

Chicago Open 2015

Packet by Tokyo Drifting Everywhere (Foster Hughes, Gaurav Kandlikar, Athena Kern, and Jason Zhou)

1. One leader during this period was nicknamed for Billiken dolls due to his bald head. A Christian politician during this period was stabbed to death by a railroad switchman. One law passed during this period forbade any association that advocated an abolition of the private property system. During one political crisis during this period, opposition groups formed the “Movement to Protect Constitutional Government”; that crisis occurred because no member of the army was willing to serve in the cabinet. A series of farmer riots in this period were triggered by the news that troops were being sent to (*) Siberia. During this period, an election law gave all men over 25 the right to vote. The emergence of a stable two-party system and the shift in power away from the genro during this period is called this its namesake “democracy”. A foreign minister during this period upheld the open-door policy in an agreement signed with Robert Lansing, and another prime minister during this period sent the 21 Demands to China. For 10 points, name this period of Japanese history which occurred after the Meiji restoration.

ANSWER: Taisho era

2. This artist created a sculpture of a woman who holds a branch of thorns behind her back and a divining rod in front of her which points to a large quartz crystal. One of this artist’s sculptures was purchased by the Duke of Cleveland and taken to Raby Castle after Miner Kellogg took it on a successful tour. This devotee of Swedenborg spent most of his artistic life in Florence, where he created the sculptures *Eve Tempted* and *Eve Disconsolate*. His full-length statues include his only male nude, *The Fisher Boy*, and a sculpture of a (*) Native American woman running while looking over her shoulder in terror, *The Last of the Tribes*. News of the gold rush inspired his *California*, while another of his sculptures inspired a sonnet by Elizabeth Barrett Browning saying that it confronts “man’s crimes in different lands.” A cross and a locket appear near that sculpture’s title figure, who stands with chains wrapped around her legs. For 10 points, name this 19th century neoclassical American sculptor of *The Greek Slave*.

ANSWER: Hiram Powers

3. The composer joked that musicologists might ponder the fact that a horn theme in this piece shares its notes with the “ape call” from Mahler’s *Das Lied von der Erde*. The two opening themes of the first movement of this piece were adapted from an unfinished violin sonata started by the composer in 1945. That first movement closes with a piccolo solo played against timpani rolls and pizzicato block chords in the strings. This symphony begins with the cellos and basses playing ascending E – F sharp – G, then ascending D-sharp – F-sharp – A. In the middle of the third movement, a solo horn blares the following concert pitch notes: (*) E – A – E – D – A. This E minor symphony was the composer’s first following his second denunciation. The third movement features the “Elmira” theme in honor of a student with whom the composer fell in love, and juxtaposes it with the “D-S-C-H” motif. The composer’s next symphony after this one is subtitled “The Year 1905.” For 10 points, name this symphony written after the death of Stalin, by the composer of *Lady Macbeth of the Mtensk District*.

ANSWER: Dmitri Shostakovich’s Tenth Symphony (accept “Shosty 10”)

4. A character in this collection tells a story called “The Wine of the Tetrarch” about a man who tells Peter that he has been unable to take pleasure in wine after an earthquake, and boasts that his name is Barabbas. In a story in this collection, Lincoln Forsner tells Mira Jama about the opera singer Pellegrina Leoni, who assumes different identities after losing her voice in a fire. Boris is urged to subdue Athena Hopballehus on the urging of the Prioress of Closter Seven in a third story in this collection, which ends with the Prioress changing bodies with the title (*) animal. This book includes the stories “The Dreamers” and “The Monkey,” as well as a story in which Calypso marries Jonathan Maersk in a hayloft, where they are trapped along with Cardinal Hamilcar and Malin Nag-ot-Dag. Another story in this book is named for a meal where the sisters Fanny and Eliza De Coninck are visited by the ghost of their brother Morten. For 10 points, name this book which includes “The Deluge at Norderney” and “The Supper at Elsinore,” as well as five other stories by Isak Dinesen.

ANSWER: Seven Gothic Tales

5. Polimeri Europa developed the PBE-1 catalyst for use in this reaction. Most modern forms of this process uses a modified and regenerable form of beta-zeolite as a catalyst in a fixed bed reactor, in the trademarked

refinement called Q-MAX. An unstable intermediate process is kept in liquid form using 5 atm of pressure, and the products of this process are often used to make polycarbonates. This reaction has traditionally used a dangerous solid phosphoric acid catalyst. It has nothing to do with hydrazine, but an alternative to this process that produces the same product is named for Raschig and Hooker. In one step of this reaction, (*) hydroperoxide is hydrolysed in the presence of a Lewis acid to facilitate a Hock rearrangement, and it ends in a decomposition which also yields acetone as a co-product. Its first step uses a Friedel-Crafts alkylation by propylene to produce its namesake intermediate. For 10 points, name this ubiquitous means of producing phenol.

