2021 ACF Nationals

Packet 5 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. The recently-deceased Joseph Sambrook has written four editions of the Cold Spring Harbor laboratory manual titled for this task. One method of performing this task uses BP mix followed by LR mix, and relies on attB1 and attB2 sites; that is Invitrogen's Gateway protocol. Scarless methods of performing this task include Takara's In-Fusion and NEB's Golden Gate. Circularization can be prevented using calf-intestinal alkaline phosphatase in this task. The most common method of performing this action can be made "directional" if two different restriction enzymes are used to create incompatible sticky ends before using DNA ligase to stick the fragments into a plasmid and transforming the resulting DNA. For 10 points, name this technique in which one or more inserts are put into a vector to create recombinant DNA.

ANSWER: molecular <u>cloning</u> [or <u>assembly</u>; or sub<u>cloning</u>; or expression <u>cloning</u>; prompt on <u>making</u> a cDNA <u>library</u>; prompt on <u>creating recombinant DNA</u> or <u>putting DNA into a vector</u> until "recombinant" is read; do not accept or prompt on "homologous recombination," "knockout," "knockin," or "knockdown"]

- 2. A murder investigation in this city began when a steamer trunk was found to contain the partly decomposed body of 19-year-old Elsie Sigel, the granddaughter of a Civil War general. This city's "deadliest street in American history," called the Bloody Angle, was where the chainmail-wearing highbinder Mock Duck feuded with Tom Lee in several wars that mirrored clashes in San Francisco. Attorney Frank Moss patronized a clergyman in this city who gave sermons like "The Blind Man's Creed" during a reform movement that led the Lexow Committee to investigate "Clubber Williams." The Becker-Rosenthal murder case occurred in this city, where Big Bill Devery fought crime and "Hell-Cat Maggie" led the Dead Rabbits. For 10 points, name this city where Police Commissioner Teddy Roosevelt battled the Bowery Boys and the Democratic machine of Tammany Hall. ANSWER: New York City [or NYC]
- 3. In a tale from these people, a boy flies up to the sky to marry a maiden of the stars whom he caught trying to steal his family's crops. A lunar god of these people impregnated a virgin by changing into a bird of paradise and mixing his semen with fruit dropped from a tree. Another of their stories features a hummingbird ripped into fifty pieces, explaining its small size. One of their gods responds to a request to make humans by sending a copper egg, silver egg, and golden egg. These people witnessed the "Black Rainbow" at the end of their history, and claimed descent from the "Macaw Woman." Their chief god turned stones into soldiers to help them defeat their enemy, while another deity fills a jug with water from the Milky Way and cracks his sling to make lightning; that god is Illapa. Their first ruler plunged a golden rod into the earth on a high plain. For 10 points, name these people who worshipped Viracocha and the sun god Inti.

ANSWER: Incan mythology [accept Peruvian myth, or Bolivian myth, or Aymara myth]

- 4. Fausto Massimini began his initial research into this concept by conducting interviews with vagrants on the streets of Milan. The book chapter "Creating Chaos" uses interviews with people who became paralyzed or blinded to argue that people use this concept as a coping mechanism as part of the "power of dissipative structures." Research on this concept often utilizes the "experience sampling method" as well as a namesake questionnaire developed by Giovanni Moneta. This concept's creator has hypothesized that it is more achievable by those with "autotelic personalities" and is most achievable with an optimal balance of challenge level and skill level during a task. For 10 points, name this psychological state proposed by Mihaly Csikszentmihalyi ("cheek-sent-mee-HIGH-ee"), a state of immersion in an activity often described as being "in the zone." ANSWER: flow
- 5. In a novel from this country, the gay auctioneer Rilke investigates a young woman's murder depicted in a dead man's pornography collection. An author from this country drew a Blake-inspired pen-and-ink illustration of a naked woman holding up the sun, which became the cover of his novel in which the title character contracts "dragonhide" in Unthank. In another novel from this country, the ghost of the artist Francesco del Cossa, revealed to be a woman in disguise, is sent to 2014 to watch over a mourning teenager. *The Accidental* and *How to be Both* were written by a contemporary novelist from this country. Another writer from this country wrote *Porno*, a sequel to his book about Mark "Rent Boy" Renton and the heroin-abusing "Skag Boys." For 10 points, name this country home to Louise Welsh, Ali Smith, Alasdair Gray, and Irvine Welsh, the last of whom wrote *Trainspotting*.

