socialites" is mentioned; prompt on people who visit Jay Gatsby; prompt on rich people in *The Great Gatsby*; prompt on minor characters in *The Great Gatsby*]

12. In a book from this decade, one philosopher attacked another book from this decade for offering an ideal “good news” instead of an empirical “good news” in its “neo-evangelistic” rhetoric. During this decade, a philosopher responded to an article describing him differently in its French and English versions with an essay stating that its authors “Aren’t Serious.” That argument from this decade began with the publication of Paul Gross and Norman Levitt’s book *Higher Superstition*, which inspired another author to publish a controversial paper in the journal *Social Text*. In this decade, a book introduced “hauntology” and also criticized another book from this decade for viewing “liberal democracy” as a telos. For 10 points, name this decade during which Derrida responded to the Sokal hoax and used *Spectres of Marx* to slam Francis Fukuyama’s *The End of History and the Last Man*.  
ANSWER: the 1990s

13. A pamphlet by this character about the prisons of the Spanish Inquisition is discovered mislaid in a copy of Stevinus. Because this character is a critic of Phutatorius’ treatise *On Retaining Concubines*, Phutatorius blames him for the red-hot chestnut that rolls into his open fly at dinner. Due to his penchant for biting jokes, this character’s neighbors suspect his motives for paying for a midwife’s license written by Didius. This character hires La Fleur as a guide in another novel, which concludes mid-sentence, possibly just as this character gropes a French chambermaid. This purported narrator of the *Journal to Eliza* encounters “Smelfungus,” a parody of Tobias Smollett, in the travel book *A Sentimental Journey Through France and Italy*. For 10 points, name this clergyman from *Tristram Shandy*, a stand-in for Laurence Sterne, who took this character’s name from a court jester in *Hamlet*.  
ANSWER: Parson Yorick

14. This activist wrote a short piece called “Reflections on Negroes” after a theater asked that a work about Zamore and Mirsa include “savage Indians” instead of black people. At this reformer’s public trial, passages from a fragmentary work called “The Tyrant Dethroned” were read aloud, leading to a charge of sedition. This writer adopted the persona of an “Aerial Traveller” to urge for a plebiscite between three different types of government in a poster titled “The Three Urns.” A play by this writer called *The Happy Shipwreck* drew on the thought of Marquis de Condorcet, and was one of the first pro-abolitionist pieces in France. A tract by this writer that begins “Man, are you capable of being fair?” was criticized for its royalist sympathies, and led to her eventual execution. For 10 points, name this French woman who wrote the *Declaration of the Rights of Woman and the Female Citizen*.  
ANSWER: Olympe de Gouges [or Marie Gouze]

15. Throughout the “Crucifixus” section of a mass by this composer, the entire chorus sings in unison on repeated E’s for 51 measures. In a requiem by this composer, the “Dies Irae” opens with the brass blasting several G’s in unison, followed by a stroke of a tam-tam. This composer authored a *Treatise on Counterpoint and Fugue* while director of the Paris Conservatory and dedicated a *Litanie della Vergine* and a *Missa solennis* in D minor to Prince Esterházy. This composer wrote a D minor requiem for his own funeral, scoring it for men’s chorus only to appease religious authorities, who disapproved of female voices in one of this composer’s earlier requiem masses. That piece, written in commemoration of Louis XVI’s (“the sixteenth’s”) death, is this composer’s Requiem in C minor. For 10 points, name this Italian-born composer of the opera *Medee*, whom Beethoven regarded as his greatest contemporary.  
ANSWER: Luigi Cherubini [or Marie-Louis-Charles-Zénobi-Salvador Cherubini]

16. An algorithm created to solve this equation breaks the Buchmann-Williams exchange protocol. If the generalized Riemann hypothesis holds, Lenstra developed a randomized algorithm to approximate the regulator, which is the log of a solution to this equation. Hallgren's algorithm uses quantum Fourier transforms over abelian groups to solve this equation; one step of that algorithm finds units of a quadratic extension of  $Z$ . Inputting a 15-digit number into this equation is used to solve Archimedes' Cattle Problem. Lagrange proved that a method of solving this equation that scales down by  $k$  and repeatedly composes two triples together always terminates; that is the Chakravala method. Solutions to this equation are used to approximate square roots via continued fractions. For 10 points, name this equation with the form " $x$  squared minus  $D$  times  $y$  squared equals 1," a Diophantine equation named for a Brit. ANSWER: **Pell's** equation (The 15 digit number is 410286423278424.)

