Chicago Open 2014: A Redoubtable Coupling of Editors

Packet by Dog With a Peer-Reviewed Journal Article (Mike Bentley, Arun Chonai, Eric Douglass, Bryn Reinecke)

Edited by Austin Brownlow, Andrew Hart, Ike Jose, Gautam & Gaurav Kandlikar, and Jacob Reed

Tossups

1. A stage direction in this play reads "there is chaos behind the civility, of course." In an essay about this play, its author wrote that originally, this play was going to be about a doctor who gives himself AIDS. In act two, the male lead of this play recalls how he stopped to purchase vegetables at a roadside stand and saw the title figure, which caused him to feel an entirely pure love. This play begins with its male lead being interviewed about designing the World City in the Midwest and the Pritzker Prize that he just won. Shortly afterwards, the protagonist shows his good friend Ross a picture of his paramour. After clashing with their homosexual son Billy in this play, the central couple destroys all of the furniture in their house in a rage that ultimately causes Stevie to kill the title figure and bring her on stage. This play takes its title from a line in *The Two Gentlemen of Verona* and focuses on Martin, who has an affair with the title figure. For 10 points, name this Edward Albee play named for an animal.

ANSWER: The Goat [or Who is Sylvia?]

2. When the structures conferring this property are below 500 angstroms in length, this property can be measured by comparing its isotherm with a reference curve in the Broekhoff-de Boer method. This quantity is raised to the negative-three power in the Kozeny-Carman equation, which predicts the pressure drop of a fluid. A method of measuring this property that relies on the expansion of helium gas frequently overstates its value, and it can be analyzed via imbibition experiments. The effective form of this property is the difference between its total form and the storativity of the material, and geotechnical engineers use a related form of this quantity called the void ratio. Its vugular form occurs in rocks prone to dissolution, and the theoretical maximum for it is 46% in rocks with cubic grain packing. For 10 points, name this property that is the proportion of the volume of rock occupied by interstitial space, and that affects how fluids flow through rock.

ANSWER: porosity [accept porousness or pore space; accept pore size until "effective"]

3. The ecclesiastical policies of this king caused a riot that began when Jenny Geddes threw a stool at a minister's face. He faced a scandal after he ordered the execution of Sir John Eliot and eight others for holding down Sir John Finch in his chair. Thomas Darnell was among the "five knights" who brought a common-law challenge to this king's "forced loans," which he used to raise funds alongside an unconventional "ship money" tax on people living within fifteen miles of the sea. This king, who set off a rebellion in Ireland when he signed the death warrant of Thomas Wentworth, entered into "The Engagement" with the Scots, which prompted John Cook to accuse him of treason. After the murder of the Duke of Buckingham three years into his reign, this king's policies prompted the promulgation of the Petition of Right. For 10 points, what king, who appointed William Laud as Archbishop of Canterbury during a "personal rule" that prompted the English Civil War, was executed in 1649? ANSWER: Charles I [prompt on "Charles"]

- 4. A concertante piece for this instrument, despite being in E-flat major, starts in C minor, and progresses from a dramatic Adagio non troppo through a lyrical Andante to a flashy 6/8 Allegro. In Weber's *Oberon* and *Der Freischütz* overtures, the second theme in the fast sections is first played by this instrument. The first theme of one concerto for this instrument just goes up an F-minor arpeggio to C and then down again and is introduced by the low strings. Another concerto for this instrument uses an orchestra with no oboes. A song featuring this instrument interpolates two extra verses into Wilhelm Müller's "Der Berghirt." This instrument appears alongside the standard voice and piano in that Schubert song, "The Shepherd on the Rock." Weber wrote a concertino, a Grand Duo Concertante, and two concertos for this instrument. Another concerto for this instrument was originally written for a "basset" kind of it. For 10 points, Anton Stadler inspired Mozart to write an A-major quintet and concerto for which woodwind instrument? ANSWER: clarinet
- 5. This statement can be used to derive a generalized version of Dykhne's formula that includes a geometric prefactor. A stronger version of this statement is applicable to any piecewise twice-differentiable, finite-dimensional spectral projection. That version was stated by Avron and Elgart, who built on Kato's extension of this statement to discrete, non-degenerate spectra in order to eliminate the gap condition that determines the timescale for its namesake limit. A result of this statement is that avoided crossing occurs when the Landau-Zener velocity is zero. This statement implies the existence of a gauge-invariant phase difference between the initial and final states of a system, when at least two Hamiltonian parameters undergo its namesake type of transport along a closed loop. For 10 points, name this statement originally developed by Born and Fock, which suggests that a slowly evolving system will retain its instantaneous eigenstate throughout an energetic transition.

