

Chicago Open 2014: A Redoubtable Coupling of Editors

Packet by A Mixture of Gravity and Wagbery (Rob Carson, Jeff Hoppes, Chris Ray, Mike Sorice)

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

Tossups

- In a scheme to help promote this work, the author shamelessly seduced Rose Fatine, the daughter of wealthy Egyptian Mohammed el-Rachi. Shortly after publishing it, its author shot Charles-Henry Hirsch in a duel. This work, which recalls how the author savored in his mouth some “fortifying mud” that reminds him of his Sudanese wet-nurse’s teat, describes museums and cemeteries as “public dormitories.” It closes with a refrain about launching an “insolent challenge to the stars” and opens with a prefatory section that climaxes by recounting when the “stupid swaying” of two cyclists caused the author to flip his car into a ditch. This work names “courage, audacity, and revolt” as the “elements of our poetry” after exalting “the love of danger” in its eleven articles. It declares that “we want to glorify war” and eschews the Nike of Samothrace in favor of a “roaring motor car.” For 10 points, name this 1909 tract by Filippo Marinetti that inspired a technology-venerating art movement.
ANSWER: “The **Futurist Manifesto**” [or “The Founding and **Manifesto of Futurism**”; or “Fondazione e **Manifesto del Futurismo**”; or “**Manifeste du futurism**”]
- This man allegedly became more pious when, as a young man, he was unharmed after falling while sleeping on a third-story windowsill in Innsbruck. Hans de Witte served as the financial agent for this man, who was denounced by abbess Katharina von Spaur as the head of a “grasping rabble.” This man’s plan to make himself a tyrant was described in the “Capuchin Relations,” a text that explains his hostility with Maximilian of Bavaria. His triumphs included the defense of a ruined castle called the “Alte Veste” and his abandonment of the Siege of Stralsund to win the Battle of Wolgast. He was in the town of Cheb, hoping for a meeting with Duke Bernhard of Saxe-Weimar, when mercenary Walter Devereaux used a halberd to kill him. This man used the “contribution system” to support a vast army that devastated much of the Holy Roman Empire. For 10 points, what Bohemian-born successor of Count von Tilly was a Catholic general of the Thirty Years’ War and the subject of a Friedrich Schiller trilogy?
ANSWER: Albrecht [Wenzel Eusebius] von **Wallenstein** [or von **Waldstein** or z **Valdstejna**]
- Charles Lamb misquotes this poem in his essay “The Old Benchers of the Inner Temple,” as its fifth stanza actually begins “what wond’rous life in this I lead!” The *volta* of this poem is the sixth stanza, which sublimates the idea of a symmetrical submarine creation with an internal rhyme in the line “the mind, an ocean where each kind / does straight its own resemblance find / yet it creates, transcending these, / far other worlds, and other seas.” The first stanza of this poem delineates the prizes of the martyr, conqueror, and poet – “the palm, the oak, or bays” – but notes that they are inferior to “the garlands of repose.” Its third stanza notes that to carve a mistress’s name into a tree is to deface the native beauty of the tree itself. This poem’s final lines are “how could such sweet and wholesome hours / be reckoned but with herbs and flowers!” For 10 points, name this poem by Andrew Marvell that imagines man as happiest alone in Eden.
ANSWER: “The **Garden**”

4. A ratio of this quantity at base conditions, and the square root of this quantity at operating conditions, is represented as F_{pv} ["F-p-v"]. For a binary gas mixture, this quantity can be estimated from Standing-Katz curves using parameters derived from Kay's rules. For any pure fluid, this quantity does not depend on the nature of the fluid, but only on the reduced pressure and temperature according to the principle of corresponding states. Attractive intermolecular forces dominate when this quantity is less than one, and it reaches a uniform minimum of three-eighths at the critical point when derived from the van der Waals equation. It can be understood as the ratio of the real volume to the volume predicted by the ideal gas law and is exactly equal to one for an ideal gas. For 10 points, name this variable that governs real gases, that is equal to pressure times volume over particle number times kinetic temperature, and is symbolized capital-z.

ANSWER: **compressibility** factor [or **compression** factor; prompt on "Z"]

5. One character in this novel complains to the protagonist after getting pregnant that "you are the main character, I am a minor character who doesn't make an appearance until halfway through." The protagonist of this book appears beneath an "inverted wastepaper basket" in a newspaper photo captioned with the text "Who's the Dunce Now?" The Globe Salon is the setting for one of this novel's early scenes, a rehearsal of the play *Sunset*, in which a main character pushes a broom across the stage and tangles it in an electric cord to create "a more Marx Brothers atmosphere." This novel's protagonist plans to write an operatic work about Lord Byron's final days in Italy, but is embarrassed to find himself lecturing about Byron's theory that a being "with a mad heart" is "condemned to solitude." In this novel's second portion, its protagonist lives with his daughter Lucy, who sells flowers and is assisted by her farmhand Petrus. For 10 points, Melanie Isaacs leads Professor David Lurie to the title state in what novel by J. M. Coetzee?