 ANSWER: Scotland [prompt on the United Kingdom or UK] (The first two novels are Louise Welsh's *The Cutting Room* and Alasdair Gray's *Lanark*.)
- 6. In Oliver Wendell Holmes Jr.'s majority opinion on a Supreme Court case discussing this project, Holmes praised the "most ingenious experiments" of the scientific advancements achieved while working on this project; according to historian Libby Hill, five years later, a state natural history survey discovered that the basis for his opinion on this project was false. Many engineers who worked on this project, which moved the largest amount of dirt to that point in history, later worked on the Panama Canal. Public health concerns arising from this project expanded the jurisdiction of a city's Sanitary District to the Calumet-Saganashkee Channels. One common quip about this project was that "the solution to pollution is dilution." For 10 points, name this civil engineering feat that changed the course of a river in Illinois towards the Mississippi.

ANSWER: <u>reversing</u> the flow of the <u>Chicago River</u> [or <u>constructing</u> the <u>Chicago Sanitary and Ship Canal</u>; or <u>redirecting</u> the <u>Chicago River</u>]

7. The *Gloria* from a mass by this composer draws from incidental choral music he wrote for a play about Joan of Arc. The second movement of a piece by this composer opens with a suspended cymbal and a rolled E-major chord with added D-sharp in the harp, followed by a solo voice marked *senza sentimentalita*. An alternate text for a piece by this composer was written and often performed by Samuel Pisar. The second movement of a piece by this composer features a countertenor or boy treble soloist singing a setting of the Psalm of David. This composer dedicated his third symphony to the memory of the recently-assassinated John F. Kennedy. This composer's only operetta includes the difficult coloratura soprano aria "Glitter and Be Gay" and ends with song "Make our Garden Grow." For 10 points, name this American composer of the *Chichester Psalms*, *Kaddish* Symphony, and *Candide*. ANSWER: Leonard **Bernstein**

- 8. Hieronymus of Cardia claims these people would "neither plant grain, set out any fruit-bearing tree, use wine, nor construct any house," under penalty of death. A king of these people was known as Philhellen for producing coins in Greek style, and built an aqueduct at its new colony Humayma. These people's independent kingdom was east of a ten-town union called the Decapolis. Strabo wrote that a deceitful minister of these people Syllaeus led the Roman army on a wild goose chase. These people's capital city, once known as Raqmu, was built by their kings Aretas and Obodas, who led their army in defeat of Alexander Jannaeus. In that capital, they built the Treasury or al-Khazneh, said to contain a pharaoh's treasure. In 106 CE, the Roman emperor Trajan annexed this kingdom to protect the road from Damascus to Alexandria. For 10 points, name these Arab nomads who ruled from Petra in modern Jordan. ANSWER: Nabataeans [or Nabateans; prompt on Arabs]
- 9. A member of this company, Alexis Angelidis, proposed a method of simulating incompressible 3D fluids using fictitious particles called "vorticles." Its founder and James Clark name a procedure to create smooth structures by recursively taking edge and face points then calculating barycenters. The current chief scientist of this company, Loren Carpenter, created the six steps of "bound," "split," "dice," "shade," "bust" and "hide," in the Reyes algorithm. One of the founders of this company worked with Raphi Rom to create cubic splines that are often used to interpolate movement between camera frames. The development of its software suite Renderman was supervised by founder Ed Catmull. It began as the "graphics group" of Lucas Film, and was funded by Steve Jobs, its primary shareholder. For 10 points, what subsidiary of Disney has produced hits like *Toy Story*?