ANSWER: adiabatic theorem [do not accept or prompt on "adiabatic approximation"]

6. In this novel, the ghost of the Capuchin priest Corneille Breille appears during the requiem mass for a man who often confessed to him. The Tivoli Café becomes a gathering place for émigrés in this novel, in which the central character is introduced to the music of Esteban Salas y Castro. One character in this novel is comforted by the masseuse Soliman following her husband's death. Another character in this novel takes up the study of poisonous plants after losing his arm in a sugar mill accident and sometimes transforms into an insect to avoid capture. That character, who is eventually burned at the stake in this novel, is named Macandal. Years after the death of Charles Leclerc and the departure of Pauline Bonaparte, this novel's main character is forced to work on the building of the Citadelle Laferriere. For 10 points, name this novel that follows the slave Ti Noel during the reign of Henri Christophe in Haiti, which was written by Alejo Carpentier.

ANSWER: The Kingdom of this World [or El Reino del Este Mundo]

7. This book notes that Impressionism fulfills Rousseau's prediction of a return to nature and laments that the "modern artist is a workman, not a creator." It claims that the democratic support for popular enlightenment "smooths the path for the coming Caesars of the world." This book, which recognizes the Babylonian, Egyptian, Chinese, Indian, Mexican, Classical, Arabian, and European-American cultures as the eight "high cultures," claims that the process of "pseudomorphosis" can stop a culture from achieving its potential to become a civilization. This book's discussion of race was extended in its author's later *The Hour of Decision*. The terms Magian, Faustian, and Apollonian describe the world's three great civilizations in this book, which offers a "Copernican" view of history in which civilizations cycle through four phases associated with spring, summer, fall, and winter. For 10 points, name this 1918 book that predicts the waning of the title culture, by Ostwald Spengler.

ANSWER: Decline of the West [or Der Untergang des Abendlandes]

8. In an October 1963 trip to the UN, this man gave a speech pleading for the release of political prisoners that inspired UN Resolution 28 and met lifelong friend E.S. Reddy. This man, who made a 1985 speech calling on the people of his country to render it "ungovernable," married Adelaide Tsukhudu while on bail from charges that led to the 1956 "Treason Trial" and recruited Pallo Jordan to establish Radio Freedom. This man, nicknamed "O.R.," was re-elected at the 1985 Kabwe Conference and established a guerrilla training camp in Morogoro. Following the death of Albert Luthuli, this man rose to his highest post, where he authorized chief of staff Joe Slovo to carry out the Church Street bombing. This man assumed control of the Umkhonto we Sizwe MK following the Rivonia trials and was succeeded in the post of party leader by Nelson Mandela. For 10 points, name this anti-apartheid activist who was president of the African National Congress from 1967 to 1991.

ANSWER: Oliver [Reginald] **Tambo** [or **O.R. Tambo**; prompt on "O.R."]

9. This man painted an allegedly 140-year-old man wearing a kufi in his portrait of Yarrow Mamout. One of his paintings shows a deceased child in a white bonnet as her mother wipes her tears away with a handkerchief. This artist of *Rachel Weeping* painted a work that shows a dead wild turkey in its bottom left corner, as a figure lifts a red curtain to reveal many stuffed birds on display. This man, who exchanged a saddle for art lessons from John Hesselius, showed the central figure of one of his portraits leaning against a cannon and standing over a grounded flag captured from mercenaries in *George Washington at Princeton*. Alexander Wilson and this artist's sons Linnaeus, Franklin, and Titian are present in a painting by this man that shows a pulley system going into a pit at Barber farm. This painter of *The Artist in His Museum* also had sons named Raphaelle and Rembrandt. For 10 points, name this early American painter of *The Exhumation of the Mastodon*.

