2020 ACF Winter
Packet A by Berkeley A, Cambridge A, UNC B
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Tossups

1. An empire of this ethnic group inspired a separatist village in Seabrook, South Carolina, led by the first American initiate into their priesthood. In the 1970s, two Pentecostalist movements dubbed "Chrislam" ("kriz-lahm") emerged among this ethnic group, whose women lead masquerades called Gẹlẹdẹ ("geh-leh-deh"). This people's unusually high rate of twin births inspired their Ibeji ("ee-bay-jee") carvings. Kola nuts used in this people's Ifá ("ee-FAH") ritual inspired cowrie-shell divination in religions like Umbanda. The Lucumí ("loo-koo-MEE") liturgy adopts the language of this people, whose holy city Ifẹ ("ee-feh") was mythically founded by Obatala. People of this ethnicity sacrificed birds for a syncretic religion while enslaved in Cuba. For 10 points, Candomblé and Santería venerate the Orishas of what ethnic group, the largest in Nigeria with the Hausa and Igbo?
ANSWER: Yoruba [prompt on Nigerians or Africans; prompt on Afro-Cubans or cubanos or cubanas] (The village is Adefunmi's Oyotunji African Village, named for the Oyo Empire.) $<$ Religion $>$
2. In 2013, Texas created a task force to respond to these people's doubled mortality ratio, whose 2007 statistics were finally updated in January 2020 by the NCHS. René Spitz found that cohorts lacking these people often developed marasmus. Over 25 percent of these people experience "third day blues" that may develop into psychosis or a restless form of depression. In the absence of these people, subjects show a disorganized, anxious-avoidant or secure response in Mary Ainsworth's "strange situation," which extended John Bowlby's attachment theory about their "deprivation." Harry Harlow created wire and wool "surrogate" monkeys to model these people, whose absence may cause "separation anxiety." For 10 points, what people release oxytocin during breastfeeding to bond with their babies?
ANSWER: mothers [accept motherhood or maternal health; accept surrogate mothers; accept pregnant women; prompt on caregivers or parents; prompt on women or girls; prompt on postpartum depression or postpartum psychosis by asking "what people experience that condition?"]
<Social Science>
3. David Applegate designed the Concorde program for solving this task. K-opt methods are the basis for the popular Lin-Kernighan heuristic for this task. If the triangle inequality holds, a three-halves approximation to this task can be solved in polynomial time with the Christofides ("krih-STO-fih-deez") algorithm. A dynamic programming solution to this problem that runs in "big-O of two-to-the- $n$ times $n$-squared" time was devised by Held and Karp. This problem can be brute forced by searching $n$-minus- 1 factorial possibilities, while a poor approximation can be found more quickly using nearest neighbor methods. This problem is equivalent to finding a minimum weight Hamiltonian cycle on a complete weighted graph. For 10 points, name this NP-hard problem of finding the shortest route that visits every city on a map exactly once.
ANSWER: traveling salesman problem [or TSP; or traveling salesperson problem; prompt on minimum weight Hamiltonian cycle until "Hamiltonian cycle" is read; prompt on shortest tour or shortest route] <Other Science>
4. Year names from this city provide evidence that some of its people emigrated to nearby marshes and formed the mysterious "Sealand Dynasty." Misconceptions about this city by other ancient writers inspired a now-lost history of it by the astrologer Berossus. Robert Koldewey's innovations in stratigraphy helped date this city's mud-brick Etemenanki. This city's Processional Way led up to a monumental entryway that was glazed blue to imitate lapis lazuli and was covered in reliefs of lions, aurochs, and dragons called mušhuššu ("moo-shoo-shoo"); that Gate is displayed in Berlin's Pergamon Museum. The Isin-Larsa period ended after the First Dynasty of this Amorite city enacted reforms like the "eye for an eye" law code promulgated by Hammurabi. For 10 points, what Mesopotamian city legendarily built Hanging Gardens?
ANSWER: Babylon [or Bābilim] (The gate is the Ishtar Gate.)
<Other History>
5. Thanks to Galileo's planetary discoveries, this artist added stars to the top of a painting that depicts the title figure clutching a scythe in his right hand as a plump baby cries in his left. He's not French, but a faction in the Academy named for this artist emphasized color and feuded with the drawing-focused Poussinists. Frans Snyders painted the eagle in this artist's depiction of a chained figure being pecked. This artist of Prometheus Bound created a 24-painting cycle that includes a depiction of two putti presenting a portrait of the title woman to Henry IV. This teacher of Anthony van Dyck completed the Descent from the Cross triptych for a cathedral in Antwerp. For 10 points, name this Flemish artist of the Marie de Medici cycle who often depicted fleshy nudes.
ANSWER: Peter Paul Rubens [prompt on Rubenists] (The first line describes Saturn Devouring His Son.)