17. In a novel, this type of character calls the protagonist the "Chevalier de Faublas ("fo-BLAH")" for dishonestly promising to marry his German landlady to avoid paying rent. The chocolate magnate Hermann becomes obsessed with a "false" character of this type, named Felix, in the novel *Despair*. In a novel titled for this type of character, the protagonist decides to get out more on the advice of his doctor, Christian Ivanovich Rutenspitz, but embarrasses himself at a birthday party for Klara Olsufyevna. Vladimir Nabokov called a novella about this type of character a "perfect work of art" and exempted it from his general censure of its author's works. In that novella, the paranoid office-worker Yakov Petrovich Golyadkin is tormented by one of these characters, a more outgoing coworker he calls "Golyadkin Jr." For 10 points, name this type of lookalike that titles a fantasy-tinged novella by Fyodor Dostoyevsky.

ANSWER: a **double** [or a **doppelganger**; accept a **lookalike** until read; accept *The Double* or *Dvoynik*]

18. In one story of these people, an archer is forced to live in the dirt as a marmot after he fails to shoot seven suns. At age three, a hero of these people used the Aram spear to avenge his homeland of Bomba, when it was captured by a "mannngus" or many-headed monster. The toli, a mirror polished on one side, was sacred to these people. Their oral tales are known as Uliger, and their pantheon includes a sky god in the form of a goose who presided over 99 similar gods divided into "white" and "black" groups. William of Rubruck wrote that their souls were in the crowns of their heads. A river was diverted over the grave of one of these people's leaders to hide its location at the sacred Burkhan Khaldun. The Tibetans share the myth of King Gesar with these people, whose ruler rose against his blood brother Jamukha as told in their *Secret History*. For 10 points, name these people, who mythologized Genghis Khan.

ANSWER: **Mongols** [or **Mongolians**; accept the **Buryats** or **Kalmyks**]

19. This value appears on the y-axis, and a measure of solubility appears on the x-axis, in a diagram that shows the Golden Triangle. The  $IC_{50}$  is divided by this quantity in order to find the binding efficiency index, which can replace the ligand efficiency. The penetration limit is the lower acceptable value of this quantity in one assay. A limit of 500 for this quantity is one of Lipinski's rules of druglikeness. In one technique, the log of this value is plotted against  $V_{sub e}$  over  $V_{sub o}$ ; that technique can be calibrated using thyroglobulin, myoglobulin, and carbonic anhydrase. Sepharose resins are rated by their range for this quantity, and molecules with a larger value of this quantity pass more quickly through the column in gel permeation chromatography. Along with isoelectric point, proteins are separated by this quantity in electrophoresis. For 10 points, name this quantity measured in kilodaltons.

ANSWER: **molecular weight** [or **molar mass**; or **molecular mass**; or number-average **molecular weight**; or weight-average **molecular weight**; or **molecular weight** distribution; prompt on **M**, or **MW**, or **mass**, or **weight**, or **size**, or **length**]

20. Members of this family founded a business that frequently published essays on a communal child raising system called "Pantarchy" by Stephen Pearl Andrews. Zula, a member of this family, co-published the eugenics magazine *Humanitarian*. A member of this family holds a placard with the slogan "Be Saved by Free Love" in a Thomas Nast cartoon titled "Get Thee Behind me, (Mrs.) Satan!" The "Bewitching Brokers" of this family started a business that led Manhattan pedestrians to press their faces against a glass façade; that Wall Street firm was financed by Cornelius Vanderbilt. This family founded a newspaper that reported an affair between Theodore Tilton's wife and Henry Ward Beecher. A member of this family secured the nomination of the Equal Rights Party alongside running mate Frederick Douglas. For 10 points, name this family that included Victoria, the first woman to run for President.  
ANSWER: **Woodhull** [accept **Claflin** or **Martin**] (Victoria Woodhull's sister was Tennessee Celeste Claflin.)

## Bonuses

1. Name these philosophers who wrote about “mixed governments,” which combine the political structures of two or more other governments, for 10 points each.

[10] In his magnum opus, this philosopher argues that “mixed principalities” are more difficult to manage than hereditary principalities. That book by him asks whether it is better for a ruler to be “loved than feared.”