ANSWER: **Disgrace**

6. One book by this writer, which discusses the contemplation of one's own skeleton, was criticized for a lack of direct contact with the Yakut, Buryat, and other practitioners of the title "archaic techniques of ecstasy." He wrote another book that begins by discussing Rudolf Otto's treatment of the "numinous." This student of Joachim Wach noted that the name for three Sumerian cities, *Dur-an-ki*, denotes a direct line. He discussed the ubiquity of "world pillars" in his book on the "Symbolism of the 'Centre,'" which also discusses the *axis mundi*. This thinker often imagined a *homo religiosus* to illustrate "irruption" events that he calls hierophanies. He said that modern man's confrontation with linear time causes the "terror of history," which produces a longing for cyclization and reconnection to the divine; he summarizes that idea with a term borrowed from Nietzsche, "eternal return." For 10 points, what author of *Shamanism, Images and Symbols*, and *The Sacred and the Profane* is a religious scholar born in Romania?

ANSWER: Mircea **Eliade**

7. This artist painted several canvases entitled *Melancholia* in which a woman in a red dress sits on the floor and lazily whittles a stick, seemingly unaware that several nude infants are doing ridiculously precocious things around her. This artist depicted himself being splashed with Christ's blood in a painting that repeats the letters "VDMIA," indicating "the word of the Lord endures forever." He painted several depictions of Venus as a tall, slender nude, including a painting in which she holds up a nearly invisible translucent cloth across her pubis. After the death of his son Hans, this artist of the *Weimar Altarpiece* used a single crow's wing in his coat of arms, which previously depicted a bat-winged serpent biting down on a ring made of gold and rubies. He depicted the parents, Hans and Margarethe, and the wife, Katharina von Bora, of a man whose portly face he framed with curly hair and a black hat in another portrait. For 10 points, name this German Renaissance artist who produced several portraits of Martin Luther.

ANSWER: Lucas **Cranach** the Elder

8. Iowa State professor Gary Wells, perhaps the world's leading expert on these people, identified the "dud-alternative effect" and proposed using sequential rather than all-at-once techniques to improve the effectiveness of these people. After conducting a series of experiments involving a number of black dots on a white sheet of paper, Hugo Munsterberg published a groundbreaking 1908 book arguing that these people are vulnerable to "illusions." John Yuille helped demonstrate that these people fall victim to the weapon-focus effect. Mood congruency and the cross-race effect also explain why these people make mistakes. If "unnecessarily suggestive circumstances" are not present, the due process clause does not require a preliminary judicial inquiry about this type of person, according to the 2011 case *Perry v. New Hampshire*. For 10 points, the "misinformation theory" of Elizabeth Loftus partially explains the frequent inaccuracies of what sort of people who testify in court about what they saw?

ANSWER: eyewitnesses [accept witness to a crime or any reasonable equivalent]

9. In *The Argonautica*, these figures turn to dust, but the weeping of Orpheus turns them into talking trees. Diodorus Siculus records that these deities were renowned for their beautiful sheep with fleeces of gold. Pliny the Elder identifies the realm where they lived as Benghazi in Libya, from which King Juba supposedly brought the first orange to his kingdom. They were the children of either Atlas or Nyx, both of whom knew where they lived beyond the realm of Oceanos. Some stories state that Perseus retrieved winged sandals and a helmet of Hades from these goddesses, whose names are usually listed as Aigle, Erytheia, and Arethusa. These nymphs, who were responsible for the golden rays of sunsets, were assisted in one task by the hundred-headed dragon Ladon, who helped them watch over a tree. For 10 points, name these nymphs who guarded the golden apples that were retrieved by Heracles.

ANSWER: Hesperides

10. This organization's head of security built a concrete fortress disguised as a log cabin, complete with a machine gun tower and a spike-filled moat traversed by a dynamite-rigged bridge, and would often bring his two gigantic pet lions with him to his office at this organization. Communist William Z. Foster ran a presidential campaign in hiding after giving a speech that launched the "Hunger March" against this organization, whose chief enforcer was Harry Bennett. Its expansion was aided by Frank Murphy's prosecution of eminent domain cases. This organization abandoned a settlement on the Tapajós in Brazil after a disastrous attempt to produce its own rubber and was the subject of Upton Sinclair's novel *The Flivver King*. Outside of its River Rouge Complex, its agents were photographed savagely beating Walter Reuther during the Battle of the Overpass, which led it to agree to terms with the UAW. For 10 points, name this Dearborn-based company that produced the Model T.