ANSWER: cumene process [accept isopropyl benzene, accept answers like the cumene-phenol process, cumene-acetone process or cumene Hock rearrangement]

6. This person escaped arrest by taking refuge in the Temple of Athena of the Brazen House, where he was starved out, and he was removed from the temple before dying so as to not desecrate the temple. This person attempted to take refuge at Colona after being driven out of Byzantium by Cimon. This regent for Pleistarchus was recalled from Byzantium because he began adopting Persian manners and clothing. This person commanded the winning forces at a battle preceded by the death of Masistius. At that battle, this person finally ordered an advance while arrows were falling around him when he finally received a favorable goat omen. (*) At that battle, this person had a debate with Amompharetus, whose division was left behind in a retreat. This person commanded at that battle, occurring near Mount Cithaeron, which was the location of the death of Aristodemus when he charged the enemy alone, and that battle took place on the same day as the Battle of Mycale. For 10 points, give the name of the Spartan who defeated the forces of Marbonius at the Battle of Plataea.

ANSWER: Pausanias

7. A man born in this country drives across Europe with his seven-year-old son Leo in the novel *Travelling with Djinns*. An author from this country wrote a short story whose narrator forces himself to vomit up the title fruit after learning that his grandfather is cheating their neighbor Masood. After being exiled from this country, Najwa moves to London and develops a new identity through Islam in the novel *Minaret*. An author from this country wrote the story "A Handful of (*) Dates," as well as a novel about a village's reaction to an eccentric man's marriage to Ni'ma, *The Wedding of Zein*. This home country of Leila Aboulela is the setting of a novel whose main character murders his wife Jean Morris after teaching economics at Oxford. That novel, which is sometimes considered a deliberate reversal of *Heart of Darkness*, follows the narrator's quest to learn the story of Mustafa Sa'eed. For 10 points, name this nation home to Tayeb Salih, the author of *Season of Migration to the North*.

ANSWER: Sudan

8. This scientist's dissertation research about the psychodynamic defense mechanism of projection failed because the experiment was not double-blind. He worked with Donald Rubin to develop the Fail Safe N, a quantity used to determine the possible influence of publication bias. This person described that quantity when developing his ideas about the "file drawer problem" in which large amounts of studies with nonsignificant results go unpublished. Elashoff and Snow published a book devoted to rebutting this researcher's most famous work. This man's work with K. L. Fode about experimenter bias led to the adoption of the (*) double-blind experiment as the gold standard. That study, conducted with Lenore Jacobson, gave a disguised IQ test to students and then labeled some as "spurters" in a report given to teachers. For 10 points, name this social psychologist who definitively documented the existence of experimenter expectancy effects and wrote "Pygmalion in the Classroom" about how the expectations of teachers led to a type of self-fulfilling prophecy.

ANSWER: Robert Rosenthal

9. This book's frontispiece depicts a man falling from a rock into the sea, but being caught by a hand extended from the heavens. Its author wishes that humanity could "procreate like trees" instead of having sex, and claims "men that look upon my outside...do err in my altitude, for I am above Atlas his shoulders." This book declares "though there be but one world to sense, there are two to reason; the one visible, the other invisible," though its author dismisses rational objections to miracles by agreeing with Tertullian's statement "it is certain because it is impossible." Divided into two sections, the first discussing faith and hope, and the second discussing Christian charity, it inspired a number of responses with similar titles, including a 1682

poem defending Anglicanism by (*) John Dryden. It was first published in 1643 by an author who went on to write the essay "Urn Burial." For 10 points, name this book with a Latin title in which Sir Thomas Browne outlines his spiritual beliefs.

ANSWER: **Religio Medici**

10. In a commentary on a work named after this philosopher, Gilbert Ryle claimed that the aim of that work was to demonstrate that "when we treat a formal concept as if it were a non-formal concept... we are committing a breach of 'logical syntax.'" G.E.M. Anscombe argued that a principle developed by this philosopher can be reformulated as "whatever can be said at all can be said clearly," in a work whose title references philosophy "From" this thinker "to Wittgenstein." Jonathan Barnes called the work of Melissus of Samos, *Concerning Nature or What Is*, "no more than a cheap edition of" this thinker's work, which is preserved a 150-line hexameter poem (*) translated by Simplicius. That poem takes the form of a dialogue between the philosopher and the goddess who exhorts him to choose the "way of truth" over the "way of opinion." The dialogue named for this philosopher consists of two parts, the former of which concerns the necessity of forms, and the latter of which discusses the consequences of the hypotheses "the one is," and "the one is not." That dialogue named for this thinker also contains the notable infinite regress article known as the "Third Man." For 10 points, identify this founder of the Eleatic school who titles a namesake Socratic dialogue.