ANSWER: Niccolo **Machiavelli**

[10] This Italian commended Venice’s “mixed constitution” and suggested Florence adopt the same kind of government. His rediscovery of Lucretius’s *De Rerum Natura* is retold in Stephen Greenblatt’s book *The Swerve*.

ANSWER: **Poggio Bracciolini** [accept either underlined part]

[10] This philosopher calls for the acceptance of “mixed constitutions” in a work comparing the constitutions of various polities. As a legal theorist, he called for the right of “freedom of the seas” in his *Mare Librum*.

ANSWER: Hugo **Grotius**

2. In February, this conductor was named Chief Conductor and Curator of the Ravinia Festival in Highland Park, Illinois. For 10 points each:

[10] Name this music director of the Baltimore Symphony Orchestra. With her appointment to the BSO in 2007, this conductor became the first female music director for any major American orchestra.

ANSWER: Marin **Alsop**

[10] Alsop was also the first woman to conduct the Last Night of this series of concerts held each summer in the Royal Albert Hall. This festival was founded in 1895 and is now hosted and broadcast by the BBC.

ANSWER: the BBC **Proms** [or The Henry Wood **Promenade** Concerts]

[10] Alsop’s recording of this piece by Jennifer Higdon won the 2010 Grammy for Best Contemporary Classical Composition. That recording featured Colin Currie, the dedicatee of this piece, as the soloist.

ANSWER: **Percussion Concerto**

3. For 10 points each, answer some questions about literary theorists with similar names.

[10] Theatre director Peter Brook drew inspiration from Jan Kott’s writings for his staging of this Shakespeare play. Brook’s version of this play features an unusually sympathetic depiction of Regan and Goneril.

ANSWER: **King Lear**

[10] Literary theorist Peter Brooks described modernism as a reaction against 19th century overreliance on this aspect of literature, as exemplified by novels like *Great Expectations*. That claim appears in Brooks’ book *Reading for* [this aspect].

ANSWER: **plot** [prompt on similar concepts like storyline]

[10] In his book *Modernism/Postmodernism*, Peter Brooker asserts that this critic “installed postmodernism as an episteme” (“eh-pis-TEE-mee”) during the 1970s and 80s. This critic’s *The Dismemberment of Orpheus* includes a widely cited table comparing 32 characteristics of modernism and postmodernism.

ANSWER: Ihab **Hassan**

4. A mutation in an enzyme that acts on this compound causes hereditary leiomyomatosis (“leio-myo-matosis”) and renal cell carcinoma. For 10 points each:

[10] Name this Krebs cycle intermediate that occurs immediately after succinate and before malate.

ANSWER: **fumarate** [or **fumaric acid**]

[10] An alkylated derivative of fumarate is used as a treatment for this disease, other treatments for which include glatiramer acetate. This CNS demyelinating disease occurs in primary progressive and relapsing-remitting forms.

ANSWER: **multiple sclerosis** [or **MS**]

[10] A recent study demonstrated that fumarate hydratase mutations affect a cysteine on the SWI/SNF complex. That complex, like NuRD and INO80, catalyzes this process in an ATP-dependent manner.

ANSWER: chromatin **remodelling**

5. This woman was known for her antics, such as taking her borzois and ocelots out for walks, wearing nothing but makeup and a so-called “necklace” made from the bite marks of her lover. For 10 points each:

[10] Name this wild Venetian marchesa. An incident in which one of her gold-covered servants suffocated from the paint inspired a similar scene from Ian Fleming’s *Goldfinger*.

ANSWER: Luisa **Casati**

[10] One of Casati’s favorite effects at her parties was creating giant blue-green flames, which she did by ordering her servants to throw this metallic element into the fire. When oxidized, this element becomes verdigris.

ANSWER: **copper** [or **cu**]

[10] Casati also made herself look more mysterious by using the extract of this plant to dilate her pupils. Its name comes from the fact that it was once used frequently for aesthetic purposes.

ANSWER: **belladonna** [or **deadly nightshade**; prompt on **nightshade** or **solonacaea**]

6. This saint known as the Third Apostle of Rome led a weekly walk through seven churches with his followers like Giovanni Palestrina and Caesar Baronius. For 10 points each:

[10] Name this mystic who in 1575 founded a society called the Congregation of the Oratory, or the Oratorians, which today is known by his name.