 ANSWER: Pixar [prompt on Disney until "Clark" is read]
- 10. In an oft-quoted formulation, this critic defined a work of art as "a corner of creation, seen through a temperament." Theodore Reff proposed that a scene from a work by this author is depicted in the ominous painting *Interior*, in which a man in shadow leans back against a bedroom door. In a seated profile of this man at his cluttered desk, a cut-off reproduction of Velázquez's *Los Borrachos* is framed alongside an Utagawa School print of a sumo wrestler. Edgar Degas's *The Rape* probably depicts a novel by this writer, who lost a contract with *L'Événement* after writing articles on the 1866 Salon that provided early praise for Edouard Manet. Paul Cezanne broke off his childhood friendship with this writer after he portrayed Cézanne as the insane protagonist of *The Masterpiece*, Claude Lantier. For 10 points, name this writer who created the prostitute depicted in Manet's painting, *Nana*. ANSWER: Émile **Zola** [or Émile Édouard Charles Antoine **Zola**]
- 11. Edith Hall's cultural history of "adventures with" this play cites a number of modern adaptations, including one that includes a "Song of the Fates." During a recognition scene in this play, a man proves his identity by describing a series of tokens, including Pelops' spear and a tapestry depicting the sun reversing course. Its title character convinces a king not to observe a purification ritual by falsely claiming that a statue magically closed its eyes. During his "Italian Journey," Goethe completed an adaptation of this Greek play. While serving as a priestess of Artemis in the land of King Thoas, the title character plans a heist with her brother Orestes and his friend Pylades. For 10 points, name this play by Euripides about a daughter of Agamemnon whisked away to the Crimean Peninsula after being offered as a sacrifice in an earlier play set at Aulis.

ANSWER: *Iphigeneia in Tauris* [or *Iphigeneia Among the Taurians*; do not accept or prompt on "*Iphigeneia at Aulis*"]

12. A thermosyphon reboiler is surrounded by this substance in a type of distillation system known as an ASU. A type of Sprengel explosive named for this substance consists of a mixture of this substance with a fuel such as lampblack. This substance is often combined with TEA-TEB, a mixture of triethylaluminum and triethylborane, in hypergolic systems. This substance can accumulate in a nitrogen cold trap if a Schlenk line is used improperly. Gilbert Lewis predicted the existence of a tetratomic allotrope to explain why this substance does not obey Curie's law. The two unpaired electrons in this substance's outermost orbital are responsible for both its light blue color and its paramagnetism. This substance is commonly combined with either kerosene or liquid hydrogen to make rocket propellant. For 10 points, name this particular form of the element with atomic number 8.

ANSWER: liquid oxygen [or Lox; prompt on oxygen or O2 by asking "in what phase?"]

13. This play's author said "I don't write plays to dump on people. I write plays about people whom I love." Near this play's end, a character says that after the attorney general calls, they have "three days" to respond. A character in this play pretends that he must attend a birthday party for Ray's wife since Ray treats him like a family member. In his introduction, that character asks his friend if he has ever had a taken a dump that felt like "you just slept for twelve hours" after claiming "we're all queer" and that he shouldn't get "befuddled by a middle class morality." In this play, a character in a Chinese restaurant complains that "all train compartments vaguely smell of shit." A robbery that takes place between the two acts of this play allows Dave Moss to make 5,000 dollars with the help of the unwitting Shelley Levine. "Leads" are sought by the main characters of, for 10 points, what play by David Mamet?

ANSWER: **Glengarry Glen Ross**

14. This man had a dream where he bathed in sweet-smelling water that cured leprosy, then saw thousands of birds all with a red left wing circling the base of a mountain. He later carried the body of a virgin named Hameltrude and placed it on the altar at St. Vedast. The first chronicle of how this man founded his realm was written by Dudo, and later reworked by Orderic Vitalis. He was betrothed to Gisela even though he refused to kiss the feet of her father Charles the Simple, who granted this man all the land between the Epte River and the coast. However, this warrior's son, known as "Longsword," was born to his native wife Poppa, starting a line that led his people and included his grandson Richard the Fearless and eventually the illegitimate William the Conqueror. For 10 points, name this Viking chief later painted as a Christian, who was the first ruler of Normandy.

ANSWER: **Rollo** of Normandy [or **Hrolf**; or Ganger-**Rolf**; or **Robert** I of Normandy]

15. Many churches in this country have an "atrial cross" with plant motifs pointing to the town centre. A pink sandstone cathedral in this country is noted for its Baroque facade covered in vine motifs, and another pink church in this country has two towers decorated only on their top halves. That church was decorated by the son of a foreign architect who used estipites ("ess-TEE-pee-tays") in this country's most iconic cathedral for his Altar of the Kings, starting the Ultrabaroque style in this country. That cathedral was finished by Manuel Tolsa, who introduced Neoclassicism to this country as first director of the Academy of San Carlos, and it is currently sinking due to the declining water table under this country's capital. Thousands of tin retablo paintings from this country's churches were collected by a couple who lived in the Blue House. For 10 points, name this country where the Templo Mayor stood in Tenochtitlan.