ANSWER: Ford Motor Company

11. This compound is quantified in an assay in which it reacts with picric acid in an alkaline medium to form a complex with a lambda max of 520 nanometers. A cysteine protease inhibitor coded by the CST3 gene is an alternative for this compound in its most important function. Values of 30 milligrams per gram or higher for the ratio of microalbumin to this compound are an indication of microalbuminuria. A correction factor of 0.85 for females, or several age-dependent factors, are used in two distinct formulas to calculate the elimination of this compound. The Schwartz and Cockcroft-Gault formulas use this compound's serum level in the denominator, and the elimination of this compound is used as a proxy for the glomerular filtration rate. It is produced by the catabolism of a compound used to replenish ATP during rapid muscle contraction. For 10 points, name this compound that is an important indicator of renal function and is produced during the breakdown of creatine phosphate.

ANSWER: serum creatinine [accept "creatinine clearance"; do not accept or prompt on "creatinine" or "phosphocreatinine"]

12. This experiment produced the most cited paper in the career of D.D. Hoppes. A follow-up to this experiment introduced diamagnetic bismuth ions to increase accuracy. This experiment used the Rose-Gorter method to prepare a thin surface layer of cerous magnesium nitrate. This experiment's setup included an adiabatic demagnetization cryostat containing an anthracene crystal that detected Gamow-Teller transitions, as well as two sodium iodide gamma scintillation counters. Just days after this experiment, Garwin, Lederman, and Weinrich verified its results by measuring muon spin polarization. This experiment found that beta decay of cobalt-60 occurred preferentially in the opposite direction of nuclear spin, thereby resolving the tau-theta puzzle and showing that all massless neutrinos are left-handed. For 10 points, name this 1956 experiment confirming parity violation in the weak interaction, performed by a female colleague of Lee and Yang.
ANSWER: **Wu** experiment [prompt on "the parity violation experiment" or similar answers by saying "I need the name of the lead researcher"]
13. A holy example of these objects was kept at Topkapi palace along with the Blessed Mantle and the Prophet's soup bowl until the latter was deported to Chechnya. One object of this type was created by an order of Aribert of Milan and was later accompanied by a large bell called a *martinella*. Aelred of Rievaulx wrote a "relatio" named for another of these objects created to unite Beverly and Ripon under Thurstan of York; that object of this type was placed on a moor near Northallerton in a namesake clash that repelled David I's invasion during the Anarchy. An ox-drawn, cart-mounted altar known as the Carroccio was used to carry an object of this type by the Lombard League. Another of them, which was stained red by the blood of St. Denis, was captured with John II at Poitiers, and was known as the Oriflamme. Roman objects of this type were carried by *signiferi* and included the iconic *aquilae*, or eagles, two of which were lost at Teutoburg Forest. For 10 points, name these objects carried into battle.
ANSWER: battle **standards** [accept Roman Legionary **standards** or **vexilla** or **vexillum** or **banners** or **war flags** or **military flags** or **battle flags**; prompt on "flag(s)" or "field sign(s)"]
14. Near the end of this novel, the protagonist witnesses the donkey John Brown jump off a balcony and hang himself from his reins at the Cloud Hotel, whose former occupants inspire the drifter Little Sunshine to say the title phrase. One character in this novel, whose throat was slashed by Keg Brown after she married him at fourteen, is alternately called "Missouri" or "Zoo" and is the granddaughter of the 100-year-old Jesus Fever. Another character in this novel tells of how he fell in love with a Spanish woman named Dolores, but then fell in love with her lover, a Mexican boxer named Pepe Sanchez, leading him to shoot and paralyze Pepe's manager, the father of this novel's protagonist. This novel is largely set at Skully's Landing, where Amy takes care of the paralyzed Mr. Sansom and the crossdressing Cousin Randolph has a homoerotic relationship with the protagonist, whose best friend, the tomgirl Idabel Thompkins, is based on Harper Lee. For 10 points, Joel Knox is the protagonist of what first novel of Truman Capote?
ANSWER: **Other Voices, Other Rooms**

15. The nomological varieties of this concept are enumerated as material, consequentialist, and inclusive in a paper by Ernest Sosa. In a 1986 paper, another thinker argued that any theory that explains this concept must also explain the “chancy” type of it by using the example of a bomb hooked up to a Geiger counter. A book by John Mackie that examines statistical laws and their relationship to this concept is titled *Cement of the Universe*; that book refutes David Lewis’s attempt to explain this concept with conditional counterfactuals and proposes “regularity” theory as an explanation for this idea. Another argument about this idea suggests that humans understand it inductively only through instances of the “copy principle,” by using the example of one billiard ball hitting another billiard ball. For 10 points, name this concept articulated as a “necessary connection” in David Hume’s *An Enquiry Concerning Human Understanding*, which can be used to explain the relationship between two events.