ANSWER: Philip **Neri** [or San Filippo **Neri**; or Saint Philip **Neri**]

[10] Neri became renowned for shutting himself in the catacombs beside this ancient Roman road, which was built in 312 BCE to link the city with Brindisi.

ANSWER: **Appian** Way

[10] Both the Italian and French Oratorians were inspired by the reforms of this nun. She founded the Discalced Carmelites with St. John of the Cross, and wrote a work titled *The Interior Castle*.

ANSWER: St. **Teresa of Avila** [or Saint **Teresa of Jesus**; or Teresa Sanchez de **Cepeda y Ahumada**; prompt on **Teresa**]

7. This concept was introduced in a 1960 paper on “ego distortion.” For 10 points each:

[10] Identify this concept that makes up the fundamentally asocial and unified component of a dichotomy central to the psychoanalytic theory of D. W. Winnicott.

ANSWER: **true self** [accept answers indicating the **real** or **true** self such as “the **real me**”]

[10] Winnicott traced the development of the “true self” to a “good enough” approach to this task, which is the subject of a bestselling “common sense” book by Dr. Benjamin Spock.

ANSWER: **parenting** [or good-enough **parenting**; or *The Common Sense Book of **Baby and Child Care***; accept answers indicating **raising children** or **child rearing** or **childcare** or **infant care**]

[10] In a book about this behavior and “reality,” Winnicott wrote that the “true self” developed from this behavior. Like most Post-Freudian accounts of this behavior, Winnicott’s drew from a passage of *Beyond the Pleasure Principle* in which Freud observes his grandson engaging in this behavior while yelling “fort!” and “da!”

ANSWER: childhood **play** [or **Playing and Reality**; accept answers indicating **playing** or playing **games**]



8. Answer the following about paleoclimatology, the geologic study of the climate of the past. For 10 points each:  
[10] Historical temperatures are correlated with the ratio of the 18 and 16 isotopes of this element in ice cores.

ANSWER: **oxygen** [or **O**]

[10] Oxygen isotopic ratios are a useful proxy for historical temperatures because the extent of this process, in which isotopic ratios deviate from a stable value, is correlated with temperature. The fact that carbon-12 is preferentially incorporated over carbon-13 during carbon fixation is an example of the "kinetic" form of this process.

ANSWER: isotope **fractionation** [or kinetic **fractionation**; or equilibrium **fractionation**]

[10] Temperature is also correlated with the abundance of these systems, which are isotopologues that are multiply substituted by heavy atoms. The most common example of these systems is the 47 isotopologue of carbon dioxide, which is composed of a carbon-13 atom and two oxygen-17 atoms.

ANSWER: **clumped** isotopes [or **clumped** isotopologues; or **clumped** systems]

9. A chapter of Michael Warner's *Publics and Counterpublics* titled "[this author] Drunk" analyzes the effect that the psychology of one of his novels had on the temperance movement. For 10 points each:

[10] Name this author of *Democratic Vistas*, who wrote about a naive country boy who befriends a New Yorker named Colby and descends into alcoholism in *Franklin Evans; Or The Inebriate*.

ANSWER: Walt **Whitman**

[10] This more popular temperance novel by Timothy Shay Arthur depicts the ruin of Joe Morgan, who becomes a drunkard after the opening of Simon Slade's "Sickle and Sheaf" tavern.

ANSWER: **Ten Nights in a Bar Room and What I Saw There**

[10] This author's daughter Susan traced the history of America's alcohol obsession in *Drinking in America*. He wrote about his own problems with alcohol in "The Sorrows of Gin" and also wrote the short story "The Swimmer."

ANSWER: John (William) **Cheever**

10. Answer some questions about artists who built unusual machines, for 10 points each.

[10] Peter Fischli and David Weiss are best known for this half-hour film from 1987, which depicts the operation of a Rube Goldberg machine they built in a warehouse.

ANSWER: *The **Way Things Go***

[10] This artist, known for his kinetic sculptures from the Metamatic series, created a machine called *Homage to New York* that destroyed itself at the MOMA in 1960. He also collaborated with his wife Niki de Saint Phalle on the *Stravinsky Fountain* outside Pompidou Centre.

ANSWER: Jean **Tinguely**

[10] Fischli, Weiss, and Tinguely are all from this country. Other artists born in this country include Paul Klee ("clay") and Alberto Giacometti.