<Painting/Sculpture>
6. In a novel with this title that ends "I hadn't learned anything at all," a Harvard freshman spends two weeks in Paris with Svetlana. In another novel with this title, a character rents a home from a gossiping clerk to follow a woman who whips an officer across the face. The Hungarian boy Ivan emails Selin in a novel with this title by Elif Batuman. In a novel with this title, a character tries to sit as far away from a Chinese vase as possible before breaking it during an argument and earlier narrowly survives a murder attempt by having an epileptic seizure. The protagonist of that novel with this title returns to a Swiss sanatorium after breaking down over the murder of his lover Nastasya by Rogozhin. For 10 points, give this title of a novel about Prince Myshkin by Fyodor Dostoevsky. ANSWER: The Idiot [or Idyot]
<European Literature>
7. A 1987 experiment by the European Muon Collaboration yielded the still-unexplained finding that most of this particle's spin did not seem to be carried by its constituent ("cun-STIT-choo-int") particles. The Georgi-Glashow model allows an X boson with negative-four-thirds charge to mediate this particle's decay. A method for calculating this particle's charge radius measures the Lamb shift of a system containing a muon and one of these particles. This particle's half-life would be greater than 10-to-the- 34 years, but its decay has not been observed. This particle consists of two up quarks and a down quark and can be converted to neutrons via electron capture. For 10 points, name this positively charged elementary particle found in atomic nuclei.
ANSWER: proton
$<$ Physics>
8. The claim that this concept is the "sensorium of God" was attacked as heretical because it implied that the essence of God contains parts. Immanuel Kant claimed that this concept's corresponding mathematical science is the [emphasize] analogue of mechanics, not arithmetic, as part of an argument that this concept is a pure form of "outer intuition," in contrast to an alphabetically-later counterpart. In a lengthy correspondence, the "absolute" and "relational" theories of this concept were defended, respectively, by Samuel Clarke and Gottfried Leibniz. This concept makes up three-quarters of the "block universe." Isaac Newton used a "bucket argument" to claim that all motion occurs relative to a rigid Euclidean example of this concept. For 10 points, name this concept that is united with time in special relativity.
ANSWER: space [prompt on geometry; prompt on answers including space and time by asking "which of those concepts?"]
<Philosophy>
9. This crop was domesticated with manioc near Llanos de Mojos ("YA-nohs de MO-hohs"), Bolivia, but captives who survived by eating it raw on slave ships conflated it with an African relative named for the Bambara. This crop titles a Confederate folk song about the Georgia Militia. Italian pushcart vendors in New York sold this crop to Union troops who first ate it boiled in the South. Farmers in Suffolk, Virginia competed with this crop's "Spanish" variety. The mental health advocate Rosalynn Smith helped her husband farm this crop in Plains, Georgia.
P. T. Barnum sold this crop in bags depicting Jumbo the elephant at his circus. Over 300 products made from sweet potatoes and this crop were invented by the Tuskegee agronomist George Washington Carver. For 10 points, Jimmy Carter farmed what legumes that Americans often eat as "butter?"
ANSWER: peanuts [accept peanut oil or peanut butter; accept goober peas or variants; accept groundnuts or ground pease; prompt on peas or legumes or nuts or Fabaceae; accept maní or pindar or similar; accept $\underline{\text { Arachis }]}$ (The first sentence is partially from Judith Carney's In the Shadow of Slavery: Africa's Botanical Legacy in the New World. The song is called "Goober Peas." Rosalynn Smith's husband is Jimmy Carter.)
<American History>
10. The narrator of a poem by this writer calls himself a "materialist" and declares "I believe in a heaven I'll never enter" while mourning a dog. This author writes "deny me bread, air, / light, spring" but "do not take from me your laughter" in a poem from the collection The Captain's Verses. A poem by this writer claims "Night invaded me with her powerful army" and "I forged you like a weapon" while praising the subject's "white hills, white thighs." This author describes the "bedrock depths" of the title location of a poem that asks his "brother" to "Rise up in birth with me." Another poem by this author of "The Heights of Macchu Picchu" proclaims "Tonight I can write the saddest lines." For 10 points, name this Chilean author of Twenty Love Poems and a Song of Despair.
ANSWER: Pablo Neruda [or Ricardo Eliécer Neftalí Reyes Basoalto]
<World/Other Literature>
11. This structure's function is negatively affected by an autosomal dominant disorder caused by a repeating CAG ("C-A-G") sequence on the ATXN3 gene, known as Machado-Joseph disease. Anti-Yo antibodies cause this structure's paraneoplastic ("para-neo-plastic") degeneration. Information reaches this structure through the arbor vitae. Mossy fibers coming to this structure from the pons can form synapses called rosettes with granule cells, which make up 80 percent of the brain's neurons. The two hemispheres of this structure are separated by the vermis, which contains one of the deep nuclei that receive inhibitory signals from large GABAergic neurons called Purkinje cells. For 10 points, motor control is governed by what brain structure beneath the cerebrum, whose name means "little brain"?