ANSWER: **causation** [or **causality**; accept other word forms like **cause** or **causal**; accept **cause and effect**]

16. The limits of this location include the Outer Silver Pit Lake and Shotton River. Bryony Coles published a “speculative survey” of this location, where archaeologists have found a pair of tuff axes that may indicate its use as a sanctuary by Neolithic people whose ancestors perished in the Storegga Slide tsunami. In 1931, the most powerful earthquake ever registered in the UK had its epicenter in this location, which contains the remains of the HMS *Arabis*. The battlecruiser HMS *Lion* was damaged during a 1915 battle at this location, during which David Beatty was unable to effectively pursue German forces. Two crewmen of the *Crane* were killed during an earlier clash at this site, which resulted in Nikolai Klado being put ashore at Vigo to submit to “international arbitration.” For 10 points, Admiral Rozhdestvensky’s Russian fleet opened fire on British fishing boats during an October 1904 “incident” that took place at what sandbank found in the center of the North Sea?

ANSWER: **Dogger** Bank [or **Doggerland**; accept Battle of **Dogger Bank** or **Dogger Bank** Incident]

17. This composer’s pieces include the *Hohenfriedberger* march. He worked with the composer of “La Caroline,” who was an early advocate for the “thumb under” fingering of the scale. This musician’s orchestra included Carl Heinrich Graun and Franz Benda. One of this musician’s employees left him to succeed Georg Philipp Telemann as music director in Hamburg. He was visited by a composer who tried out his Silbermann fortepianos, and improvised a three-part fugue on one of them in 1747. This man was honored with an acrostic spelling the word “Ricercar” in a volume that contains ricercars in three and six parts, as well as pieces like a C-minor trio sonata and a crab canon. This man was the first major employer of the author of *An Essay on the True Art of Playing Keyboard Instruments*; he also employed the author of *On Playing the Flute*, Johann Joachim Quantz, who taught him the instrument. For 10 points, name this employer of C.P.E. Bach, the dedicatee of J.S. Bach’s *Musical Offering*.

ANSWER: **Frederick the Great** [or **Frederick II** of Prussia; or **Friedrich der Grosse** or II; prompt on “Frederick” or “Friedrich”]

18. The narrator of this story says that the man who started the rumor that he has a “predilection for removing [his] pants whenever [he has] guests” should have “each finger shot off his writing hand, one by one,” sardonically asserting “I may remove my pants in front of whomever I please.” This story’s protagonist describes soiling himself for want of a whiskey bottle; said protagonist eventually acquires and drinks from one, which emboldens him to jump into a crowd of sailors and call out “hello!” This story’s protagonist gains his nickname after taking a gunshot to the face from “a hunting party of the firm Hagenbeck” who captures him in the Gold Coast. After arriving in Hamburg, the protagonist of this story realizes that he has a choice between “the Zoological Gardens or the Music Hall;” its protagonist chooses the latter and hires many tutors that allow him to forget his “apish nature.” For 10 points, name this Franz Kafka story in which Rotpeter, or Red Peter, is a civilized ape who delivers the title analysis.
ANSWER: “A **Report to an Academy**” [or “Ein **Bericht für eine Akademie**”; or “A **Report for an Academy**”]
19. A transition between the two major forms of this process characterizes the switch from biostacy to rhexistacy in the cycle of pedogenesis. The end products of this action are characterized by a high ratio of silicon to aluminum; the extent of this process is thus quantified using concentrations of zircon, tourmaline, and rutile, which comprise the ZTR index. Sapolite is produced by one type of this process in spheroidal configurations of the source material. Structures called *tafoni* are made through the “honeycomb” type of this process. The ability to resist this process is given for many species on the Goldrich series, which is analogous to the Bowen’s reaction series. The freezing of ice in geological joints contributes to a type of this process known as frost wedging. This geological process happens without major transport, unlike erosion. For 10 points, name this geographic process, the in-situ breakdown of rocks and minerals.
ANSWER: **weathering**
20. This city’s Gorongobo cemetery was the burial place of a woman named Waybu who died around 1130. The Sane tombstones found in this city indicate its trading links with the Spanish city of Almeria. Historical rulers of this city were from the Zuwa dynasty. According to the *Notice Historique*, this city had been governed by a “giant” from Yemen, and by 1068, “none but a Muslim” could rule in this city according to al-Bakri’s *Book of Highways and Kingdoms*. A UNESCO World Heritage Site in this city is a mud pyramid with a built-in staircase and many protruding sticks. This city near the mouth of the Tilemsi River gained a monopoly on the trade of salt to the kingdom of Ghana. The Moroccan army of Judar Pasha sacked this city after the battle of Tondibi, after which a military caste called the “Arma” was established to rule this city, Jenne, and Timbuktu. For 10 points, the tomb of Askia Mohamed is located in what city on the Niger River that was the capital of the Songhai Empire?
ANSWER: **Gao**

