Chicago Open 2014: A Redoubtable Coupling of Editors
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Tossups

1. One character in this story wears a greenish-black suit and is twice described as having a mind that slowly orbits as if it is magnetized by his speech. Shortly after drinking some raspberry lemonade, another character in this story tries to chase a cat that escapes into a field. Earlier in this story, a character is found with a copy of *The Halfpenny Marvel* and is reprimanded for not studying Roman history instead. The narrator begins this story by pointing out that Joe Dillon introduced the Wild West to the narrator and his friends, and that their mock battles always ended with Joe's victory dance. Later, this story's two central characters meet a man who exclaims that "every boy...has a little sweetheart." This story culminates with that strange man saying that any boy he finds talking to girls or that has a girl as a sweetheart should be whipped, and that he would love to whip them himself. For 10 points, name this short story in which the narrator and Mahony skip school and have the title meeting, the second story in *Dubliners*.
ANSWER: "An **Encounter**"

2. One of the two major producers of this food packages it with a triangular seal explaining that it was invented by the 16-year-old Eduard, whose name graces that version. Ten years before opening the institution that popularized this food product, its namesake opened up a wildly successful beer business at the 1876 Parisian World fair. A legal dispute over this food included the testimony of author Friedrich Torberg, who noted that he never saw this food prepared with a slice through the middle by the originals chef's grandson. The years from 1950 to 1957 were known as the "war over" this food item after the Demel bakery also claimed rights to its production and original recipe. This dessert, which was apocryphally created by its namesake chef as a way of pleasing the visiting Prince von Metternich, includes a thin layer of apricot jam, and is traditionally served with whipped cream. For 10 points, name this chocolate sponge cake first served at a five-star Viennese hotel with which it shares its name.
ANSWER: **sachertorte**

3. The result that rates of this phenomenon drop significantly when the subject is presented with his or her own name during the critical trial was discovered by Arien Mack and Irvin Rock, who also conducted experiments on this phenomenon in which they asked subjects to identify which arm of a cross was longer. Studies on this phenomenon involving a hand-slapping game that is interrupted by handshaking were extended by Daniel Simons and Christopher Chabris to a setup replicated by the city of London in a public service announcement that features a "moonwalking bear." The seminal study illustrating this phenomenon asked participants to count the number of times that a basketball is passed; most participants fail to notice that a man in a gorilla suit is walking in the background. For 10 points, name this psychological phenomenon in which a person focused on a specific event or activity is oblivious to their surroundings.
ANSWER: **inattentional blind**ness [or **perceptual blind**ness; accept word forms; prompt on "blindness (effect)" or word forms]

4. This man appointed Pompejus Occo as a representative to the court of Christian II of Denmark, and another of his secretaries kept a catalogue of contemporary dresses called the "Book of Clothes." This man used his friendship with Janos Thurzo to gain direct access copper-producing regions near Baska Bystrica in modern Slovakia. His earlier dealings with Antonio Cavalli helped him wrest control of Tyrolean mines from the Baumgartners of Kufstein, which paved the way for his entry into the electoral politics of the Holy Roman Empire. Albrecht Durer painted a portrait of this man, who provided significant support to Maximillian I and Charles V of Spain. This man, who was from the "of the lily" branch of his family, began a business empire that grew under the control of his nephew Anton. For 10 points, name this scion of a merchant and banking family in Augsburg, known as "the Rich," whose name Martin Luther made synonymous with usury.
    ANSWER: Jacob **Fugger** the Rich [or Jacob **Fugger** II]

5. The narrator of this novel had youthful feelings for a violin-playing character only referred to as "she of the brown eyes." During a performance of Gounod's *Faust,* this novel's protagonist unmistakably sees his father and his sister. This book closes with the narrator remarking that he has sold his birthright for a mess of pottage. Its narrator resolves to go to college after his mother dies in Connecticut, but the theft of his $400 causes him to take up cigar rolling in Jacksonville. The protagonist of this novel travels across Europe with his millionaire benefactor while cultivating his talents in the ragtime genre before settling down as a composer in the South. A lynching in Georgia causes the protagonist to leave the South and go to New York City, where he abjures his heritage. It was written by the author of "Seven Negro Sermons in Verse" called *God's Trombones*. For 10 points, name this novel about a black man who passes as white, by James Weldon Johnson.
    ANSWER: The ***Autobiography of an Ex-Colored Man***