ANSWER: Mexico

16. A "wind horse" carries a blazing one of these objects on his back in a common "prayer flag" design. In the *Lotus Sutra*, after presenting one of these objects to the Buddha, a *naga* princess swaps genders and becomes a bodhisattva. A popular mantra named for one of these objects is written hundreds of thousands of times on coiled pieces of paper that are placed inside of prayer wheels to farm merit. That mantra, which invokes Avalokiteshvara, enigmatically refers to one of these objects along with a lotus. In artistic depictions, the Bodhisattva Ksitigarbha generally holds a *shakujo* staff in one hand and one of these objects, the legendary wish-granting *cintamani*, in the other. The "refuges" of Buddhism, the dharma, the Buddha, and the *sangha*, are metaphorically referred to as three of these objects. For 10 points, name these precious items exemplified by the title object of the *Diamond Sutra*. ANSWER: jewels [or *mani* stone; or gems; or gemstones; or the Three Jewels; prompt on stones]

17. In this country, a newspaper called *L'Independant* investigated the death and torture of a chauffeur for the president's brother Francois. A coup in this country installed a "triumvirate" of Jean-Baptiste Lingani and two other leaders of the *Front Populaire*. Riots broke out in this country's capital after the suspicious death of the investigative journalist Norbert Zongo. A dictator of this country began a campaign of inoculating millions of its citizens against meningitis and used a phrase that translates as "The Land of the Upright Men," for this country's current name. In the so-called "Christmas War," it skirmished with its northern neighbor over the resource-rich Agacher Strip. In this country, Captain Blaise Compaore overthrew a socialist dictator sometimes known as "Africa's Che Guevara." For 10 points, Thomas Sankara once ruled what country after consolidating his power in Ouagadougou ("wah-guh-DOO-goo")?

ANSWER: Burkina Faso

18. An example by Imogen Dickie argues that beliefs about the purchasing behavior of a man named after this real-life thinker are not actually *about* him. Playing on Leibniz, this philosopher created the "maxim of the identification of indiscernibles." Ralph is suspicious of a man in a brown hat named Bernard J. Ortcutt in an example created by this philosopher to distinguish between *de re* and *de dicto* beliefs. This thinker lampooned the philosopher "McX," who argues that the statement "Pegasus is not real" is nonsense, in an essay that claims Plato's beard "is tangled." In another essay, this author of "Quantifiers and Propositional Attitudes" criticized Carnap's use of atomic "state-descriptions" to explain analyticity. For 10 points, name this thinker whose *From a Logical Point of View* contains essays like "On What There Is" and "Two Dogmas of Empiricism."

ANSWER: Willard van Orman **Quine** [prompt on Willard van <u>Ortcutt</u> until "Leibniz" is read by asking "who created Ortcutt?"] (The example by Imogen Dickie is about "Willard van Ortcutt.")

19. In the Percus—Yevick hard-sphere model of gas interaction, combining this equation with the Ornstein—Zernicke relation allowed for the analytic calculation of the Helmholtz free energy. For the dilute quantum gas, an important value within this equation can be obtained exactly via the Beth—Uhlenbeck formula. Higher-order terms in this equation are often obtained using the Pade approximation. Analytic computation of terms of this equation typically involves cluster integrals, which can be expressed using Mayer functions. The second coefficient of this equation vanishes for an ideal gas at the Boyle temperature. For 10 points, identify this equation of state which expresses the pressure as a sum of powers of density times the namesake coefficients which are only functions of temperature.

ANSWER: virial expansion [or virial equation of state]

20. As a boy, the protagonist of this novel requests a lion mask for New Years by sneaking into his father's workshop and writing it in his notebook. This novel's protagonist is mortified when one of his classmates reveals that he fell from some monkey bars on purpose. The prologue of this novel describes the uneasiness caused by three separate photos of the protagonist, who relates to his peers through acts of "clowning." Its protagonist thinks of Dostoevsky while discussing the antonym of the word "crime" with his friend, only to discover moments later that his wife Yoshizo is being sexually assaulted. The protagonist of this novel paints "ghost picture" self-portraits inspired by Modigliani and is confined to a mental institution after developing a morphine addiction. For 10 points, name this largely autobiographical "I-novel" about the suicidally depressed Oba, a work of Osamu Dazai. ANSWER: *No Longer Human* [or *Ningen Shikkaku*]

Bonuses

- 1. In this opera, Isabella and Lindoro trick the antagonist into letting them escape by promising to initiate him into the order of the "Pappataci." For 10 points each:
- [10] Name this "rescue opera" by Gioacchino Rossini in which Isabella, the title character, escapes the Turkish bey Mustafa.