ANSWER: cerebellum [prompt on brain until read; do not accept or prompt on "cerebrum"]
<Biology>
12. In this [emphasize] state, William Ridgely and Papa Celestin split up and led rival "Tuxedo" bands. Standards from this state's style like "Livery Stable Blues" were recorded by a Chicago-based band called the "Rhythm Kings" of a city here. Slaves gathered to play music at this state's Congo Square. This state's district of Storyville is where many jazz musicians got their start, including the cornetist Buddy Bolden. Preservation Hall is a historic music venue in this state, the home of Sidney Bechet ("buh-SHAY"), Jelly Roll Morton, and a bandleader who led the Hot Five and Hot Seven groups. Dixieland jazz originated in this state, the home of a musician who sang "I see trees of green, red roses too" on "What a Wonderful World" and had the nickname "Satchmo." For 10 points, name this home state of jazz trumpeter Louis Armstrong.

## ANSWER: Louisiana [or LA]

<Other Arts>
13. A queen of this country employed Jean Laborde to create munitions factories until he tried to overthrow her. A king of this country legendarily killed a group of soldiers with a single rotten egg empowered by a set of twelve royal idols called the sampy. This country's noble Andriana caste lived in rova palaces and ruled over the enslaved Andevo and free Hova. This country was Christianized and modernized by Radama I. A queen from this country threw Christian converts off cliffs and forced sorcerers to swallow poisonous tangena nuts. This country's Merina Kingdom was ruled by Queen Ranavalona I. Austronesian people sailed from Sumatra to this island in the Indian Ocean. For 10 points, name this island country, previously known as the Malagasy Republic, whose capital is Antananarivo.
ANSWER: Madagascar [or Republic of Madagascar]
<World History>
14. To kill one of these animals, Dadhichi sacrifices himself so that his bones can create a destructive weapon. The 1000 children of Kashyap and Kadru take the forms of these animals, and include their queen Manasa. In one story, a demon of this form is killed by sea foam at twilight. These animals are central to an activity involving a pungi. It's not a bull or a tiger, but art often shows one of these animals being worn by Shiva. One of these animals referred to as "Ananta" is often shown supporting Vishnu and is named Shesha. One of these animals is killed after the 99 fortresses in which it hoarded water were destroyed by Indra. A race that is half-human, half these animals eternally fights with Garuda. For 10 points, Vasuki, Vritra, and the Nagas are depicted as what animals that are "charmed" in street performances?
ANSWER: snakes [or serpents or equivalents; accept cobras; accept dragons or Nagas]
<Mythology>
15. The title character of a story by this author buries the body of his friend beside his cabin after transporting it in a donkey-cart. In a story by this author, a character is told "Euchred ("YOO-kurd"), old man!" after failing to bribe a judge to prevent his friend from being hanged. This author parodied Swinburne's "Atalanta in Calydon" in a poem that Mark Twain co-adapted into the play Ah Sin. This author wrote a story in which a prostitute known as the Duchess is found embracing Piney Woods after they die of starvation during a snowstorm. That story by this author ends by describing a two of clubs pinned to a tree above the body of the gambler John Oakhurst. For 10 points, name this author who depicted the California Gold Rush in stories like "The Outcasts of Poker Flat."
ANSWER: Bret Harte [or Francis Brett Hart] (The first two lines refer to the story "Tennessee's Partner.")
<American Literature>
16. Two bulls fight each other in this country's annual Corrida of Grmeč ("GRR-metch"). Wooden windmills can be found by the Pliva Waterfall near this country's city of Jajce ("YA-eet-sa"). This country's capital names "roses" such as one in Markale ("MAR-ka-leh") market, which were formed by filling red resin in craters left by bombing campaigns. This country's only coastline stretches twelve miles around the city of Neum ("NEH-oom"). The Mehmed Pasha Sokolović ("soh-koh-loh-veech") Bridge in this country's city of Višegrad ("VEE-sheh-grahd") serves as the setting for Ivo Andrić's ("EE-vo AHN-drich's") The Bridge on the Drina. The free city of Brčko ("BIRCH-ko") was divided between this country's Republika Srpska and its namesake "Federation" by the Dayton Agreement. For 10 points, name this former Yugoslav republic whose capital is Sarajevo.
ANSWER: Bosnia and Herzegovina
$<\mathrm{CE} / \mathrm{Geo} / \mathrm{Other} /$ Pop Culture $>$
17. Giacomo Casanova lamented this ruler's creation of a "chastity commission" intended to crack down on prostitution and adultery. After the death of a child from smallpox, this ruler held a royal dinner to reward the first batch of children to be inoculated. This ruler employed Gerard van Swieten to reform hospital practices in the city of Graz and investigate vampire sightings in her kingdom. Foreign minister Wenzel von Kaunitz helped this ruler ally herself with France in the "Diplomatic Revolution" prior to the Seven Years' War. Frederick the Great invaded this monarch's territory of Silesia and disregarded the Pragmatic Sanction issued by her father, Charles VI. For 10 points, name this Enlightenment-era Habsburg empress of Austria.