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Bonuses

1. In 1988, this man's memoir *Red Horizons* was serialized on Radio Free Europe. For 10 points each:

[10] Name this former three-star general of the Securitate whose 1978 defection from Nicolae Ceausescu's government made him the highest-ranking Eastern Bloc official to defect.

ANSWER: Ion Mihai **Pacepa**

[10] Among the many amusing revelations that Pacepa made about this home country of his was that a Kremlin plot to kill its leader, Gheorghe Gheorghiu-Dej, was possibly the result of a clerical error.

ANSWER: [Socialist Republic of] **Romania**

[10] Pacepa also described "Seat 12," a KGB propaganda smear effort against this man that emphasized alleged Nazi sympathies, chronicled in John Cornwell and Daniel Goldhagen's book *A Moral Reckoning*.

ANSWER: Pope **Pius XII** [prompt on "Pius"; or Eugenio Maria Giuseppe Giovanni **Pacelli**]
2. The *idée fixe* of this poem is a "balloonman" who whistles "far and wee," calling to pairs of children like "eddie-and-bill" and "betty-and-isbel." For 10 points each:

[10] Name this poem about spring.

ANSWER: "**in just**"

[10] "in just" is by this American poet who also wrote *The Enormous Room*. It's one of only a few poems by him whose intended reading is fairly unambiguous, as a recording of him reading it for the BBC has survived.

ANSWER: [Edward Estlin] E.E. **Cummings**

[10] Give either of the two hyphenated adjectives that describe the rain-soaked world of "in just." As a hint, neither is "goat-footed."

ANSWER: **mud-luscious** OR **puddle-wonderful**
3. This thinker introduced four namesake maxims of quality, quantity, relevance, and manner to illustrate his cooperative principle, which is meant to model conversation interactions. For 10 points each:

[10] Name this philosopher of language, who contrasted natural and non-natural meaning in his book *Logic and Conversation*.

ANSWER: [Herbert] Paul **Grice** [or **H.P. Grice**]

[10] Grice was promoted by this Oxford philosopher, who authored "Freedom and Resentment," critiqued Russell in the essay "On Referring," and fathered a philosopher named Galen.

ANSWER: [Sir Peter Frederick] P.F. **Strawson**

[10] Strawson's *Bounds of Sense* rejuvenated the modern study of this text, which advocates transcendental logic and discusses synthetic a priori judgments.

ANSWER: **Critique of Pure Reason** [or **Kritik der reinen Vernunft**]