ANSWER: **Parmenides**

11. An Egyptian king with this name succeeded a man who was told to wash his eyes with the urine of a faithful woman to cure his blindness. That king of this name had a daughter named Theonoe who prevented her brother Theoclymenus from forcibly marrying Helen of Troy. A deity of this name is the grandfather of the twin gods that presided over the mysteries of Samothrace, the Cabeiri, through his daughter Kabiero. Heracles killed two this god's sons, Polygonus and Telegonus, in a (*) wrestling match. Aristaeus is told by Cyrene to consult this figure after the death of his bees. He resides on the island Pharos in the Nile Delta and is married to the Nereid Psamanthe. This god has a daughter Eidothea who advises a shipwrecked Menelaus on how to capture her father. He's not Nereus, but Homer refers to this god as the "Old Man of the Sea." For 10 points, name this shape shifting sea god.

ANSWER: **Proteus**

12. Measuring this effect in the muonium system allows for a precise determination of the mean square proton radius, knowledge of which is necessary to calculate the magnitude of this effect in more familiar systems. The original experiment that measured this phenomenon prepared atoms in a particular state, then passed them through a region filled with transition-inducing electromagnetic radiation until the atoms struck a tungsten foil, resulting in a current due to Auger emission; the difference in current with and without the radiation gave the magnitude of this effect, which was about 1000 MHz (*) in frequency units. This effect can be explained in three Feynman diagrams, two of which represent vacuum polarization and the anomalous magnetic moment of the electron. Originally discovered by its namesake and R.C. Retherford, this phenomenon was explained by Hans Bethe in terms of the self-interaction of the electron. For 10 points, identify this hyperfine phenomenon of quantum electrodynamics in which the $2S_{-1/2}$ and $2P_{-1/2}$ orbitals in an atom have slightly different energy levels.

ANSWER: **Lamb** shift

13. Three start codons in this organism's genome divide it into pre-S1, pre-S2, and S sections. It's not Epstein-Barr virus, but this agent is the most common cause of a form of infantile papular acrodermatitis named for Gianotti and Crosti. Around 30% of patients with polyarteritis nodosa are infected with this virus. Entecavir and telbivudine are treatments for this virus, whose receptor is NTCP, and its complete enveloped form is sometimes called the Dane particle. One antigen from this virus, denoted "e", is correlated with high replication rates, and packing cells with another antigen from this virus gives them a "ground glass" appearance. Tracking infection with this virus involves assaying for its (*) surface and core antigen, and antibodies to the same. Its incubation period is around 120 days, and the delta agent satellite can only propagate in the presence of this virus. Around 20% of patients chronically infected with this virus will experience fulminant failure of the organ it infects. This virus is blocked by a three-course vaccine usually began at birth. For 10 points, name this partly-double-stranded DNA virus which causes a form of hepatitis.

ANSWER: **Hepatitis B** [or **HBV**]

14. A poem named for these objects describes a weekly lesson in which they are passed out by a smiling woman and used automatically by “the circle of crazy ladies” in Bedlam; that poem was written by Anne Sexton. Hart Crane’s poem “Voyages II” mentions how these objects “off San Salvador / salute the crocus lustres of the stars.” A poem named for these objects begins and ends by using the words “astonishes” and “vexed” to describe a character’s “brown (*) study.” In that poem, these objects interrupt the speaker’s memories of how a lively girl harried some lazy geese into a pond. Another poem named for these objects consists of four sections which successively describe them as silver, golden, brazen, and iron, and mentions that they keep “time, time, time / with a sort of Runic rhyme.” For 10 points, name these objects which remind the speaker of the death of John Whiteside’s daughter in a poem by John Crowe Ransom, and title a poem by Edgar Allan Poe which coined the word “tintinnabulation.”

ANSWER: bells

15. A Midrashic legend claims that this man named God and the sea as guarantors for a loan, and when he was unable to repay it, a treasure chest was carried by the sea to the creditor as payment. This man is said to have died at the hands of Turnus Rufus, who questioned why God did not make the poor rich if he loved them. He defended the Song of Solomon’s canonicity despite its lack of mention of God, holding that if the Torah is holy, then the Song of Solomon is the Holy of Holies. Of four people who entered paradise, he was said to be the only one that emerged unscathed. Despite being (*) illiterate until age 40, this man was inspired to learn to read after seeing water carve out a hole in a stone drop by drop. He claimed Simon Bar Kokhba was the messiah and gave him the appellation “Bar Kochba,” and was the first to systematize *halakhot*, which was expanded upon by his successors into the Mishnah. For 10 points, name this first-century CE rabbi.