ANSWER: Maria Theresa of Austria [or Maria Theresia]
<European History>
18. Mary Eliza Haweis ("HAW-iss"), who is best known for scholarly works about this author, illustrated an anthology of this author's works subtitled "a Golden Key." In one of his books, this author is chastised for his misogyny by Queen Alceste. A character created by this author tears a leaf from the book Valerie and Theofraste, becoming deaf in one ear when the clerk Jankin slaps her for it. A story by this author of The Legend of Good Women ends with an old hag turning into a beautiful princess. That story by this author follows a knight who is given a year to find what women most desire. A group meets at the Tabard Inn to travel to the tomb of Thomas Becket in a work by, for 10 points, what author who included the Wife of Bath in the Canterbury Tales?
ANSWER: Geoffrey Chaucer
<British Literature>
19. A composer from this country wrote three nocturne-like "symphonic impressions" for piano and orchestra that were partially inspired by a folk genre typically sung by cantaors. The second movement of a concerto from this country begins with four B minor arpeggios and a dolce solo beginning with the mordent F-sharp, E, long F-sharp for the English horn. Camille Saint-Saëns ("kah-MEE san-SAWNS") dedicated Introduction and Rondo Capriccioso ("ka-pree-CHO-zo") to a violinist from this country who wrote Zigeunerweisen
("tsih-GOY-nur-VYE-zen"). A composer from this country included "Dance of Terror" and "Ritual Fire Dance" in his ballet Love, The Magician, and wrote a piece titled for Nights in the Gardens of [this country]. For 10 points, name this home country of Manuel de Falla ("deh FAH-yah") and Joaquín ("wa-KEEN") Rodrigo, the composer of Concierto de Aranjuez ("kon-see-AIR-toh deh ah-rahn-WEZZ").
ANSWER: Spain [or España] (The violinist is Pablo de Sarasate.)
$<$ Classical Music>
20. Beta-aluminate ceramics support the formation of nickel metal and this compound in ZEBRA batteries. "Multiple effect distillation" treats solutions of this compound whose gradients generate "blue energy" in a "pressure-retarded" process at Israel's Sorek plant. Around 800 degrees Celsius, this compound melts into an ionic liquid whose electrolysis splits it into a reactive metal and a toxic gas. A solution of this compound forms hydrogen gas and a hydroxide in the Castner-Kellner process. This compound's concentration is 0.9 percent in "normal" IV drips. A "global conveyor belt" that is formed by different levels of this compound and temperature drives thermohaline circulation. Reverse osmosis removes this compound from brackish water. For 10 points, desalination filters what compound from seawater?
ANSWER: sodium chloride [or $\underline{\mathbf{N a C l}}$; or table salt; prompt on desalination or thermohaline circulation until read; accept normal saline solution; accept saltwater]
<Chemistry>
21. A guerrilla leader in this country was captured while hiding in a dance studio after police searching garbage cans found empty tubes of psoriasis cream. The Tarata bombing was committed by a movement from this country two days before a massacre at La Cantuta University. This country's only president from the APRA party was Alan García. A former president of this country resigned after intelligence chief Vladimir Montesinos was caught bribing congressmen, and later avoided human rights abuse charges from the Barrios Altos massacre by fleeing to his parents' home country of Japan. In 1992, Abimael Guzmán and other Shining Path rebels were captured here. For 10 points, name this South American country where President Alberto Fujimori served as president from Lima.
ANSWER: Peru [or Republic of Peru; or Piruw Suyu]
<World History>

## Bonuses

1. Two artists produced the documentaries Powers of Ten while working in this house, which pioneered the use of De Stijl ("duh STALE") in architecture outside of Europe. For 10 points each:
[10] Name this house, number 8 in a series of "Case Study Houses." It was designed by, and named for, a husband-and-wife design duo who crafted a single piece of plywood into the first "Organic Chair."
ANSWER: Eames House
[10] The Eames House, like most of the Case Study Houses, is located in this US city's metropolitan area, whose other architectural highlights include Frank Gehry's Walt Disney Concert Hall and the Hollywood sign.
ANSWER: Los Angeles [or L.A.]
[10] Charles Eames initially sketched out the Eames House with this other architect, with whom he collaborated on the Entenza House next door. This architect's design of Dulles International Airport incorporates catenary curves, which inspired his Jefferson Expansion Memorial.
ANSWER: Eero Saarinen
<Other Arts>
2. Two men in this novel who compete for Mumbi's affections participate in a foot race, resulting in a broken arm for one of the men. For 10 points each:
[10] Name this novel, in which Mugo removes suspicion from Karanja by confessing to betraying a fighter who killed District Officer Robson.