ANSWER: The <u>Italian Girl in Algiers</u> [or L'<u>Italiana in Algieri</u>]

[10] The Algerian musician Khaled performed "Didi," an internationally-popular song in this genre of North African music. Performers of this genre of social protest music are known as "cheb" or "chaba."

ANSWER: rai music

[10] In a photograph, this musician plays the trumpet in front of the Sphinx during a government-sponsored visit to Egypt. "King" Oliver mentored this leader of the "Hot Five," who covered "Mack the Knife" before Bobby Darin.

ANSWER: Louis **Armstrong** [or **Satchmo**; or **Pops**]

- 2. An editor of this kind named Olivia Doll sits on the board for seven medical journals. For 10 points each:
- [10] A favela in Caxias do Sul managed by a group called So Ama houses over 1,000 of what kind of vagrants? Ken-kun, the first known entrepreneur of this kind in Japan, manages a baked potato shop in Sapporo.

ANSWER: dogs

[10] This inventor taught his dog Trouve how to "talk," leading the public to believe it could ask questions like "How are you, grandma?" He's better known for founding the company AT&T.

ANSWER: Alexander Graham Bell

[10] Isaac Newton's dog Diamond is said to have discovered two theorems, but one had a mistake and the other had this kind of exception. In general, this term is the opposite of well-behaved, and describes functions like the Weierstrass function.

ANSWER: pathological function

- 3. A Swahili epic poem about this conflict is the *Utendi wa Tambuka*, also called the *Utenzi wa Herkali*. For 10 points each:
- [10] Name this long conflict whose frontier battles are featured in the Acritic Songs, one of which follows a mixed-race hero descended from both sides and appropriately named Digenes.

ANSWER: the <u>Arab-Byzantine</u> Wars [accept <u>Rashidun</u> or <u>Umayyad</u> in place of "Arab"]

[10] Scholars have linked the dragon slain by Basil in *Digenis Akritas* to this villain from the *Shahnameh*. This tyrannical ruler has two snakes growing from his shoulders, where he was kissed by Ahriman.

ANSWER: Zahhak [or Azi Dahaka]

[10] The *Shahnameh*, which blames Heraclius's invasion of Iran on the perfidy of Goraz, was written by this great Persian poet.

ANSWER: Ferdowsi [or Abul-Qasem Ferdowsi Tusi]

- 4. This result makes it impossible for an eavesdropper on a quantum communication channel to both extract the information and pass undetected. For 10 points each:
- [10] Identify this theorem proved by Wootters, Zurek, and Dieks, according to which it is impossible to make a copy of an arbitrary unknown quantum state.

ANSWER: no cloning theorem

[10] Despite the no-cloning theorem, Buzek and Hillery showed that arbitrary states can be copied approximately. The copy and original will have this relationship to each other, meaning that their quantum states are interdependent. ANSWER: **entangled** [or word forms like **entangling**]

[10] An entangled state can be used to transmit two classical bits between two parties using a single qubit in this procedure, which was first proposed by Bennett and Wiesner.

ANSWER: superdense coding

- 5. In 1898, this man's namesake Supreme Court case established birthright citizenship through its interpretation of the Fourteenth Amendment. For 10 points each:
- [10] Name this man born in San Francisco to Chinese parents, who was detained upon re-entry to the US.

ANSWER: Wong Kim Ark [or United States v. Wong Kim Ark; or Huang]

[10] The journalist Wong Chin Foo, a contemporary to Wong Kim Ark, challenged this labor activist to a duel. This leader of the Workingmen's Party paid homage to Cato the Elder by ending all of his speeches with "And whatever happens, the Chinese must go!"

ANSWER: Denis **Kearney**

[10] In a more ignominious moment, the Supreme Court ruled against this Japanese-American man in a 1944 case that upheld Japanese internment pursuant to Executive Order 9066.

ANSWER: Fred Korematsu [or Korematsu v. United States]

- 6. At the conclusion of a play, this god gives a speech about love, which has the power "to suffer woes which hope thinks infinite" and "to forgive wrongs darker than death or night." For 10 points each:
- [10] Name this deity whom Boccaccio's *Genealogy of the Pagan Gods* claims to be the ancestor of all divine beings. In actuality, his name is just a scribal error made by medieval writers.