ANSWER: Akiva ben Joseph [or Akiba]

16. Ramshaw developed the “blossom” formalism for constructing these objects. Like similar constructs named for Hermite, these constructs are affine-invariant; in addition, the rational form of these constructs is also projection-invariant, although generally they are not. Points on these constructs can be evaluated with numerical stability by the recursive de Casteljau algorithm, and these constructs are normally written in the form of Bernstein polynomials. These constructs have the property that they are always contained within the convex hull (*) of their control points, which are used to define these constructs. 32 higher-dimensional generalizations of these constructs, called “patches,” were used to construct the Utah teapot. These constructs are used to define paths such as those used in scalable vector graphics and the B-spline is a generalization of these objects. For 10 points, identify these eponymous parametric planar constructs used in computer graphics which are named for their French inventor.

ANSWER: Bezier curves [accept “spline” before “rational”, prompt after that]

17. One of these architectural structures is set to be encircled by 15 rainbow-colored bands meant to symbolize “the ribbon of friendship”. The site surrounding another one of these structures by Albert Speer Jr. juts out into open water and is framed by nine oblong tear-shaped viewing bays that one mock-up shows peppered with the local *dhow*s, which have inspired the design of many of these structures, like another topped with a white rim whose walls emulate wood panel and look like a boat from ground level. A shimmering golden walled one of these was designed to be reminiscent of the nearby landmark Al Koot fort. Hexagonal solar panels will shade the parking and service areas leading from a nearby hotel up to what will be the most used of these structures, which has six bridge entrances over its circular moat, that design is the “Lusail Iconic” one of these things by Norman Foster. (*) It is a monumental challenge to air condition the interior of these spaces, and these projects have also courted controversy for its home nation’s corrupt migrant worker system which has left thousands of Indian and Nepalese workers stranded with confiscated visas, and dying at an estimated 1-3 workers per day in desert heat. For 10 points, name this group of 12 extremely decadent architectural structures to be built in cities like Al-Rayyan and Doha, the most infamous of which has generated a lot of silly internet grumbling about how Zaha Hadid’s design for it looks like a giant metallic vagina that people can play soccer inside.

ANSWER: 2022 FIFA World Cup stadia in Qatar [prompt on soccer stadium, accept any answer line which includes both “world cup” and any other underlined portion, prompt for “world cup” unless an answer mentioned all three of FIFA 2022 Qatar stadia]

18. This person allegedly had an affair with Queen Frederika of Greece during her visit to the US. This man advocated the creation of an “Estimates Division” in a report he wrote Mathias Correa and William Harding Jackson. During World War II, this man negotiated with Karl Wolff in Operation Sunrise for surrender of Nazi forces in Italy and receiving information on the Messerschmitt Me 262 jet from Fritz Kolbe. Edwin land sent this man a five-page report about a device codenamed CL-282 developed by the so-called “Skunk (*) Works”. With Frank Wisner, this person tried to influence the media in Operation Mockingbird, and he was succeeded by John A. McCone. This man rode on the plane from Italy to Tehran with the Shah in the wake of Operation Ajax. He established Operation 40 but resigned after his agency’s failure in the Bay of Pigs invasion. For 10 points, name this Director of the Central Intelligence Agency whose older brother was Eisenhower’s Secretary of State.

ANSWER: Allen Dulles [prompt on Dulles; do not accept John Foster Dulles]

19. Though not Norman Rockwell, this artist made a triple self portrait in which the central figure wears yellow shoulder patches, and which shows a preparatory sketch for the three faces on the right-hand side. This artist summarized the condition of his time with the credo “All is living dead.” This artist’s posthumous reputation skyrocketed when the collector Rudolf Leopold went on a buying spree to collect as many of this man’s paintings as he could for his museum. For an exhibition of his at the Galerie Arnot, he painted himself as St. Sebastian full of arrows and wearing an orange robe. Another of his self-portraits juxtaposes the brown tones of his own skin against the vivid red (*) fruit of the Chinese Lantern or lampion plant. The many red-haired women in his paintings are based on his lover Wally Neuzil, and his self-portraits include one showing him “as prisoner” after he was arrested in 1912 for publicly displaying erotic material. For 10 points, name this Austrian expressionist artist of *Death and the Maiden*, who painted many angular nudes bordering on the pornographic.

ANSWER: Egon Schiele

20. A late operation during this conflict resulted in the capture of the supposedly impregnable and excellently named fortress of Berg-op-Zoom, after which the general who had captured it won a somewhat meaningless Pyrrhic victory at Lawfeld. During this conflict, two combatants concluded the Convention of Klein-Schnellendorf, thereby removing a major coalitional pillar from one side in this war. After Max Joseph succeeded Charles VII as Elector of Bavaria during this conflict, he promised to vote for Francis Stephen of Lorraine. The earlier occupation of Munich in this conflict resulted in the signing of the Treaty of Breslau, (*) whose terms were largely reaffirmed three years later at the Treaty of Dresden. Major encounters in this war included an early defeat for the Prussian forces at Mollwitz and Murice de Saxe's victory over a multinational coalition at Fontenoy, in part because William, Duke of Cumberland, had to return to England to deal with the Jacobite uprising. The treaty which finally ended this conflict resulted in France regaining the lost fortress of Louisbourg in exchange for returning conquered Dutch territory, as well as another ruler's loss of Silesia. For 10 points, identify this dynastic conflict sparked by the death of Charles VI and the ascension to the throne of Maria Theresa, ended by the 1748 Treaty of Aix-la-Chapelle.