ANSWER: Charles Willson Peale

- 10. Leighton and Pirrung massively parallelized the fundamentals of this method in their VL-SIPS technology. Jean Frechet and Clifford Leznoff developed techniques that rely on the same principles as this method. This method was significantly enhanced in Ronald Frank's SPOT method. This method's inventor names a chloro-methyl derivative of polystyrene used in this method, and Gisin's cesium salt esterification can generate the backbone in this method. Racemization can be introduced in this method with the use of in-situ coupling agents like DCC or DIPCDI, which prime the monomers. TFMSA or hydrofluoric acid cleave protecting groups like Boc or Fmoc ["F-mock"]from the product in its last step, and it proceeds via a "deprotection-wash-coupling-wash" cycle. Its products are assembled in a C-terminal to N-terminal fashion, unlike in ribosomal synthesis. For 10 points, name this method of synthesizing proteins developed by Robert Merrifield that involves growth on small insoluble particles. ANSWER: Merrifield solid phase peptide synthesis [or SPPS; accept "protein" instead of "peptide"; accept Merrifield synthesis or reaction; accept descriptive answers that clearly state solid phase and optionally proteins or peptides being produced]
- 11. This city hosts the annual Il Cinema Ritrovato festival to screen restored films, and the largest Children's Book Fair in the world. A large church in this city contains Lorenzo Costa's frescoes *The Triumph of Fame* and *The Triumph of Death*. This city passed the *Paradisus* to liberate its serfs in the years following its victory at the Battle of Fossalta. Giovanni da Oleggio sold this city to the papacy. The Spanish-born founder of the Dominican order died in this city, and artists like Nicola Pisano worked on his tomb here, the Arca di San Domenico. Its citizens built the large San Petronio Basilica to honor one of its patron saints. The Asinelli and Garisenda families each built this city's prominent Two Towers, both of which are now leaning. In 1088 CE the first European institution of a certain type was founded in this city on the confluence of the Savena and Reno rivers. For 10 points, name this Italian city home to Europe's first university.

ANSWER: **Bologna** [or **Bononia**]

12. The man of this name had sons named Riphath and Togarmah. The woman of this name bore three children: a son named after the valley where God promised to break the bow of Israel, a daughter named for the fact that God will no longer have mercy on Israel, and a son named for God's claim that "ye are not my people, and I will not be your God." According to the Table of Nations, the man of this name had three sons, the eldest of whom is the namesake of the Ashkenazi tribe. The mention of the woman of this name prompts an extended metaphor in which God claims that he will rebuke Israel and will only restore it when god is called "husband," not "master." The woman of this name, the daughter of Diblaim and mother of Lo-Ammi, Lo-Ruhamah, and Jezreel, is redeemed for 15 pieces of silver and a quantity of barley after she is loved by another man adulterously. For 10 points, give this shared name of the eldest son of Japheth and the "promiscuous woman" whom God told Hosea to marry.

ANSWER: Gomer

13. According to Pliny's *Natural History*, the public was outraged when Tiberius grew so fond of this statue that he removed it from the Warm Bathhouse and placed it in his bedchamber. In 1849, a copy of this statue was found in a basement of a house on the Vicolo dell'Atleta in Trastevere in Rome that was once used as a synagogue. That marble copy, which now stands in the Belvedere Courtyard in the Vatican, should hold a bronze strigil, which is missing. The sculptor of this statue, who, like Polykleitos, hailed from Sicyon, reformed his predecessor's system of proportions to make this statue taller and with a smaller head, but retained the contrapposto pose for both it and the similar *Oil Pourer*. This nude statue depicts its subject's left arm extending across his chest so that his hand reaches the triceps of his right arm, which is extended directly toward the viewer. For 10 points, name this statue by Lysippos that shows an athlete removing dirt and oil from his body.

ANSWER: The <u>Scraper</u> [or <u>Apoxyomenos</u>]

14. One story says that this figure saved a pack of dogs by putting them into a giant boot and sending that boot down south where the dogs became white people. This deity was sometimes syncretized with Apasinasee, and mammalian bones support the roof this deity's home, to whose floor is attached her bent leg. The realm of this goddess was home to a slowly spinning wheel of ice and a terrorizing dog, which was sometimes said to be her consort. While she was mortal, she spurned all suitors so that she could take care of her one-eyed, one-armed father, but she eventually left him for a good-looking man from the Land of Birds. This figure could be appeased by a shaman that combed her hair if he could visit her realm of Adlivun. After she had her fingers chopped off by her father Anguta as she tried to climb into his boat, the fingers became seals, whales, and other marine animals. For 10 points, name this Inuit sea goddess.