4. In 2004, Stephen Hawking used this relationship to resolve the black hole information paradox. For 10 points each:
- [10] Name this relationship that links theories of quantum gravity with exact counterparts in quantum field theory. For example, type IIB [“2-B”] string theory in ten dimensions can be reformulated in terms of supersymmetric Yang-Mills theory in four dimensions.
ANSWER: **AdS/CFT** correspondence [accept answers describing a relationship between **anti-de Sitter space** and **conformal field theory**; prompt on, **but do not otherwise reveal**, “Maldacena duality” or “gauge/gravity duality”]
- [10] This Argentine physicist proposed the AdS/CFT correspondence in 1997. In 2013, he and Leonard Susskind conjectured that entangled particles are connected by wormholes.
ANSWER: Juan Martin **Maldacena**
- [10] The AdS/CFT correspondence is a special case of the holographic principle, which states that the boundary of a region of space contains a complete description of it. For example, information pertaining to an object that has fallen into a black hole is encoded in this part of the black hole.
ANSWER: **event horizon** [prompt on “horizon”]
5. According to this portion of a larger work, a Trojan king named Munon married Troain, a daughter of Priam, and thus founded a line beginning with Tror, or Thor, that later ruled Sweden. For 10 points each:
- [10] Name this section of a larger mythological work containing a euhemeristic explanation for the origin of a certain group of gods.
ANSWER: **prologue** to the **Prose Edda**
- [10] The prologue precedes the section of the *Prose Edda* describing the “beguiling” of this king, who interrogates High, Just-as-High, and Third about a variety of Norse myths.
ANSWER: **Gylfi** [accept **Gylfaginning** or *The **Beguiling of Gylfi***; or *The **Tricking of Gylfi***]
- [10] The *Gylfaginning* is followed by the *Skaldskaparmal*, which consists largely of a dialogue between these two gods, who are at a party. One of them relates a number of myths and kennings to the other, a non-Aesir visitor.
ANSWER: **Bragi** [or **Brage**] and **Aegir** [or **Aeger**; or **Hler**]
6. This piece comes after an étude “for opposed sonorities.” For 10 points each:
- [10] Name this penultimate Claude Debussy étude, which is filled with grace notes containing its namesake entities.
ANSWER: “**Pour les arpèges composés**” [or “**For Composite Arpeggios**”]; accept any literal translation, including ones using the plural form “Arpeggii”]
- [10] This earlier composer wrote many difficult études filled with arpeggios, including ones nicknamed “Harp” and “Revolutionary.”
ANSWER: Frédéric [François] **Chopin** [or Fryderyk Franciszek **Chopin**]
- [10] This French composer included many arpeggios in his incredibly difficult “Étude en forme de valse.” He followed Liszt’s innovations by using thematic transformation in pieces that combine four movements into two, like his fourth piano concerto and his third symphony.
ANSWER: [Charles] Camille **Saint-Saëns**

7. Relics were imported to this site from Monte Gargano in Italy, and unlike the rest of the surrounding territory, it was not captured during the Hundred Years' War. For 10 points each:
 [10] Name this island monastery off the coast of Normandy.
 ANSWER: **Mont Saint-Michel**
 [10] Mont Saint-Michel was paired with this Gothic cathedral in the title of a 1904 medievalist work by Henry Adams.
 ANSWER: **Chartres** cathedral
 [10] This Norman historian wrote three books about the acts of the early Norman dukes, which tell us that Richard I of Normandy encouraged monks to gather at Mont Saint-Michel.
 ANSWER: **Dudo** of Saint-Quentin [or **Dudon**]
8. Name these people who helped convert Scandinavia to Christianity, for 10 points each.
 [10] Rimbert wrote the life of this Archbishop of Hamburg, who was known as the Apostle to the North for his missionary journeys to Sweden.
 ANSWER: **Anskar** [or **Ansgar**; or **Anschar**]
 [10] The English bishop Grimketel speedily canonized this Norwegian king, who was killed at Stiklestad by rebellious farmers.
 ANSWER: **St. Olaf** [or **Olaf II**; or **Olaf Haraldsson**; prompt on "Olaf"; do not accept or prompt on "Olaf Trvggyvason"]
 [10] The Jelling Stone, which was erected by this king, claims that this son of Gorm the Old "turned the Danes to Christianity." He was succeeded, perhaps forcefully, by his son Sweyn Forkbeard.
 ANSWER: **Harald Bluetooth** [prompt on "Harald" or "Bluetooth"]
9. This algorithm for solving a second-order ordinary differential equation near a singular point requires only that the coefficient functions of the first- and zeroth-order terms have at worst first- and second-order removable singularities respectively. For 10 points each:
 [10] Name this technique. Under the above hypothesis, Fuchs' theorem guarantees that it will find at least one solution.
 ANSWER: method of **Frobenius**
 [10] In general, the method of Frobenius produces solutions in this form. A solution in this form can be summed to yield a more desirable closed-form solution in special cases.
 ANSWER: **infinite series** [prompt on "series" or "analytical"]
 [10] This is the name for an equation that relates the terms of a series to one another. A step in the method of Frobenius is to derive one of these equations by equating like terms in the substituted ODE, then solving for the zeroth-order term to obtain the indicial equation.
 ANSWER: **recurrence** relation [or **difference** equation]
10. This novel's plot is set into motion when a poor clerk named Kostia impulsively shoots the title high-ranking bureaucrat, sparking a worldwide hunt. For 10 points each:
 [10] Name this posthumously published novel set during the Soviet Great Terror, by Victor Serge.
 ANSWER: *The Case of Comrade Tulayev* [or *The Case for Comrade Tulayev* or *L'Affaire Toulaev*]
 [10] *The Case of Comrade Tulayev* was republished in 2004 as part of the "Classics" line produced by this American periodical's publishing arm. Its founding co-editors were Robert B. Silvers and Barbara Epstein.
 ANSWER: *The New York Review of Books* [or **NYRB**]
 [10] Another publisher of Eastern European literature, Northwestern Press, has brought to us many obscure classics, including this writer's *Absent without Leave* and *The Bread of Those Early Years*, but not his novel *The Lost Honor of Katharina Blum*.
 ANSWER: Heinrich [Theodor] **Böll**