## ANSWER: A Grain of Wheat

[10] A Grain of Wheat was written by this Kenyan author, who also wrote Weep Not, Child and Petals of Blood. ANSWER: Ngugi wa Thiong'o ("GOO-gee wah thee-ON-go") [or James Thiong'o Ngugi]
[10] Ngugi wrote his novel Devil on the Cross on toilet paper in one of these locations. Sozaboy author Ken
Saro-Wiwa documented his time in one of these places in A Month and a Day, and was executed after spending a year in one of them.
ANSWER: prison [or jail; or equivalents]
<World/Other Literature>
3. An "amalgamated" union for this industry was led by Sidney Hillman, who founded the American Labor Party to support Roosevelt in 1936. For 10 points each:
[10] Identify this trade whose 1913 strike in Paterson, New Jersey, was organized by the visiting IWW leader Elizabeth Gurley Flynn. This industry's workers died in the 1860 Pemberton disaster and quoted a poem by James Oppenheim in a 1912 strike.
ANSWER: textile workers [or clothing workers; or apparel; or garment workers; accept silk workers or weavers; accept Paterson silk strike or Lawrence textile strike; accept shirtwaist or blouse or other specific garments; accept Amalgamated Clothing Workers of America or ACWA] (The poem is Bread and Roses.)
[10] Textile labor leader Clara Lemlich gave a speech in this language for the 1909 "Uprising of the 20,000." The socialist Jewish Daily Forward was written in this Germanic language spoken by most Ashkenazi Jews before the Holocaust.
ANSWER: Yiddish
[10] Yiddish speakers often settled on the Lower East Side in these shabby dwellings reformed by the 1879 "Old Law" and 1901 "New Law." New York's Immigration Museum preserves one of these crowded buildings. ANSWER: tenement houses [prompt on high-rise apartments or flats or other generic answers; prompt on rookeries; accept Lower East Side Tenement Museum]
<American History>
4. Imitation meat products often use 2-methyl-3-furanthiol ("fyur-an-THIGH-awl") generated by this reaction, which can produce the carcinogen acrylamide. For 10 points each:
[10] Name this reaction that forms glycosylamines ("gly-CO-sil-uh-MEENS") that undergo an Amadori rearrangement. This reaction often occurs alongside caramelization and improves a food's flavor by causing non-enzymatic browning.
ANSWER: Maillard ("my-YAR") reaction [or Maillard browning]
[10] These carbohydrates with a reactive anomeric ("an-oh-MAIR-ick") carbon undergo the Maillard reaction. Benedict's test changes color in the presence of these carbohydrates, which have a free carbonyl ("car-bo-NEEL") group.
ANSWER: reducing sugars [accept reducing disaccharides; prompt on sugars; prompt on monosaccharides or disaccharides or polysaccharides or aldoses or ketoses]
[10] Reducing sugars undergo the Maillard reaction during the application of this process, which is symbolized delta above a reaction arrow. This process is applied to food via convection ovens and conduction from pans.
ANSWER: heating [accept increased temperature or thermal energy transfer or equivalents]
<Chemistry>
5. Answer the following about literary depictions of the English coastal town Lyme Regis, for 10 points each.
[10] Louisa Musgrove suffers a fall down some stairs during a vacation to Lyme Regis in a pivotal scene from this author's novel Persuasion, published five years after Pride and Prejudice.
ANSWER: Jane Austen
[10] Charles Smithson falls in love with the disgraced former governess Sarah Woodruff, who frequently stares out to the sea from the shore of Lyme Regis, in this postmodernist novel with multiple endings by John Fowles.
ANSWER: The French Lieutenant's Woman
[10] The life of Lyme Regis fossil collector Mary Anning is chronicled in Tracy Chevalier's novel Remarkable Creatures. In 1999, Chevalier published this historical novel that follows the life of the 16-year-old maid Griet as the title artistic figure.

## ANSWER: Girl with a Pearl Earring

<British Literature>
6. A major Renaissance treatise on this practice recommends using its Venetian form, which involved three books called the memoriale, giornale, and quaderno. For 10 points each:
[10] Name this practice. The Medici bank adopted ledger books for this practice and pioneered its double-entry type. ANSWER: accounting [or bookkeeping; or keeping financial records or similar; accept double-entry

## bookkeeping]

[10] The oldest European record of double-entry bookkeeping comes from the accounts of this city-state. This Italian city-state, which dominated the region of Liguria, vied with Venice over control of the Mediterranean.
ANSWER: Republic of Genoa [accept Comune di Genova]
[10] Benedetto Cotrugli, an economist from this city, described an early version of double-entry bookkeeping. This city became a major maritime republic after being transferred from Venice to Hungary in the Treaty of Zadar.