ANSWER: War of the Austrian Succession

Extra

Most plant disease resistance genes code for proteins that have an nucleotide binding domain and contain elevated numbers of residues of this amino acid. Ribonuclease inhibitors are unusually rich in this non-Cysteine amino acid, which is an important part of a domain that has alternating alpha helices and beta strands that fold into horseshoe-shaped structures. High levels of this amino acid are found in most plant PAMP-receptor kinases and in human toll-like receptors. The binding of Jun and Fos is based on interactions involving this molecule. In a different protein motif, this amino acid is a prominent part of the hydrophobic channel formed due to the dimerization of two alpha helices. For 10 points, name this hydrophobic amino acid that is found at every seventh position in the “zipper” motif named for it.

ANSWER: leucine [or L or Leu]

Extra

A failed amendment by Arlen Specter and Patrick Leahy to a bill which narrowed the scope of *this* piece of legislation attempted to explicitly safeguard the rights to habeas corpus, which would not be restored until a Supreme Court decision three years later. A clause nullifying the protections of this regulation for aliens found to be “awaiting determination” indefinitely was included in the Military Commissions Act of 2006, which would eventually be reversed by the decision *Boumediene v. Bush* and was speedily passed through congress in response to a ruling that found that the Combatant Status Review Tribunals that were established to try detainees at Guantanamo Bay was found in direct violation of both the Uniform Code of Military Justice and *this* provision, in the decision *Hamdan v. Rumsfeld*.⁹ “grave breaches” of this specific regulation are enumerated in the War Crimes Act. These provisions’ four tenets protect all non-combatants, including prisoners of war and those who have laid down arms from “outrages on personal dignity”, being taken hostage, torture, and being denied the judicial process of a “regularly constituted court”. FTP, name this regulation which outlines basic protections of people caught in “armed conflict not of an international character”, such as rebellion or rebel faction infighting, civil war, insurgency and anti-terrorist campaigns, which as its name suggests is a subordinate provision shared by all four Geneva Conventions.

ANSWER: **Common Article 3** of the Geneva Convention [prompt on the Geneva Accords]

1. This technique or its related Gel Permeation version can be used to determine a compound's dispersion index, which is equal to the ratio of M_w ["M-sub-w"] to M_n ["M-sub-n"]. For 10 points each:

[10] Name this technique that separates proteins based on the time it takes them to traverse a network of pores between gel beads.

ANSWER: size exclusion chromatography [or SEC]

[10] A hexameric tag of this amino acid is often engineered on to proteins so that they can be captured by nickel affinity chromatography. This amino acid has an imidazole side chain.

ANSWER: histidine [or poly-his tag, or H]

[10] This compound is used to purify proteins by altering their solubility. Because this salt is extremely soluble in water, adding it to a sample causes protein to decrease in solubility and "salt out."

ANSWER: ammonium sulfate or (NH₄)₂SO₄

2. This man ordained Matthias F. Cowley, who edited his daily journals for publication. For 10 points each:

[10] Name this religious leader whose 1890 Manifesto ended the practice of plural marriage in the Mormon church. He also published the earliest account of fly fishing west of the Mississippi.

ANSWER: Wilford Woodruff

[10] Woodruff was the first president of the St. George's temple where this leader helped him direct the establishment of the endowment ordinances. This man founded Salt Lake City.

ANSWER: Brigham Young

[10] The original defense of polygamy was announced by Orson Pratt, who was a member of this group of church leaders. They lie right underneath the First Presidency in the church hierarchy.

ANSWER: the Quorum/Council of the Twelve Apostles

3. This person ordered the construction of an addition to the palace of Palenque called the White Skin House. For 10 points each:

[10] Name this Mayan ruler of Tikal who reigned for about 68 years, the longest recorded reign in the Western Hemisphere. Some people claim that an image of an astronaut is carved on his sarcophagus.

ANSWER: Kinich Janaab Pakal [or Pakal the Great]

[10] This civilization sacked the Mayan city of Teotihuacan. They had their capital at Tula, Hidalgo and faced the nomadic Chichimec people.

ANSWER: Toltec culture

[10] The Maya used this calendar. One of its b'ak'tuns ended on December 21st, 2012, sparking unfounded fears of the end of the world, which, evidently, did not come about.

ANSWER: Long Count calendar

4. This god is the namesake of the document governing succession in the Hittite empire. For 10 points each:

[10] Name this Hurrian god who stomps off and falls asleep in a moor where no one could find him. His retreat from the world releases a mist and smoke and causes crops to die and pregnant animals and humans to stop conceiving.