11. A chair, a stepstool, three no-doubt-displeased cats, and an S-shaped splash of water are among the items depicted in midair in a photograph of this man. For 10 points each:
[10] Name this man who is depicted as “Atomicus” in a photograph in which two of those cats appear to jump out of his painting *Leda Atomica*.
ANSWER: Salvador [Domingo Felipe Jacinto] **Dalí** [i Domenech, 1st Marqués de Dalí de Pubol]
[10] *Dali Atomicus* was taken by this Lithuanian-American portrait photographer, who laid out six rules for the creation of unusual photographs in his book *On the Creation of Photographic Ideas*.
ANSWER: Philippe **Halsman** [or Filips **Halsmans**]
[10] Halsman also captured a mournful-looking portrait of this German-American physicist, who was photographed by Arthur Sasse sticking his tongue out.
ANSWER: Albert **Einstein**
12. The “sergeants and soldiers” model describes the amplification of this property in polymers, as the products have a uniform helicity when the reagents only feature a small number of monomers with this property. For 10 points each:
[10] Name this property whose name comes from the Greek for “handedness.” The goal of asymmetric syntheses is to selectively achieve it in products without the need for further separations.
ANSWER: **chirality**
[10] These two terms, which are reminiscent of the notation used to identify the directionality of chiral centers, describe the two “faces” of the prochiral sp²-hybridized carbon. Name both.
ANSWER: **Re** and **Si**
[10] This early predictive rule for asymmetric inductions states that for a carbonyl carbon with an alpha chiral center, a nucleophilic attack preferentially occurs from the less bulky side. This now-outdated model gives the same result as the Felkin-Anh model in some cases.
ANSWER: **Cram**’s rule
13. Local oligarchs known as “colonels” headed the political machines that supported this situation, which suffered serious blows in the *tenente* revolts and the 1930 overthrow of Washington Luis. For 10 points each:
[10] Name this term that refers both to the domination of politics in Brazil’s Old Republic by landed gentry in Sao Paulo and Minas Gerais, and to the main products produced by those cities.
ANSWER: **cafe com leite** [or **coffee with milk**; or **coffee and milk**]
[10] The coup against Brazilian president Washington Luis was led by this corporatist leader of the Liberal Alliance, who modeled his ensuing rule of Brazil on Antonio Salazar’s Estado Novo.
ANSWER: Getulio [Dornelles] **Vargas**
[10] This longtime foe of Vargas was the target of an assassination attempt in the Rua Tonelero led by Vargas’s bodyguard Gregorio Fortunato, which resulted in the killing of Air Force major Rubens Vaz instead.
ANSWER: Carlos [Frederico Werneck de] **Lacerda**

14. This character predicts “I am the last that will last keep his oath” after signing a certain paper. For 10 points each:

[10] Name this character who lectures his friends about not keeping that oath after finding them each with a love letter, then extemporizes about the importance of skirt-chasing after his own love letter to Rosaline is discovered.

ANSWER: **Biron** [or **Berowne**]

[10] Biron is a character in this play, in which the King of Navarre and his lords flirt with the Princess of France and her ladies despite having forsworn women for three years.

ANSWER: **Love’s Labour’s Lost**

[10] In Act V, Scene II of *Love’s Labour’s Lost*, the schoolmaster Holofernes puts on a show in which he and other actors present themselves as these personifications of medieval chivalry and are ruthlessly heckled by the audience.

ANSWER: Nine **Worthies**

15. Name these artists who depicted scenes at Calais, for 10 points each.

[10] A critic called this painter’s gloomy seascape *Calais Pier* “a lamentable proof of genius losing itself in affectation.” His other seascapes include *The Slave Ship* and *Ulysses Deriding Polyphemus*.

ANSWER: Joseph Mallord William [J.M.W.] **Turner**

[10] This man’s *The Gate of Calais* depicts a crowd of starved Frenchmen admiring the arrival of “the Roast Beef of Old England.” He painted English commoners more flatteringly in his *Four Times a Day* paintings.

ANSWER: William **Hogarth**

[10] This painter’s *The Monk of Calais* depicts Parson Yorick exchanging a snuffbox with the title monk; like many of this neoclassicist’s scenes from Shakespeare, the painting is ovular.