ANSWER: Sedna [accept Apasinasee before mention]

15. This poet's adaptation of the Faust legend includes a scene in which a woman named Lust seduces Faust in his garden. This author, whose maxims include "a poem is never finished, only abandoned," created a character who says that "stupidity is not my strong suit." This poet wrote a pseudo-Platonic dialogue in which Eupalinos relates the necessary qualities to be an architect. Edmund Wilson relayed an anecdote in *Axel's Castle* in which this author angered some blowhards by being too well-dressed. One of this author's poems begins by comparing the sighing "single wind" with "distant diamonds dying." The speaker of another of this author's poems climbs to see a "temple of time" and describes an arrow as "flying, but yet not flying." This author broke his "Great Silence" by writing "La Jeune Parque." He wrote of "Zeno, Zeno, cruel philosopher Zeno" in a poem that ends with the command "the wind is rising...we must try to live!" For 10 points, name this author of "The Graveyard by the Sea."

ANSWER: Paul Valéry [his full name is Ambroise-Paul-Toussaint-Jules Valéry]

16. The classification of this industry's main product was decided in *Maurice v. Judd*. A disaster in this industry inspired a history by Nathaniel Philbrick based on the narratives of Thomas Nickerson and Owen Chase. African-American blacksmith Lewis Temple's namesake "toggle" was used in this industry. Its decline as an industry was hastened by Paul Poiret's development of a "slim, up-and-down" line of women's clothing. This industry, which used the process of "trying out" to process its main product, provided much of the aging equipment that was filled with stones and used to blockade Charleston Harbor during the Civil War. The case of *Ghen v. Rich* held that ownership rights in this industry arose from the common practice of identifying "bomb lances." "Reverend" Mary Coffin was integral to converting many of the workers in this industry to Quakerism. For 10 points, name this industry centered in New Bedford and Nantucket that harvested ambergris, baleen, and oil.

ANSWER: **whaling** [accept word forms or any equivalent of **hunting whale**s; do not accept or prompt on "fishing"]

17. This work includes a comparison of "live" or "dead" hypotheses to live and dead electric wires and discusses the momentous option of being asked to join Fridtjof Nansen's North Pole expedition. This work, which describes a conversation between its author and a biologist who refused to look for evidence of telepathy, begins by discussing an address by one Mr. Guest, who tells a student to prove the omnipotence of God. This work, which titles a collection that includes "Is Life Worth Living?" and "Reflex Action and Theism," challenges the schoolboy wisdom that faith concerns "something that you know ain't true." This work concerns the right to adopt a certain attitude in religious matters despite the fact that our "merely logical intellect may not have been coerced," and takes a different tack than its speaker's Gifford Lectures, which were compiled into *The Varieties of Religious Experience*. For 10 points, name this lecture about religious conviction by William James.

ANSWER: "The Will to Believe"

- 18. When the rate of this process is between zero and *c*, a shifting-mosaic pattern is expected in patch dynamics. The rate of this process is multiplied only by the fraction of occupied patches in Levins' metapopulation dynamics model. Four positive feedback cycles that increase the likelihood of this process occurring were proposed by Gilpin and Soulé. Jackson and Sax introduced the concept of an "Immigration Credit" to contrast with a term that describes the future occurrence of this process, which is called its namesake "debt." The rate of this process decreases with increasing area in Macarthur and Wilson's island biogeography model. When this process occurs in one of several populations, it is called its (*) "local" form. After the Nile Perch's introduction into Lake Victoria, there was a dramatic rise in this process among cichlids, and organisms that have experienced this process include the golden toad and the great auk. For 10 points, name this process that occurs when a species' population falls to zero.

 ANSWER: extinction [accept word forms; accept "local extinction"; accept expatriation until (*), anti-prompt (i.e. "can you be less specific?") thereafter]
- 19. This piece of prose notes that snakes and toads are killed "not for the evil they have done, but the evil they may do." Twice throughout this piece, it refers to a certain punishment as "fire and faggot." This piece states that Heaven let slip the moment "Post est Occasio CALVO!" It points out that the title group is "very numerous," but not as numerous as a similar group in France, and praises William III for giving them mercy. This tract begins by telling a story by Sir Roger L'Estrange that discusses the cock and the horses, and it criticizes the "fatal leniency" that allowed for the settlement of New England. This work's 1703 publication caused the author to be imprisoned for seditious libel; its author was then humiliated for three days at Charing Cross's public square, an experience that was mocked in the poem "Hymn to the Pillory." For 10 points, name this pamphlet that satirically argues for severe sanctions against religious Nonconformists in England, a work by Daniel Defoe.