ANSWER: Telepinu

[10] After Telepinu's father Tarhungave up looking for him, this grandmother goddess and conciliatory figure sent a bee to find him. In another story she had sent the same super bee to find Inara.

ANSWER: Hannahanna [begrudgingly accept Nintu]

[10] Hannahanna negotiates Telepinu's marriage to Hatepuna after the rescue of Istanu, who was a god of this domain. It is also personified by the Sumerian god Utu and in Babylonian mythology as Shamash.

ANSWER: the sun

5. For 10 points each, name these American authors who wrote novels about homosexuality.

[10] A young man travels across the United States while hustling in this author's first novel, *City of Night*. Classes in Chicano literature often read his 1991 novel *The Miraculous Day of Amalia Gomez*.

ANSWER: John Rechy

[10] This author was blacklisted from American newspapers for six years after writing a novel about an openly gay man, *The City and the Pillar*. He also wrote a novel about the transsexual film buff Myra Breckenridge.

ANSWER: Gore Vidal

[10] The gay engineer Tak Loufer helps Kid explore the city of Bellona in this African-American author's cryptic science fiction novel *Dhalgren*. He explored the Sapir-Whorf hypothesis in his novel *Babel-17*, and wrote the linked essays *Times Square Red*, *Times Square Blue*.

ANSWER: Samuel R. **Delany**

6. In 1982, Carlo Bini was roundly booed at the Met upon singing this aria after replacing Placido Domingo onstage. For 10 points each:

[10] Name this tenor aria which is sung in Act II by Enzo, who awaits the arrival of Laura aboard his ship.

ANSWER: "**Cielo e Mar**"

[10] "Cielo e Mar" is a highlight of this opera by Amilcare Ponchielli, which ends with the title character stabbing herself. It may be most famous for containing the "Dance of the Hours."

ANSWER: *La* **Gioconda**

[10] This author wrote the libretto for *La Gioconda*, as well as the libretti for Verdi's operas *Otello* and *Falstaff*. He also composed the opera *Mefistofele*.

ANSWER: Arrigo **Boito**

7. Ben Broos has suggested that these objects represent the painter's ideas of artistic perfection. For 10 points each:

[10] Name these objects, two of which appear in, and sometimes name, a self-portrait of their artist, in which he wears a white turban and holds a palette, brushes, and a mahlstick.

ANSWER: **circles** [prompt on **arcs**]

[10] That *Self-Portrait with Two Circles* was one of the later ones by this Dutch master, who also painted *The Conspiracy of Claudius Civilis*. He used much rougher brushwork and melancholy expressions in his self-portraits as he got older.

ANSWER: **Rembrandt** Harmenszoon van Rijn

[10] A painting of *Samson Betrayed by Delilah* originally attributed to Rembrandt is now generally attributed to this colleague of his, who had also studied under Pieter Lastman. A contemporary wrote that he surpassed Rembrandt in a "certain grandeur" in paintings like *Raising of Lazarus*.

ANSWER: Jan **Lievens**

8. This formalism, first introduced by John Wheeler, relates the incoming to the outgoing state via a matrix whose entries are amplitudes. For 10 points each:

[10] Identify this method of analyzing quantum-mechanical interaction problems in the asymptotic limits before and after interaction.

ANSWER: **s-matrix** formalism

[10] The formal definition of the s-matrix is given as the asymptotic limit of the product of the final state bra with the results of this operator applied to the initial state ket.

ANSWER: **propagator** or the **time-evolution** operator

[10] The time evolution operator is given by the exponent of the quantity minus i times the integral of this quantity, which for an arbitrary system represents the system's total energy.

ANSWER: **Hamiltonian**

9. This substance's cation exchange capacity increases with the relative amount of humus, and this substance is often divided into "horizons". For 10 points each:

[10] Name this substance, whose texture is described by the relative amount of sand, silt, and clay particles.

ANSWER: **soils**

[10] This model of soil formation was formulated by the pedologist Hans Jenny and takes its name from the five factors that Jenny argued influenced the characteristics of the resultant soil.

ANSWER: **Cliropt** model [or **climate**, **organisms**, **relief**, **parent**, and **time**]

[10] The Klamath-Siskiyou mountains are the largest source in North America for serpentine soil, which is derived from weathered rock of this type. Rocks of this type, such as peridotites, are very low in silicates and have a very high iron and magnesium content.

ANSWER: **ultramafic** [do not accept or prompt on "mafic"]

10. In 1871, this actor achieved his first major success by playing Mathias, the main character of Leopold Lewis's play *The Bells*. For 10 points each:

[10] Name this actor who became the manager of the Lyceum Theatre in 1878, where he starred in many performances of Shakespeare alongside Ellen Terry.