ANSWER: **Switzerland**

11. This name is given to the group of four pro-Nazi colonels, and the 1941 coup d'état that they led, placing Raschid Ali al-Keilani in power as the "Chief of the National Defense Government" in Iraq. For 10 points each:

[10] Name this fascist Iraqi revolutionary group whose name was reflected in the design of their flag.

ANSWER: **Golden Square** [or *al-Murabba' al-dhahabi*; accept **Four Colonels** or *al-'iqdā' al-arba'a*]

[10] The 1941 coup happened when this Hashemite king was an infant. After being reinstated, he became the last king of Iraq when Colonel Qasim's troops killed him during the 14 July Revolution.

ANSWER: **Faisal II** [prompt on **Faisal** or Al-Malik **Faysal** Ath-thani]

[10] The regicide of Faisal II in 1958 led to US intervention in the Lebanon Crisis, after Egypt and Syria had united to form this sovereign state that allied with North Yemen and lasted until 1961.

ANSWER: **United Arab Republic** [or the **UAR**; accept the **UAS** or **United Arab States**]

12. After an extra-large dose of mescaline, Jean-Paul Sartre had visions of these creatures following him around for years; his sessions with Jacques Lacan “sort of concluded that it was fear of becoming alone.” For 10 points each:  
[10] Name these creatures. In Sartre’s play *The Condemned of Altona*, Franz von Gerlach repeatedly addresses a jury of these creatures that judge mankind from the thirtieth century.

ANSWER: **crabs** [prompt on crustaceans; do not accept “lobsters”]

[10] Several allusions to crabs appear throughout this Sartre novel, in which objects that infringe on Antoine Roquentin’s freedom, such as the root of a chestnut tree, produce the title sensation in him.

ANSWER: ***Nausea*** [or *La Nausee*]

[10] The title character inexplicably transforms into a crab in “Father’s Last Escape,” one of the enigmatic stories by this Polish Jewish author of *Sanatorium Under the Sign of the Hourglass*.

ANSWER: Bruno **Schulz**

13. According to Pliny, this region’s king made its oxen the best in the world by not allowing them to breed until they were large. For 10 points each:

[10] Name this region home to the Thesprotian and Molossian people, whose king Alexander I married Cleopatra at a wedding ceremony that saw the death of Philip II of Macedon.

ANSWER: **Epirus**

[10] This better-known king of Epirus battled the Romans at Asculum and Heraclea, winning his signature style of victory involving heavy loss to his own army.

ANSWER: **Pyrrhus** of Epirus

[10] Epirus’s use of *peliai* to refer to old women is linked to a myth of a black dove from Egypt landing on an oak tree, establishing the oracle of Zeus at this site. King Pyrrhus built a theatre and held the Naia festival at this oldest Hellenic oracle.

ANSWER: **Dodona**

14. The Halloween Problem is the potential for this operation to change the location of a data table row, potentially causing infinite loops. For 10 points each:

[10] Name this operation. In SQL, this operation modifies tables in place by setting a certain value where a condition is true. Merging is sometimes known by a portmanteau of this word and insert.

ANSWER: **update** (The portmanteau is “upsert.”)

[10] Joining two tables in SQL can cause problems if they contain this value, which represents missing data and is not equal to anything, including itself. In R, this object is used for undefined values, as opposed to the logical NA (“N-A”).

ANSWER: **NULL**

[10] In Python’s pandas module, concatenating data frames is fastest when this feature of a data frame, the position of each row, is unique. By default, these values start at 0 in Python.

ANSWER: **indexes** [or **indices**]

15. After entering the *diwan* hall of a *gurdwara*, barefoot worshippers go to the front of the hall and kneel in front of this object. For 10 points each:

[10] Name this Sikh holy text, which Guru Gobind Singh proclaimed to be the final and eternal guru of Sikhism.

ANSWER: **Adi Granth**

[10] The third Sikh guru, Amar Das, is credited with institutionalizing the operation of these communal kitchens in all Sikh temples. These kitchens offer free meals to all comers regardless of caste.

ANSWER: **langaar**

[10] After a service in a *gurdwara*, every worshipper is offered a share of this sugary dessert. During the service, a Sikh blesses this dish by touching it with a *kirpan* while the Ardas prayer is recited.