ANSWER: "The Shortest Way with the Dissenters"

20. After conquering this city, Ibn Ukkasa was killed and crucified next to a dog's grave. Jacob ibn Gau was named nasi of the Jews of this city, but was later imprisoned here. After crucifying and exiling its citizens, Al-Hakam I destroyed the revolting "el Arrabal" suburb of this city. The Christian muladi Ibn Hafsun rebelled against another of its rulers, prompting the destruction of his fort at Bobastro. The Jahwarid dynasty included the "lords of the province" of this city, which contained the Madinat al-Zahra or "shining palace" that was destroyed by Berbers. Mozarabs like Paul Alvar and Eulogius were hanged in this city during its namesake "Martyrs Movement." This city, which Mugith al-Rumi captured from the Visigoths on the orders of Tariq ibn Zayad, was taken by Alfonso VII from the Almohads. Abd al-Rahman I was the first ruler of this capital of Al-Andalus and former Umayyad capital. For 10 points, name this Spanish city on the Guadalquivir River.

ANSWER: **Cordoba** [or **Cordova**; or **Qurtuba**h]

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Bonuses

1. This movement reached its apex at the Council of Basel. For 10 points each:

[10] Name this Catholic movement whose adherents claimed that religious authority rested with ecumenical councils, not the papacy.

ANSWER: **conciliar** movement [accept word forms such as **conciliarism**; do not accept or prompt on "conciliarity"]

[10] The conciliarists were ultimately condemned at the fifth ecumenical council held in this Apostolic Palace in the Vatican. The first council at this palace affirmed the Concordat of Worms of a year earlier.

ANSWER: <u>Lateran</u> Palace [or Palazzo <u>Laterano</u>; accept [First or Fifth] <u>Lateran Council</u>]

[10] Boniface VIII arguably inspired the conciliar movement with this 1302 papal bull asserting his absolute power.

ANSWER: Unam sanctam

2. "Prophet" Jennings designed cover art for this man's albums *Outward Bound* and *Out There*. For 10 points each:

[10] Name this early practitioner of the jazz flute who recorded "Gazzelloni" on his 1964 free jazz album *Out to Lunch!* He died in Berlin at age 36 when doctors assumed he was overdosing and failed to treat him for diabetic shock.

ANSWER: Eric [Allan] **Dolphy** [Jr.]

[10] The title of Dolphy's song "Hat and Beard" referred to the sartorial leanings of this jazz pianist of "Epistrophy," "Straight, No Chaser," and "Round Midnight."

ANSWER: Thelonious [Sphere] Monk

[10] Monk was one of many artists to do a version of this most recorded standard in jazz, which first gained American popularity in the 1930 Broadway revue *Three's a Crowd*. Coleman Hawkins recorded a notable 1939 version of this song, which was also the subject of a duet between Amy Winehouse and Tony Bennett. ANSWER: "**Body and Soul**"

3. This play ends with Nikita making a ghastly confession in which he admits that he heard bones crunching when he crushed his baby with a board. For 10 points each:

[10] Name this naturalist drama by Leo Tolstoy, in which Anisya cuckolds her rich husband Peter with the unfaithful and lazy Nikita.

ANSWER: The Power of Darkness [or Vlast' t'my]

[10] Another of Tolstoy's plays, *The Fruits of Enlightenment*, was first directed by this Russian actor who pioneered method acting.

ANSWER: Constantin [Sergeievich] Stanislavski

[10] Both Stanislavski and this Russian playwright were fans of marionette and puppet theatre. This author wrote the wildly influential "The Puppet Show," in which Pierrot hangs out with a group of mystics and falls in love with Columbine, only to discover tragically that she is made out of cardboard.

ANSWER: Alexander [Alexandrovich] Blok

- 4. Two men from this place carried out an attack in which the police officer Leslie Coffelt was killed. For 10 points each:
 - [10] Name this island whose independence was sought by Oscar Collazo and Griselio Torresola, two men who attempted to kill Harry Truman at the Blair House in 1950.

ANSWER: [Commonwealth of] **Puerto Rico** [or Estado Libre Asociado de **Puerto Rico**]

[10] In 1954, Puerto Rican nationalists shot 30 semi-automatic pistol rounds from the Ladies' Gallery in this building to protest U.S. occupation.

ANSWER: U.S. Capitol Building

[10] This Marxist Puerto Rican separatist organization, a forerunner of the Boricua Popular Army, was responsible for numerous bombings, including a January 1975 Wall Street bombing that killed four people.