ANSWER: Ragusa [or Dubrovnik; accept Republic of Ragusa]
<European History>
7. A short 2000 piece by John Corigliano titled for a technique named after this city quotes many important pieces in music history. For 10 points each:
[10] Name this city where Johann Stamitz ("SHTAH-mits") founded a school of composers that became known for their use of crescendoing arpeggios at the beginnings of pieces.
ANSWER: Mannheim [accept Mannheim school or Mannheim rocket or The Mannheim Rocket]
[10] In his The Mannheim Rocket, Corigliano claimed that the "motor" of his rocket was a "very low, very slow" example of the "Alberti" form of this musical feature, which consists mostly of broken chords. This term also names the bottom clef on a piano staff.
ANSWER: bass [accept Alberti bass or bass line]
[10] Corigliano's The Mannheim Rocket playfully quotes the soft melody [read slowly] "C C, E E, G G, E" from this Classical symphony in the low brass. This second "London" symphony is nicknamed for the fortissimo chord that occurs at the end of that melody.
ANSWER: "Surprise" Symphony [or Joseph Haydn's Symphony No. $\underline{94}$ in G major; or equivalents] <Classical Music>
8. This resident of the "Castle of Shadows" was renowned for teaching skills like pole vaulting over castle walls and underwater combat. For 10 points each:
[10] Name this mythological figure who instructs a warrior armed with a barbed spear to defeat her rival, Aífe ("EEF-yuh").
ANSWER: Scáthach ("SKA-hawk")
[10] Scáthach teaches this Irishman, the hero of the Ulster cycle. He wields the legendary spear Gáe Bulg ("guy BUL-ugh").
ANSWER: Cu Chulainn ("coo HULL-in") [or Setanta]
[10] While having an affair with Scáthach's daughter, Uathach ("OO-uh-ha"), Cu Chulainn accidentally breaks some of these things belonging to her, necessitating a duel with her husband. It's not a fish, but Finn MacCool gains vast amounts of knowledge after burning and sucking on one of these things.
ANSWER: fingers [or thumbs; or equivalents; prompt on hands; prompt on bones or body parts or similar]
<Mythology>
9. A ridge found in place of upper incisors called a "dental pad" helps this group of organisms process plant matter. For 10 points each:
[10] Name this suborder of mammals whose stomachs are composed of the reticulum, omasum, abomasum, and a methanogen-rich chamber in which foregut fermentation takes place.
ANSWER: ruminants [or Ruminantia; prompt on artiodactyls or ungulates; anti-prompt (ask "can you be less specific?") on specific ruminants like cows, sheep, deer, or giraffes]
[10] The microbiome in ruminant stomachs allow them to break down this polymer found in leaf fibers and grasses. This polysaccharide is the most abundant naturally-occurring polymer.

## ANSWER: cellulose

[10] The GI tract of ruminants typically contains this species of the genus Bacillus, which is a common model in endospore formation studies. An enzyme named for this organism cleaves DNA polymerase I to form the Klenow fragment.
ANSWER: Bacillus subtilis [accept subtilisin]
<Biology>
10. The first major hip-hop album to be made entirely using this technique was DJ Shadow's Endtroducing.... For 10 points each:
[10] Name this technique integral to John Oswald's plunderphonics. The MF DOOM and Madlib album Madvillainy was recorded over two weeks its artist spent in Brazil "cratedigging," which is vital to this technique.
ANSWER: sampling music [or samples]
[10] Another album made entirely from samples was Donuts, released by this Detroit producer three days before his 2006 death. This producer collaborated with Madlib on Champion Sound.
ANSWER: J Dilla [or Jay Dee or James Dewitt Yancey]
[10] Donuts opens with a sampled version of this group's song "All I Do is Think of You." "I Want You Back" and "ABC" are two songs by this Motown family group whose member Michael later became known as the "King of Pop."
ANSWER: Jackson 5 [or the Jacksons; accept Michael Jackson]
<CE/Geo/Other/Pop Culture>
11. Despite this institution's notorious history of corruption and misuse, members of it could not impose a sentence of death. For 10 points each:
[10] Name this punitive court. It was eventually abolished after Charles I used it to prosecute opposing nobles.
ANSWER: Court of the Star Chamber
[10] The Star Chamber was established by Henry VII, a king of this dynasty. This dynasty came to power after the defeat of Richard III at Bosworth Field.
ANSWER: Tudor Dynasty [or House of Tudor]
[10] This man, Henry VII's most trusted advisor, presided over the Star Chamber. He developed a taxation theory known as his namesake "fork" in which people living lavishly could afford more taxes because of their obvious wealth, while people living modestly could also afford more taxes because they were saving.
ANSWER: John Morton [accept Morton's Fork]
<Other History>
12. A dispute about grammar led an irate newspaper columnist to publicly reveal this poet's homosexuality in 1924. For 10 points each:
[10] Name this poet who ponders "How long can I let my mind moulder in this place?" and asserts "You won't find a new country" in "The City." This poet asks "Why are the senators sitting there without legislating?" in "Waiting for the Barbarians."