ANSWER: **<u>Demogorgon</u>** (The play is *Prometheus Unbound* by Shelley.)

[10] This writer observed that the story of Demogorgon is the "only time a scribal error underwent an apotheosis" in his book *The Discarded Image*. His other books alluding to folklore include *The Allegory of Love*.

ANSWER: C. S. <u>Lewis</u> [or Clive Staples <u>Lewis</u>]

[10] Medieval writers thought that Demogorgon created this primordial goddess, who in Hesiod's *Theogony* is the mother of Nyx and personifies the "void." Her name denotes the space separating the earth and the sky.

ANSWER: Chaos

- 7. Schoenberg's Variations for Orchestra, Webern's String Quartet, and many other pieces from the 20th century feature this motif. For 10 points each:
- [10] Name this motif. Its pitches spell the name of its inventor, who used it as a subject for the final Contrapunctus of *The Art of the Fugue*.

ANSWER: <u>BACH</u> motif [accept <u>B-A-C-H</u> motif; accept <u>B-flat-A-C-B</u>-natural]

[10] This composer used the BACH motif and traditional Baroque forms in the piece *Collage Über Bach*. This composer employed a string orchestra and a single bell in the canon *Cantus in Memoriam Benjamin Britten*.

ANSWER: Arvo Pärt

[10] In this chamber piece by Alfred Schnittke, the BACH motif first appears in the passacaglia third movement. The motif reappears in the finale, whose main theme is based on the folk song "La Cucaracha."

ANSWER: Quasi una sonata [or Violin Sonata No. 2]

- 8. During this event, children were held at a grammar school in nearby Kladno and then killed, and its destruction by explosives was filmed by Franz Treml. For 10 points each:
- [10] Name this village completely destroyed in June 1942. Hitler accused its residents of harboring the planners of Operation Anthropoid, a plot to assassinate Reinhard Heydrich.

ANSWER: Lidice

[10] Heydrich had planned this Jewish pogrom on the pretext of responding to the killing of diplomat Ernst vom Rath. It was named for the broken glass busted out of Jewish-owned shops.

ANSWER: Kristallnacht [prompt on the November Pogrom or Broken Glass Night]

[10] The plot to kill Heydrich was meant to prop up this President of Czechoslovakia, who had been governing from exile in London prior to 1945. He was removed as President in 1948 by the Victorious February movement.

ANSWER: Edvard **Benes** [or Edward **Benesh**]

- 9. For 10 points each, name some modern philosophers named after Greek thinkers from antiquity.
- [10] This philosopher, who collected his work in the book *Linguistics in Philosophy*, described four categories of "time schemata" in his paper "Verbs and Times." He was married to a better-known literary critic.

ANSWER: Zeno **Vendler** (The husband of Helen Vendler.)

[10] This philosopher criticized the idea of life as a story in his paper "Against Narrativity." His father, who wrote the book *Individuals*, named him after a Greek doctor who wrote "That the Best Physician is Also a Philosopher."

ANSWER: Galen Strawson

[10] A "philosopher of clothes" with this first name appears in Thomas Carlyle's book *Sartor Resartus*. The Greek Cynic with this name allegedly lived in a jar and told Alexander the Great to step out of his sunlight.

ANSWER: **Diogenes** [or **Diogenes** Teufelsdrockh]

- 10. In this text, Aesop comes across an argument between a spider and a bee, which he judges by observing that bees provide mankind with "sweetness and light." For 10 points each:
- [10] Name this satire of the Quarrel of the Ancients and the Moderns, in which classical and contemporary writers come to life and go to war in a library.

ANSWER: "The Battle of the Books"

[10] This Irish satirist wrote in favor of the "Ancients" against the "Moderns" in "The Battle of the Books," which he published with *A Tale of a Tub*.

ANSWER: Jonathan Swift

[10] "The Battle of the Books" especially satirizes this critic, who receives a helmet nine times too big for him in an armor exchange with Virgil. He weighed in on the ancients-versus-moderns issue in his *Essay of Dramatic Poesy*.

ANSWER: John Dryden

- 11. If this condition isn't resolved by wearing gloves, a dihydropyridine ("di-hydro-pyridine")-type calcium channel blocker like nifedipine ("ni-fed-ipine") can help. For 10 points each:
- [10] Name this symptom in which exposure to cold causes some of your fingers to turn white or purple due to vasospasm. When severe, it can cause gangrene.