ANSWER: Henry **Irving** [or John Henry **Brodribb**]

[10] This man spent many years as the Lyceum's business manager, and may have used Irving as the inspiration for his novel *Dracula*.

ANSWER: Bram **Stoker**

[10] During the late 19th century, the Lyceum repeatedly staged this author's play *The Lyons Mail*. This author exposed social abuses in novels like *Foul Play* and *Hard Cash*, and wrote a historical novel about Gerard, a scribe in love with Margaret Brandt.

ANSWER: Charles **Reade**

11. In 1907, employees of these places went on strike at the Holborn Empire. For 10 points each:

[10] Name these places, which name a style of entertainment popular in England in the late 19th and early 20th centuries. Popular performers at these places included lions comiques such as George Leybourne, who sang songs like "Champagne Charlie."

ANSWER: **music halls**

[10] Music hall performers like Vesta Tilley helped recruit many English soldiers for this war by singing popular songs such as "Keep the Home Fires Burning" and "It's a Long Way to Tipperary."

ANSWER: **World War I**

[10] This singer, who supported the 1907 strike, was known as the "Queen of the Music Hall." She sang songs dripping with innuendo, such as "She'd Never Had Her Ticket Punched Before," as well as hits like "The Boy I Love is Up in the Gallery" and "My Old Man."

ANSWER: Marie **Lloyd**

12. "Pattern II" of this scheme is represented by a volatile hyperbolic curve with females occupying each extreme, while patterns I-A and I-B each follow a near identical slope, but vary with regard to chromosomal pairs, for 10 points each:

[10] Name this biological phenomenon present in certain amniotic reptilian vertebrates and in some turtles, which one theory says developed due to having a densely female brood in some species earlier in the calendar year.

ANSWER: **temperature-sensitive sexual selection/determination** or **temperature-dependant sexual selection/determination** or **thermo-sensitive sexual selection/determination** [within reason, accept answers which clearly imply the gender/sex of offspring is determined by temperature]

[10] This ecologist is a namesake of the prevalent double-eponymous theory of temperature-sensitive sexual determinacy along with James J. Bull. He also wrote a paper on the his Marginal Value Theorem of optimal foraging.

ANSWER: Eric **Charnov**

[10] Prior to Charnov and Bull's work, the predominant consensus of retention of temperature-dependant sexual determinacy in amniote reptiles was due to a type of inertia named for this adjective. This adjective also describes a type of tree that show relationships between species by shared characteristics, and a "species concept" which describes a species as a group that descended from a common ancestor.

ANSWER: **phylogenetic**

13. Interest in this policy grew after studies like the Kansas City Preventive Patrol Experiment found that rapid response was not effective. For 10 points each:

[10] Name this policy which has become increasingly popular in American cities during the past two decades. It emphasizes foot patrols, problem solving and partnership with local organizations in order to reduce crime.

ANSWER: **community policing**

[10] The other major American policing innovation of the past two decades is this strategic management system first implemented by New York City police commissioner William Bratton in 1994. It requires commanders to answer questions from their higher ups about weekly crime report data, and has been criticized for encouraging officers to manipulate crime statistics.

ANSWER: **CompStat**

[10] Community policing was influenced by broken windows theory, which was developed by this political scientist and George Kelling. He co-wrote the popular textbook *American Government* along with John DiIulio.

ANSWER: James Q. **Wilson**

14. The foundations for this book were laid by Dom Prosper Guéranger, who spearheaded an effort to record and transcribe old melodies from authentic manuscripts. For 10 points each:

[10] Name this compilation of medieval Gregorian chant melodies published by the Abbey of Solesmes. It went out of print following the decline of Gregorian chant after the Second Vatican Council.

ANSWER: **Liber Usualis**

[10] Vatican II's other reforms included removing this hymn from the Requiem Mass, due to its gloomy text. The traditional plainchant melody of this hymn was quoted by Sergei Rachmaninoff in *Rhapsody on a Theme of Paganini*.

ANSWER: **Dies Irae**

[10] Instead of using circular noteheads, Gregorian chant generally used these shapes to represent notes. Their name comes from the Latin for "gesture," because they supposedly resemble hand movements indicating melodic shape.

ANSWER: **neume** [or **neumatic** notation]

15. This conflict began following the marriage of Charles of Blois to Joan of Penthièvre. For 10 points each:

[10] Name this conflict in which John of Montfort sought to gain control of the namesake French region following the death of John III.

ANSWER: War of the **Breton Succession**

[10] The War of the Breton Succession came to an end at this 1364 battle during a siege of the namesake French town. Charles of Blois was killed during it.

ANSWER: Battle of **Auray**

[10] This Bohemian king, the son of Holy Roman Emperor Henry VII and Margaret of Brabant, died fighting at the Battle of Crecy despite being blind. He shares his royal name with an English ruler called "Lackland."