ANSWER: Constantine Cavafy ("kuh-VAH-fee") [or Konstantinos Kavafis]
[10] Cavafy wrote "Waiting for the Barbarians" in this language. The Odyssey, which was written in this language's ancient form, inspired George Seferis to write "Mythistorema" in its modern form.
ANSWER: Modern Greek [or Ellinika]
[10] E. M. Forster's "Alexandria: A History and a Guide" included a Cavafy poem about this person whose "plans" are "all proving deceptive." That poem tells this person "you hear an invisible procession" and "listen with deep emotion... the pleas of a coward."
ANSWER: Mark Antony [or Marcus Antonius; accept "The God Abandons Antony"]
<European Literature>
13. A toroid of wire called a Rogowski coil may be used to measure this phenomenon. For 10 points each: [10] Name this phenomenon whose density tends to be distributed towards the surface of a conductor. This phenomenon experiences a higher effective resistance due to the proximity effect.
ANSWER: alternating current [or alternating electrical current; or $\mathbf{A C}$; prompt on electric current]
[10] High voltage transmission of power via AC relies on these devices to change the voltage. These devices generally transfer electrical power between circuits.
ANSWER: transformers
[10] The higher effective resistance of AC circuits causes them to lose more energy due to the heating predicted by this law. This law typically states that voltage equals the product of current and resistance.
ANSWER: Ohm's law
<Physics>
14. Answer the following about the incompetent art historian Ascanio Condivi, for 10 points each.
[10] Condivi started his career in this artist's workshop, but he was so bad at painting he turned to writing instead. Condivi's biography of this artist describes him painting the ceiling of the Sistine Chapel.
ANSWER: Michelangelo Buonarroti [or Michelangelo Buonarroti]
[10] Condivi uncharitably depicts this pope's impatience over the Sistine Chapel ceiling. Michelangelo designed this pope's tomb, which includes sculptures of several slaves, as well as a horned Moses.
ANSWER: Pope Julius II [prompt on Julius]
[10] Condivi claims that Michelangelo was entirely self-taught, even though his training in this artist's workshop is well-documented. This artist painted a fresco cycle of the life of the Virgin in Santa Maria Novella.
ANSWER: Domenico Ghirlandaio
<Painting/Sculpture>
15. Case Western was one of the first universities to create a program integrating this field with the humanities and bioethics. For 10 points each:
[10] Name this field whose "traditional" form is practiced in Tibetan Sowa-Rigpa. This field informs a branch of anthropology that studies culture-bound syndromes, folk herbalism, acupuncture, and other cultural aspects of health.
ANSWER: medicine [accept medical anthropology or traditional medicine or ethnomedicine or alternative medicine or similar; accept ethnopharmacology or ethnobotany; accept medical humanities; accept doctors or nurses or physicians or other healthcare professionals; accept medical education; prompt on psychology or psychiatry]
[10] Ola palm leaf texts inform the traditional medicine of this country, where yellow oleander poisoning drove a 1983 to 1993 "suicide epidemic." The ethnography In My Mother's House traces a civil war in this county, which houses a Tooth of the Buddha relic in Kandy.
ANSWER: Sri Lanka [or Democratic Socialist Republic of Sri Lanka; accept Ceylon] (Sharika Thiranagama wrote In My Mother's House.)
[10] Sri Lanka's Vedda people spend two months a year harvesting this food, a popular folk treatment for wounds.
Lǐ Shízhēn ("shur-jun") wrote of a healing substance made from mummies and this food, which Mozambique's Yao people are guided to by birds of the genus Indicator.
ANSWER: honey [accept honeycombs; accept honeyguides; prompt on bees or beehives; accept mellified man]
<Social Science>
16. Two characters argue over the meanings of the words "vassals" and "vessels" in a short story by this author. For 10 points each:
[10] Name this author who wrote about Nick, Mel, Terri, and Laura partaking in the title activity while getting drunk in his story "What We Talk About When We Talk About Love." This author also wrote the collection Cathedral.
ANSWER: Raymond Carver
[10] Nathan Englander took inspiration from Carver to write about a tense parlor game in the short story "What We Talk About When We Talk About" this person. Her life is the subject of a play by Frances Goodrich and Albert Hackett.
ANSWER: Anne Frank
[10] This Japanese author titled his memoir What I Talk About When I Talk About Running. This author also wrote Kafka on the Shore and The Wind-Up Bird Chronicle.
ANSWER: Haruki Murakami
<American Literature>
17. In a 1953 lecture on the "Problem" of this figure, Ernst Käsemann ("KEZ-uh-mahn") introduced the "criterion of dissimilarity." For 10 points each:
[10] Name this historical figure studied with the criteria of "multiple attestation" and "embarrassment." Albert Schweitzer ("SHVYTE-suh") critiqued the first "quest" for records of this man, who is the subject of the "Q source" and Josephus's Testimonium Flavianum.