ANSWER: <u>FALN</u> [or <u>Fuerzas Armadas de Liberación Nacional</u>; or reasonable translations such as <u>Armed Forces of National Liberation</u>]

- 5. This problem was inspired by a legend in which Brahmin priests working in an underground Varanasi temple are moving 64 rings from one peg to another peg. For 10 points each:
 - [10] Name this classic problem in which disks are moved from one stack to another following a certain set of constraints.

ANSWER: **towers of Hanoi** [accept pluralized and singular forms of the answer]

[10] The problem can be solved with the numeral system of these binary codes, sometimes called reflected binary codes, in which two successive values differ by only one bit.

ANSWER: Gray code

[10] The axes of these constructs are labeled using the Gray code. These graphical constructs allow anyone, even Chris Ray, to find prime implicants and thus minterms of boolean expressions.

ANSWER: **Karnaugh** maps [or **K-map**s]

- 6. When this book won both the Booker and the James Tait Black Memorial Prize, its author gave a controversial speech saying that he would donate half of his prize money to the Black Panthers. For 10 points each:
 - [10] Name this bizarre novel in which the title character participates in sexual conquests during Garibaldi's campaigns, the Boer Wars, and the Great War.

ANSWER: G.

[10] G. is a novel by this British writer, who wrote a series of essays with other writers entitled Ways of Seeing to supplement its namesake BBC series.

ANSWER: John [Peter] Berger

[10] John Berger's King, like Virginia Woolf's Flush, is narrated by this kind of animal.

ANSWER: **dog** [accept **canine** or other equivalents]

- 7. These formulas give the derivatives of the tangent, normal, and binormal unit vectors with respect to arclength. For 10 points each:
 - [10] Name these formulas that describe the kinetic properties of a particle moving along a curve in Euclidean space.

ANSWER: Frenet-Serret formulas

[10] The coefficients of the Frenet-Serret formulas are curvature and this other quantity, which measures the speed of rotation of the bi-normal vector. Coulomb invented a "balance" named for this quantity that is used to measure very weak forces, especially in experiments on gravitation.

ANSWER: torsion

[10] The first of these identities sets the exterior covariant derivative of the torsion form equal to the wedge product of the curvature form and solder form. They reduce the number of independent Einstein field equations from 10 to 6.

ANSWER: Bianchi identities

- 8. This philosopher argued that evil is the ground that teaches man the difference between good and evil and is necessary for the development of perfection. For 10 points each:
 - [10] Name this German philosopher who distinguished between God's aspects of perfection and the ground of being in his book *Philosophical Enquiries into the Nature of Human Freedom*.

ANSWER: Friedrich [Wilhelm Joseph von] Schelling

[10] Several of Schelling's titles make reference to this German term that now refers to the German romantic idealist conceptions of the natural sciences held by Schelling and his contemporaries.

ANSWER: Naturphilosophie

[10] This contemporary thinker lambasted Schelling's definition of absolute knowledge as similar to a night "in which all cows are black" in his *Phenomenology of Spirit*.

ANSWER: Georg Wilhelm Friedrich Hegel

- 9. This man appeared in early 90s Nike commercials in which he said that "the purpose of technology is not to confuse the brain but to serve the body" in advertising the Air Max line. For 10 points each:
 - [10] Name this writer who appeared in the music video for Ministry's "Just One Fix," played the old junkie Tom in *Drugstore Cowboy*, and was played by Kiefer Sutherland in the 2000 movie *Beat*.

ANSWER: William [Seward] **Burroughs** [III] [accept William **Lee**]

[10] Another early 90s Nike commercial featured this 1970 John Lennon song, which was produced by Phil Spector and includes the refrain "we all shine on."

ANSWER: "Instant Karma!"

[10] This Portland, Oregon-based ad agency was inspired by the last words of Gary Gilmour to create the Nike slogan "Just Do It." It is also behind ESPN's "This is SportsCenter" commercials.

ANSWER: Weiden+Kennedy [or W+K]

- 10. During this event, a mob of angry Parisians marched on the Bastille and murdered the Provost of Paris, Pierre de Essarts. For 10 points each:
 - [10] Identify this 1413 Parisian revolt during the Hundred Years' War, named for the butcher who led it.

ANSWER: Cabochien Revolt

[10] An account of the Cabochien Revolt appears in Michel Pintoin's chronicle of the reign of the sixth French king of this name, known as the "Beloved" or the "Mad." The fourth French king of this name was called "the Fair."