ANSWER: **John** of Bohemia

16. At this novel's outset, one character accurately predicts his own death, as he is a Leo, after his wife Zita leaves him for an Italian man, setting into movement the common theme of the suicide attempts of the three protagonists of this novel's disproportionately sized three sections, for 10 points each:

[10] Name this novel which contrasts the perpetual transience of the sometime art dealer and newspaper astrologer Inni Winthrop with the starkly opposite rigid lifestyles of the secular father Arnold Taads who immerses himself in the minutiae of his schedule, and his newly spiritual Japan-obsessed estranged son. It is probably the best known novel of Dutch author Cees Noteboom.

[10] Noteboom's novel about Arthur Daane, a man who lives in post-unification Berlin after losing his wife and son in a plane crash, is titled for this day, which is also the setting for the plot of Malcolm Lowery's *Under the Volcano*.

ANSWER: **All Souls** Day

[10] Arnold Taads' son in *Rituals* shares this given name with the protagonist of Noteboom's first novel about the sprawling coming of age of a boy who goes to live with his gay uncle at age 10, titled for "*this character*" and the *Others*. A deformed literary character with this given name fails to marry Maggie Tulliver, while another with this name is continuously jilted by Mildred Rogers and has a club foot.

ANSWER: **Phillip** [from **Phillip** and the *Others*, Phillip Wakem, and Phillip Carey]

17. This politician's namesake plan formed the basis for the creation of the Federal Reserve. For 10 points each:

[10] Name this a member of the Jekyll Island club of Millionaires whose namesake act with Edward Vreeland created the National Monetary Commission.

ANSWER: Nelson **Aldrich**

[10] Aldrich names a tariff with this New York Senator. That tariff was signed in a special session called by President Taft and allowed for free trade to the Philippines.

ANSWER: Sereno **Payne**

[10] 4 years after the Payne-Aldrich tariff was passed, rates were lowered from 40 to 25% by this other tariff bill, which re-imposed the income tax after the passage of the 16th Amendment.

ANSWER: **Underwood**-Simmons tariff [or **Revenue Act of 1913**]

18. John Searle's essay "Literary Theory and Its Discontents" accused Jacques Derrida's paper "Signature Event Context" of misunderstanding J.L. Austin's application of this concept in his writing on the illocutionary act. For 10 points each:

[10] Name this concept which differentiates between a general sort and a particular instance of the sort. A common example is that, depending on which sense of “word” is chosen, the sentence “Rose is a rose is a rose is a rose” contains either 3 or 10 words.

ANSWER: **type-token** distinction [accept word forms, accept **type-token ambiguity**]

[10] Frank Jackson’s application of the type-token distinction drove this thought experiment in which a neuroscientist who knows all there is to know about color is raised in a black and white environment before being exposed to color.

ANSWER: **Mary**’s room thought experiment [accept anything that mentions “**Mary**” basically]

[10] Jackson’s thought experiment was titled after this type of qualia; Jackson argued that there is no good reason to deny that qualia have this property. Those who hold this view with regard to qualia argue that they are not causally efficacious and are merely byproducts of physical processes.

ANSWER: **epiphenomenal**[ism] [accept word forms]

19. This ruler promulgated an *ukaz* establishing male primogeniture to avoid succession crises, and liberated thousands of political prisoners, including Poles captured during Kociuszko's war of independence. For 10 points each:

[10] Identify this tsar who succeeded his mother, Catherine the Great, in 1796. Though officially the son of Peter III, he was more likely the son of Catherine's lover Sergei Saltykov.

ANSWER: **Paul** I [or **Pavel** I or **Paul Petrovich** or **Pavel Petrovich**]

[10] Paul's military successes were in no small part due to this Russian general, who served both Paul and Catherine, defeated the Kociuszko uprising, and won impressive victories against Napoleon at Cassano and Novi.

ANSWER: Alexander **Suvorov**

[10] Charles Whitworth, the British ambassador, encouraged the Bannigsen plot, which ended in Paul's assassination, after Paul sent a military expedition toward this British overseas possession; Cornwallis was its first governor general.

ANSWER: **India**

20. This critic analyzed four types of meter in his book *Poetic Meter and Poetic Form*. For 10 points each:

[10] Name this cultural and literary critic, who examined how authors like Wilfred Owen and Siegfried Sassoon reflected the massive upheaval caused by World War I in *The Great War and Modern Memory*.

ANSWER: Paul **Fussell**

[10] One of Fussell’s first important works examines this British author “and the Life of Writing.” It analyzes several of this author’s works, including *The Lives of the English Poets* and *Rasselas*.

ANSWER: Samuel **Johnson**

[10] Fussell reflected on the origins of the term “equality” in the opening chapter of this 1983 book, which delineates nine levels of American society and is subtitled “A Guide Through the American Status System.”

ANSWER: **Class**: *A Guide Through the American Status System*