ANSWER: Jesus [or Jesus of Nazareth; or Jesus Christ; accept The Quest of the Historical Jesus or The Quest for the Historical Jesus or Von Reimarus zu Wrede: eine Geschichte der Leben-Jesu-Forschung]
[10] According to the "swoon hypothesis," Jesus did not die but fainted from this punishment that he suffered instead of Barabbas. Good Friday commemorates this event, while Easter celebrates Jesus's subsequent resurrection. ANSWER: crucifixion [or word forms like being crucified; or being nailed to the cross; prompt on execution or equivalents]
[10] Julius Africanus critiqued the Greek historian Thallus's interpretation of this event during the crucifixion. The Synoptic Gospels claim that this event occurred for three hours right before Jesus asked why God had forsaken him. ANSWER: crucifixion darkness [accept the sky becoming dark in the daytime or equivalents; accept solar eclipse] <Religion>
18. The KGB attempted to blackmail this leader with photos of him having sex with Russian women dressed as flight attendants, but this leader instead asked for more copies to show his people. For 10 points each:
[10] Name this leader who blended the principles of Nasakom and Pancasila ("pahn-cha-SEE-lah") in his formulation of Guided Democracy. This leader hosted a conference that founded the Non-Aligned Movement at Bandung ("bahn-DOONG").
ANSWER: Sukarno [or Kusno Sosrodihardjo]
[10] Sukarno was the first president of this country. The New Order of his successor Suharto eliminated this country's communist PKI party and crushed regional revolts in East Timor.
ANSWER: Indonesia
[10] Sukarno sparked this diplomatic crisis in which Indonesian guerrilla fighters were encouraged to "gobble raw" a newly formed Malaysia in 1963. ASEAN ("AH-see-ahn") was created in the wake of this regional crisis in 1967. ANSWER: Konfrontasi [prompt on the Confrontation]
<World History>
19. The absence of Gunn-Peterson troughs ("troffs") indicated that the density of this substance in the Universe is much lower than originally expected. For 10 points each:
[10] Name this specific form of a substance that emits radiation at 1420 megahertz due to a spin-flip transition in its hyperfine structure. That radiation emitted by this substance is a major tool for studying the period between reionization and recombination.
ANSWER: neutral hydrogen gas [or H I ("H one"); or unionized hydrogen; or neutral atomic hydrogen; prompt on atomic hydrogen gas or $\underline{H}$; do not accept or prompt on "H II" or "H2" or "molecular hydrogen"] (The later clues refer to the 21-centimeter line.)
[10] Gunn-Peterson troughs were predicted due to neutral hydrogen completely absorbing radiation in the alpha range of this spectral series. This series results from an electron's principal quantum number transitioning from 2 or higher to 1 .
ANSWER: Lyman series [accept Lyman-alpha line or Lyman-alpha radiation]
[10] Gunn-Peterson troughs and the similar Lyman-alpha forests are effects observed in the spectra of these extremely powerful and distant active galactic nuclei that can either be "radio-quiet" or "radio-loud."
ANSWER: quasars [accept quasi-stellar radio sources]
<Other Science>
20. Will Kymlicka ("KIM-lick-uh") has argued that this ideology is consistent with liberalism because of the need for group-specific rights such as special representation and self-government. For 10 points each:
[10] Name this ideology that a Susan Moller Okin essay provocatively argues is "bad for women." Implementation of this ideology often stresses the need to create "common ground."
ANSWER: multiculturalism [accept Multicultural Citizenship; prompt on pluralism, diversity, melting pot, cultural mosaic, or similar]
[10] Another feminist philosopher, Catherine MacKinnon, has promoted the dominance approach over an approach named for this word in arguments for women's equality. This word also names a principle stating that inequalities must be arranged to maximally benefit the least advantaged members of society.
ANSWER: difference [accept difference approach or difference principle]
[10] The difference principle was first proposed in this philosopher's A Theory of Justice, which Okin criticized from a feminist perspective for assuming that the family was inherently just.
ANSWER: John Rawls
<Philosophy>
21. A book in this genre muses how "the trains in any country contain the essential paraphernalia of the culture," noting that Malaysian ones have "a noodle stall" and Indian ones have "a vegetarian kitchen and six classes." For 10 points each:
[10] Name this genre of Paul Theroux's The Great Railway Bazaar. Works in this genre typically document the author's experience visiting different countries.
ANSWER: travel literature [or travelogues or travel memoirs or travel narratives or equivalents]
[10] This author helped popularize the travelogue genre with Journal of a Tour to the Hebrides. Another account of the same trip was published by Samuel Johnson, the subject of a biography by this man.
ANSWER: James Boswell
[10] This travel writer's first major work, A Time of Gifts, was published 43 years after he walked from the Hook of Holland to Constantinople. This author continued narrating his journey in Between the Woods and the Water.
ANSWER: Patrick Leigh Fermor
<British Literature>