ANSWER: Raynaud's phenomenon

- [10] Raynaud's phenomenon is one of the symptoms of this incredibly variable disease, other symptoms of which include joint pain and a butterfly-shaped rash on the face. The anti-Smith antibody is very specific for this disease. ANSWER: systemic **lupus** erythematosus [or SLE]
- [10] Wire-loop lesions are a hallmark of lupus affecting this organ. That wire-loop shape occurs due to proliferation of mesangial cells and presence of sub-endothelial deposits.

ANSWER: kidneys [or glomerulus; or glomeruli]

- 12. For 10 points each, answer some questions about the adventures of artist Chris Ofili.
- [10] Ofili developed his painting style while studying this type of art in Zimbabwe. The first paragraph of Sontag's "Against Interpretation" refers to the magical experience of this art form in locations like Niaux and Lascaux.

ANSWER: cave paintings [accept rock art or petroglyphs; prompt on paleolithic art]

[10] In 2014, Ofili was photographed by Malick Sidibé, who had documented this country's street culture since the 1960s. Ismaila Traoré was the chief mason of a Sudano-Sahelian adobe mosque in this country.

ANSWER: Mali (The building is the Great Mosque of Djenné.)

[10] Ofili moved to Trinidad to join this friend of his, who depicted canoes in his paintings *Swamped* and *100 Years Ago*. This artist was sued by a man who claimed to own one of his paintings, only to find that it was signed by an unknown Canadian artist with the same name.

ANSWER: Peter **Doig**

- 13. This man, who wrote fictional travelogues under the pen name Thomas Strangeways, proclaimed the "Republic of the Floridas" after conquering the Spanish garrison on Amelia Island. For 10 points each:
- [10] Name this man slightly better known for claiming to be the Cazique of a completely fictional paradise known as Poyais.

ANSWER: Gregor MacGregor

[10] These indigenous people, divided into Tawira and Zambo groups, facilitated MacGregor's scheme when their nominal "King" George Frederic Augustus I signed over title to eight million acres of their land.

ANSWER: Miskito [or Miskitu; or Miskitu Sambo/Tawira; or Mosquito]

[10] Naturally, Gregor MacGregor claimed to be the great-nephew of this outlaw called the "Highland Rogue," whose life inspired a certain Waverly novel.

ANSWER: Rob Roy MacGregor

- 14. One of the most-studied classes of these compounds is based on benzene-1,3,5-tricarboxylate and is named for Hong Kong University of Science and Technology. For 10 points each:
- [10] Name these highly porous coordination polymers composed of a network of polydentate ligands bridging between cations such as Cu²⁺ ("C-U-two-plus") and Zn²⁺ ("Z-N-two-plus").

ANSWER: metal-organic frameworks [or MOFs]

[10] This Jordanian-American professor at UC Berkeley developed the field of "reticular chemistry" for the study of metal—organic frameworks, which earned him a share of the 2018 Wolf Prize in Chemistry.

ANSWER: Omar M. Yaghi

[10] The high specific surface area of MOFs makes them viable candidates for storage of this small gas. The catalytic decomposition of formic acid into CO₂ and this gas has been investigated for the same purpose.

ANSWER: **hvdrogen** [or $\underline{\mathbf{H}}_2$]

- 15. The "small good angel" is expelled from the head of the worshipper undergoing this process, who is referred to as a *chwal*, or "horse." For 10 points each:
- [10] Identify this ritual, the subject of Maya Deren's documentary *Divine Horsemen*. A *houngan* will often speak in an esoteric *langaj* to calm down the convulsing *hounsi* undergoing this process.

ANSWER: **possession** by a **loa** [or **possession** by a **lwa**; or **possession** in **Voodoo**; prompt on spirit <u>possession</u>; prompt on <u>channeling</u>; do not accept or prompt on "exorcism"]

[10] *Hounsi* are possessed by *loa* in this syncretic Haitian religion, which combines aspects from Roman Catholicism and West African spirituality.

ANSWER: Haitian Vodou [or voodoo; or Vodun]

[10] In Vodou, these elaborate geometric diagrams, drawn in cornflour on earth floors, serve as "beacons" to attract the *loa*. One of these diagrams depicting coffins and a cemetery cross represents Baron Samedi.