ANSWER: **karah prasad** [or **karah parshad**]

16. A 2016 Royal Opera House production of a certain opera featured a chorus of strangely-costumed tap dancers whose interlude was punctuated by this involuntary action. For 10 points each:

[10] Name this involuntary action, a “musical” instance of which opens another opera, *Háry János*.

ANSWER: **sneezes** [or **sneezing**] (The first opera mentioned is *The Nose*.)

[10] In this opera, a sneezing fit brought on by some powder prevents Rosina from telling Bartolo whether she has been speaking to the title character. That *recitativo* in this opera comes shortly after Rosina sings the aria *Una voce poco fa*.

ANSWER: *The Barber of Seville*

[10] This composer’s opera sketch *Hin und zurück* begins and ends with a sneeze. This composer of the children’s opera *We Are Building a City* outlined his distinctive theory of tonality in *The Craft of Musical Composition*.

ANSWER: Paul **Hindemith**

17. In one folktale about this practice, a mother breaks twigs and drops them on the ground so that the son who is carrying her can find his way back to his home after he has finished his task. For 10 points each:

[10] Give the foreign-language term for this largely mythical practice of ancient Japan, in which a son would hoist their old parent onto their back and take him or her to the mountains, abandoning them to die.

ANSWER: **ubasute**

[10] The story of Ubasute was actually imported from India, and first appeared in this Sanskrit text named for “five techniques” of wisdom. The Jataka tales retell many of this text’s stories using the Buddha’s wisdom.

ANSWER: **Panchatantra**

[10] In a similar *Panchatantra* story, a retainer hides his mother after the emperor decrees no one should live past age 70. That story is also in a Chinese collection named for this concept, which includes devotion to one’s parents.

ANSWER: **filial piety**

18. Bhabha scattering is a specific example of this type of process, which results in the production of either pure photons or more massive particles. For 10 points each:

[10] Identify this process in which the lightest lepton collides with its antiparticle. Its inverse is called pair production.

ANSWER: electron-positron **annihilation**

[10] A common occurrence in annihilations that produce large numbers of hadrons are these phenomena, which occur when the resultant hadrons are all moving in the same direction. The fact that hadronization creates three of these things was the first evidence of the gluon.

ANSWER: quark **jets**

[10] Because there are fewer than 16 quark flavors, this quantity in QCD is negative, resulting in asymptotic freedom. For a general theory this quantity equals the derivative of a coupling parameter with respect to the log of the energy scale.

ANSWER: **beta** [prompt on **running** or **running of the coupling**]

19. After too many local workers died building a railroad to connect the Pacific and Caribbean coasts of Costa Rica, this man completed the project by bringing in American prisoners and other immigrants. For 10 points each:

[10] Name this American businessman who owned a large percentage of Costa Rica's land in the late 1800s, including massive banana plantations near Limón. Through a merger with a Boston-based company, he became one of the founders of the United Fruit Company.

ANSWER: Minor Cooper **Keith**

[10] At the age of 18, this man made a fortune by buying ripe bananas near New Orleans and selling them to places within a day's travel. In 1933, this man bought a controlling stake in UFC.

ANSWER: Samuel **Zemurray** [or Schmuel **Zmurri**]

[10] In 1904, Keith signed a deal with this country's president Manuel Estrada Cabrera to take over its railroad infrastructure. Zemurray and UFC supported a 1954 coup against this country's president Jacobo Arbenz.

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

20. This poet was controversial during his lifetime for his frank depictions of sexuality, such as his poem praising a "lazy, laughing, languid" prostitute based on his mistress Fanny Cornforth. For 10 points each:

[10] Name this poet of "Jenny." This poet from the Pre-Raphaelite Brotherhood sensually described how the title character's "bosom...made / the bar she leaned on warm" in "The Blessed Damozel."

ANSWER: **Dante Gabriel Rossetti** [prompt on **Rossetti**]

[10] Rossetti's sonnet "Nuptial Sleep," which describes a couple dozing off after sex, was omitted from the 1881 version of this sequence due to controversy. Its first poem begins, "A sonnet is a moment's monument."

ANSWER: *The **House of Life***

[10] In a caustic 1871 review, Robert Buchanan coined this term for the poetry of Rossetti and Algernon Swinburne, whose work Buchanan accused of promoting a "morbid deviation" from healthy living.

ANSWER: "The **Fleshly School** of Poetry"