ANSWER: Charles

[10] The Cabochien revolt was an outgrowth of the French civil war between the Burgundians and this other faction, whose name derives from the region that Bernard VII ruled. This faction was forced to recognize Burgundian independence in the Treaty of Arras.

ANSWER: Armagnacs

- 11. Kapitonov and Jurka discovered helitrons in this organism, and the "b-z" locus is an oft-studied region on its chromosome 9. For 10 points each:
 - [10] Name this organism. The genome of the B73 strain of this organism was released in a landmark 2009 paper by Schnable et al., and strains of this organism are often categorized as "SS" or "NSS."

ANSWER: <u>maize</u> [or <u>corn</u>; accept <u>Zea mays</u> or <u>Z. mays</u>]

[10] This cytogeneticist discovered the role of transposons in maize using the Ac/Ds system. She also produced the first genetic map for maize, and is the only woman to be awarded an unshared Nobel in Physiology and Medicine.

ANSWER: Barbara McClintock

[10] Helitron transposons in maize replicate using this type of DNA replication, which results in a single strand of DNA. It is not theta replication, but the lambda phage replicates using this process during lytic development.

ANSWER: <u>rolling-circle</u> replication [accept <u>rolling-circle</u> amplification or <u>RC</u>A or <u>RC</u>R]

- 12. This is a bonus on American doggerel and food. To begin, let's listen to some beautiful poetry: "Come, dear bowl, Glide o'er my palate, and inspire my soul." For 10 points each:
 - [10] That bullshit appears in what three-canto poem by Joel Barlow that celebrates the title dish of cornmeal mush by mock-heroically tracing the history of corn?

ANSWER: The Hasty-Pudding

[10] "Wives in the avocadoes, babies in the tomatoes" and you, "Garcia Lorca...down by the watermelons" are just some of the enumerations of food found in this Allen Ginsberg poem.

ANSWER: "A Supermarket in California"

[10] Robert Hass writes "if you think I am going to make a sexual joke in this poem you are mistaken" in "Poem with a Cucumber in it," an entry in this collection of his. Another poem in this collection is a meditation on the pose of Vermeer's *Milkmaid*.

ANSWER: **Time and Materials**

13. This school of painting was characterized by flat expanses and minimum surface detail. For 10 points each: [10] Name this painting school that, along with action painting, was one of the major schools of Abstract Expressionism. It was influenced by Barnett Newman's *Who's Afraid of Red, Yellow and Blue?*

ANSWER: color field painting

[10] This color field painter developed a stain technique in which thinned oil was soaked onto an unprimed canvas. She died in 2011.

ANSWER: Helen Frankenthaler

[10] Frankenthaler, with many other color field painters, rose to prominence after taking part in this 1964 exhibition that Clement Greenberg curated at the Los Angeles County Museum of Art.

ANSWER: Post-Painterly Abstraction

- 14. A territorial dispute between these two countries ended with the 1995 Brasilia Presidential Act. For 10 points each:
 - [10] Name these two South American countries that fought the Cenepa War and the War of '41 during that dispute, which lasted from 1821 to 1998.

ANSWER: [Republic of] $\underline{Ecuador}$ [or República de $\underline{Ecuador}$] and [Republic of] \underline{Peru} [or República de $\underline{Per\acute{u}}$]

[10] The Brasilia Presidential Act was signed by this Peruvian president of Japanese descent who was later accused of crimes against humanity.

ANSWER: Alberto [Fujimori] Fujimori

[10] Fujimori was accused of ordering this anti-communist death squad to carry out the Barrios Altos, La Cantuta, and Santa massacres.

ANSWER: Grupo Colina

- 15. This woman had her tongue excised after she was raped by Tereus, so that she could not talk about what he did to her; luckily, she was able to convey her sad story by weaving. For 10 points each:
 - [10] Name this sister of Procne.

ANSWER: Philomela

[10] Philomela underwent this kind of transformation after praying to Zeus so that she could escape from Tereus. Two mythological figures named Cygnus underwent this kind of transformation.

ANSWER: <u>turning into a bird</u> [or <u>avification</u>; accept equivalents; accept <u>turning into a nightingale</u> or <u>turning into a swan</u>]

[10] After learning that Philomela was raped, Procne slew this son of Tereus and Philomela and fed him to his father. Other accounts state that he was turned into a wood pigeon after the tragic affair.