ANSWER: Angelica **Kauffman**

16. The slope of these curves for U.S. government bonds has a negative correlation with future activity, making them a reliable predictor of economic activity over four to six quarters. For 10 points each:

[10] Name these curves that, in general, depict the interest rates of similar debt securities for varying maturities.

ANSWER: **yield** curves

[10] Unlike liquidity preference and pure expectations, this theory suggests that bondholders don’t evaluate the securities along one spectrum, and that supply/demand dynamics for different maturities drive the shapes of yield curves.

ANSWER: market **segmentation** theory [or hypothesis]

[10] Besides maturity and liquidity risks, bondholders must worry about this phenomenon, whose break-even rate reflects market expectations for it. It is typically measured in terms of annual percentage change in the consumer price index.

ANSWER: **inflation** [or **deflation**]

17. Herbert Storing and Murray Dry have compiled the definitive collection of these texts. For 10 points each:
[10] Name these texts written by men like Samuel Bryan and George Clinton, who took the pseudonym Cato. They opposed writings by Hamilton, Jay, and Madison.
ANSWER: **Anti-Federalist Papers** [accept equivalents including **anti-Federalist**]
[10] Much scholarship of the *Anti-Federalist Papers* centers on this non-Latin pseudonym behind several iconic articles addressed to “The Republican.” It may have been Melancton Smith or Richard Henry Lee.
ANSWER: **Federal Farmer** [prompt on “Farmer”]
[10] An alternative theory suggests that Federal Farmer was really this female revolutionary who wrote as “A Columbian Patriot” and penned a *History of the Rise, Progress, and Termination of the Revolution*. Her brother James popularized the slogan “no taxation without representation.”
ANSWER: Mercy Otis **Warren** [or **Mercy Otis**; prompt on “Otis”]
18. Owls! For 10 points each:
[10] This Iranian author of *Three Drops of Blood* and *Mister Bow-Wow* wrote *The Blind Owl*, a novel about a nightmare-plagued pen-case painter, which he published in Bombay to evade the Shah’s censorship.
ANSWER: Sadeq **Hedayat** [or Sadeq **Hedayat**]
[10] The 2010 Golden Owl prize went to this Dutch author’s *The Foxes Come at Night*. This perennial Nobel candidate debuted with *Philip and the Others* and returned after a 17-year novel-writing hiatus with *Rituals*.
ANSWER: [Cornelis Johannes Jacobus Maria] Cees **Nooteboom**
[10] The wise owl Archimedes hangs out with Merlyn and teaches the young Arthur about birds in *The Once and Future King*, an Arthurian fantasy tetralogy by this author.
ANSWER: [Terence Hanbury] T.H. **White** [or **Tim White**]
19. Thanks to name-change threads on the quizbowl forums, everyone knows that the Schmidt index refers to beeeeeee stings. For 10 points each:
[10] The toxic component of beeeee venom is this water-soluble protein that exists as a monomer or a tetramer. Its S form is slightly less toxic, and, like the wasp-toxin mastoparan, this compound wreaks havoc on ion-channel activity.
ANSWER: **melittin**
[10] Melittin’s structure has an amphiphilic nature, which means that it is great at integrating into these structures, whose component molecules have an ionic group in their heads and two glyceride tails. They are described by the fluid mosaic model.
ANSWER: **cell membrane** [prompt on phospho**lipid bilayer**]
[10] WUSTL researchers have created melittin-wielding nano-beeeees as part of a therapy against this agent, whose Vif protein counteracts the body’s A3G response. This agent may be CCR5 or CXCR4-tropic.
ANSWER: **HIV** [or **human immunodeficiency virus**]
20. They included the bandmaster-general Andrew Kagawa; Kizito, who was burned alive; the Anglican bishop James Harrington; and the major-domo Charles Lwanga. For 10 points each:
[10] Name this group of missionaries who were executed between 1885 and 1887 by Mwanga II, in part for their seemingly endless interference with Mwanga’s sexual conquest of a harem of boy pages.
ANSWER: **Uganda Martyrs** [or **Buganda Martyrs**; accept descriptive equivalents]
[10] The twenty-two Catholics among the Uganda Martyrs were canonized in 1964 by this Pope, who closed Vatican II after taking over from his predecessor, John XXIII.
ANSWER: Venerable **Paul VI** [or Giovanni Battista Enrico Antonio Maria **Montini**; prompt on “Paul”]
[10] Paul VI died on the Feast Day celebrating this occurrence, when Jesus appears radiant on a mountain and Elijah and Moses show up for good measure.
ANSWER: **Transfiguration** of Jesus