ANSWER: <u>vèvè</u>

- 16. The "Cricot 2" theater group, founded by avant-garde artist Tadeusz Kantor, was initially dedicated to staging productions of this writer's plays, such as *The Cuttlefish* and *The Water Hen*. For 10 points each:
- [10] Name this Polish writer and painter, whom Martin Esslin cited as a precursor to the "Theater of the Absurd." Chinese armies take over Europe in the year 2000 in this author's novel *Insatiability*.

ANSWER: Stanislaw Witkiewicz [or Witkacy]

- [10] The first section of this book uses the "Murti Bing pills" from *Insatiability* as a metaphor for dogmatic thought. It analyzes the case histories of four intellectuals under the pseudonyms "Alpha," "Beta," "Gamma," and "Delta." ANSWER: *The Captive Mind* [or *Zniewolony Umysf*] (by Czesław Miłosz)
- [10] In *The Captive Mind*, "Beta," who represents Tadeusz Borowski, becomes a propagandist for the Polish government after returning from this location. This location is the setting of Primo Levi's *If This is a Man*.

ANSWER: **Auschwitz**

- 17. A key term is defined as "prepersonal" in Brian Massumi's translation of Gilles Deleuze and Felix Guattari's *A Thousand Plateaus*, which is central to the "turn" named for this general framework. For 10 points each:
- [10] Identify this "theory" of philosophy and social science that is increasingly applied to political analysis following the publication of Lauren Berlant's 2011 book *Cruel Optimism*.

ANSWER: affect theory [accept answers mentioning forms of the word affect such as affective turn]

[10] In the 2010s, Alan Abramowitz used the "negative" form of this concept to describe voters' fear of what the other side will do in power. Noam Lupu linked polarization to the "mass" form of this concept.

ANSWER: <u>partisanship</u> [or <u>party allegiance</u>; or <u>party identification</u>; or <u>party affiliation</u>; accept negative <u>partisanship</u> or mass <u>partisanship</u>]

[10] Rachel Bitecofer has used a model based on negative partisanship for this general task, which Nate Silver's website *FiveThirtyEight* attempts to do by aggregating polling data.

ANSWER: election prediction [accept answers indicating predicting or forecasting the winners of elections]

- 18. After becoming the first African-American Rhodes scholar, this man served as the chair of the philosophy department at Howard University, where he coined the term "cultural relativism." For 10 points each:
- [10] Name this "Father of the Harlem Renaissance" who laid the groundwork for the movement in his 1925 anthology *The New Negro*.

ANSWER: Alain Locke

[10] *The New Negro* featured this short story in which the sexually jealous Joe Kanty is killed for threatening his wife's lover with a razor, only for that man to fall onto a moving saw at the end of the story.

ANSWER: "Spunk"

[10] "Spunk" was one of the first stories published by this friend of Alain Locke, who also wrote a novel in which Tea Cake is shot by Janie after being bitten by a rabid dog.

ANSWER: Zora Neale Hurston

- 19. Answer the following about the history of the *inaka*, or the Japanese countryside. For 10 points each:
- [10] The term *inaka* originally referred to the outlying provinces from the capitals, such as this province, which corresponds to modern day Nara. This province gives its name to the largest ethnic group within Japan.

ANSWER: Yamato

- [10] In the Meiji Era, this condition was called "Edo Yamai" or the "Edo Sickness" since a trip away from Edo and into the countryside almost always cured it. Takaki Kanehiro finally found a different cure for it.
- ANSWER: **beriberi** (Beriberi was caused by urban rice being overly polished, and thus lacking thiamine; rice in the countryside was unpolished.)
- [10] The concept of the "rural" in Japanese historiography began with Nitobe Inazo's founding of the Society for Rural Studies. His studies on rural samurai led him to popularize this concept, "the way of the samurai."

ANSWER: bushido

- 20. Answer the following about the movement of Alaska's Variegated Glacier, for 10 points each.
- [10] Many organisms rely on the freshwater generated when the Variegated Glacier undergoes this process, in which the terminus of a glacier melts. Its name refers to the appearance that the glacier terminus has shortened.

ANSWER: glacial retreat

[10] Over the last hundred years, the Variegated Glacier has exhibited this phenomenon, which are periods of intense movement in between long stretches of quiescence.

ANSWER: glacial <u>surge</u>s [or glacial <u>surging</u>]

[10] The surges of the Variegated Glacier became even more intense during this roughly 300 year period, lasting from 1550 to 1850. During it, the average temperature of the world's climate fell several degrees.

ANSWER: Little Ice Age