ANSWER: Itys

- 16. This novel's protagonist seeks to figure out what happened to Gordon Ngubene, who mysteriously died during a police interrogation. For 10 points each:
 - [10] Name this novel in which Ben du Toit investigates the death of his friend, only to be mysteriously murdered while investigating the aftermath of the Soweto Riots.

ANSWER: A Dry White Season [by Andre Brink]

[10] This Faulkner-inspired André Brink novel features thirty or so narrators, and traces the disintegration of the friendship between Nicholas and Galant amidst a 19th-century slave rebellion.

ANSWER: A Chain of Voices

[10] André Brink's *The First Life of Adamastor* is a reimagining of a monstrous character from this epic poem, in which Vasco da Gama encounters various gods and monsters on the way to India. It is considered the national epic of Portugal.

ANSWER: Os <u>Lusíadas</u> [or The <u>Lusiads</u>]

- 17. This book argued against the use of torture and secret proceedings and claimed that the penal system should administer penalties just severe enough to ensure order. For 10 points each:
 - [10] Name this book by Cesare Beccaria that argues for the abolition of the death penalty.

ANSWER: On Crimes and Punishments [or Dei Delitti e Delle Pene]

[10] This Italian criminologist developed largely discredited theories in which he claimed that anomalies he called "stigmata" resulted in higher crime among an atavistic criminal class.

ANSWER: Cesare Lombroso

[10] Lombroso's fascination with human measurements was suspiciously similar to that of this German physician who worked with Johann Spurzheim to found the pseudoscience of phrenology.

ANSWER: Franz Joseph Gall

- 18. Under the law of majestas, these people stood to receive one quarter of the property of anyone they successfully ratted out. For 10 points each:
 - [10] Name these professional treason-accusers of the early Roman Empire.

ANSWER: **delator**es [or **delators**]

- [10] Tacitus relates how the delatores were particularly rampant during the reign of Sejanus, the "imperial aide" and de facto ruler of the empire while this emperor was living on Capri.
- ANSWER: <u>Tiberius</u> Caesar Divi Augusti filius Augustus [or <u>Tiberius</u> Julius Caesar; or <u>Tiberius</u> Claudius Nero]
- [10] Tacitus also recounts an instance of delator abuse in which Caepio Crispinus and Romanus Hispo accused Granius Marcellus, the proconsul of this region. Antinous, the favorite nubile youth of Hadrian, also hailed from this region.

ANSWER: **Bithynia** [or **Bitinya**]

- 19. César Franck's Opus 1 contains three pieces in this genre using an early version of his cyclic form. For 10 points each:
 - [10] Name this genre of Clara Schumann's most famous piece, which was written in G minor. Robert Schumann wrote three pieces, in D minor, F major, and G minor, in this genre.

ANSWER: piano trio [prompt on "trio"]

[10] This composer revised his First Piano Trio in B major to remove quotations from Beethoven and Schubert songs; his other two piano trios are in C major and C minor. He also composed *A German Requiem*.

ANSWER: Johannes Brahms

[10] This composer's rediscovered "Easter Sonata" was recently premiered alongside her extremely difficult Piano Trio in D Minor. This composer of an E-flat major string quartet and the piano cycle *Das Jahr* had a sibling who wrote two piano trios, in D minor and C minor.

ANSWER: Fanny <u>Hensel</u> [accept <u>Fanny</u> Cäcilie <u>Mendelssohn</u>-Bartholdy or Fanny <u>Mendelssohn-Hensel</u> or Fanny <u>Hensel-Mendelssohn</u>; prompt on "Mendelssohn"]

- 20. Compatibilization procedures can be used to impart this property to two polymers that would otherwise not be capable of it. For 10 points:
 - [10] Name this property in which two or more substances mix in all proportions to form a homogeneous solution. Metal pairs without this property cannot form alloys.

ANSWER: <u>miscibility</u> [accept word forms such as <u>miscible</u>]

[10] The immiscibility of two liquids is key to the liquid-liquid form of this procedure, which involves a solute moving from one solvent to another as they are brought into contact. The more contact between the two phases, the greater the efficiency of this process.

ANSWER: [liquid-liquid] extraction

[10] Useful in understanding extraction systems, this law states that, for a solute and two immiscible solvents, the ratio of the concentrations of the solute in each solvent equals a constant.

ANSWER: Nernst distribution law [accept distribution law; prompt on "Nernst('s law)"]