6. This concept is the subject of the folk song "Balsam Flowers." This concept is illustrated by a parable in which a hunter nearly shoots a boy who disguised himself as a fawn to obtain deer's milk. The Buddha explains why men's bones are heavy and white but women's bones are light and black in an apocryphal sutra dealing with this concept that includes a lengthy description of pregnancy. This concept manifested itself in the illegal but popular practice of gēgŭ [GUH-goo], which involved people making soup out of their own flesh. Master Mou argued that monks do not disavow this concept by shaving their heads and withdrawing from society. The *Thirteen Classics* includes a text named for this concept that calls it "the root of all virtue and the stem out of which grows all moral teaching." The Chinese word "xiao" signifies this concept that is central to role ethics. For 10 points, name this Confucian doctrine that children should revere their parents.
    ANSWER: **filial piety** [accept **xiào** before "xiao"; accept **hyo** or **hiếu** or **oyakoukou**]

7. The Hopfner-Vorsatz test is a histochemical method to detect highly substituted examples of these compounds. These compounds can be produced using excess nitrous oxide from adipic acid production activated by a zeolite catalyst in the Solutia process. In one assay, the concentration of these compounds is measured in gallic acid equivalents and uses a molybdo-tungstate reagent with a lambda-max of 750 nm. That reagent, which is named after the simplest example of these compounds and Otto Folin, is also used in the Lowry protein quantitation assay. The biosynthesis of these compounds begins with the deamination of tyrosine. Their simplest example can be produce by a Friedel-Crafts alkylation of benzene, followed by a peroxidation, and ending with a decomposition to give this compound. For 10 points, name this class of compounds whose simplest member, produced in the Cumene process, is a benzene with a hydroxyl group.
    ANSWER: **phenol**s [accept **phenolic**s or **benzyl alcohol**; accept **tannin**s until "nitrous oxide"]

8. This ruler's coinage depicted Tyche and a personification of the river Orontes on the reverse, and a portrait bust wearing a tiara emblazoned with a comet, possibly Halley's Comet, on the obverse. Modern scholars point to Josephus and Strabo to argue that the character of Nebuchadnezzar in the book of Judith in fact represented this man. This ruler was a hostage to a rival power for the first 40 years of his life and he was eventually released in exchange for "70 valleys" in Atropatene after the death of his father. He took advantage of the chaos following the death of Antiochus VII Grypus to conquer Syria, Phoenicia, and Cilicia. His downfall began when his sons and wife Cleopatra betrayed him and sided with Rome. This member of the Artaxiad dynasty was defeated by Lucullus at the Battle of Artaxata and surrendered the majority of his conquests to Pompey in 66 BCE. For 10 points, what son-in-law and ally of Mithridates the Great was the most powerful king of ancient Armenia?
    ANSWER: **Tigranes the Great** [or **Tigranes II**; or **Tigran II**; or **Dikran II**; prompt on "Tigran(es)" or "Dikran"]

9. A *Temptation of Saint Anthony* produced in this country shows the title figure with three decreasingly sized heads stacked on top of each other, draped in an oversized white robe, and seated to the left of a river being poured from a large urn. A picture painted in this country shows three fiery-red figures with large ears sipping juices from pieces of fruit on a table in front of them. *The Vegetarian Vampires* was painted in this country, where another artist created *Two Characters Attacked by Dogs* on a massive piece of stone using the technique of Mixografia. Leonora Carrington lived the majority of her life in this country, which is home to an art museum called the Blue House. An artist from this country showed a woman falling through the sky and then lying in a puddle of blood on the sidewalk in the painting *The Suicide of Dorothy Hale*. For 10 points, name this country where Remedios Varo did much of her work, the birthplace of Rufino Tamayo and Frida Kahlo.
    ANSWER: **Mexico** [or United **Mexican** States; or Estados Unidos **Mexicano**s]

10. This corporation recently acquired Firehole Technologies, which makes software for analyzing composite materials. This company currently uses a proprietary file format called FBX, which stores digital content data for use across multiple applications. A selection of "graphite tools" can be found on the ribbon interface of one of this company's products, a program that is interoperable with this company's Mudbox, which is used for painting applications. Another of this company's products currently comes with a Nucleus simulation toolset and uses a cross-platform scripting language called MEL. This San Rafael-based company has produced the Building Information Modeling program Revit and 3DS Max, both of which can be used for digital prototyping. For 10 points, name this software company that makes computer assisted design programs, including the hugely popular program Maya.
    ANSWER: **Autodesk**, Inc.

11. The only chapter of Charles Rosen's *The Romantic Generation* centering on a French-born composer ends with a detailed analysis of a section of this piece. In one section of this piece, a "psalmody" on one note in the chorus accompanies a "Marche Fuguée." This piece's prologue is followed by an alto aria accompanied by low harp arpeggios, to which a high cello obbligato is added during the second strophe, "Premiers transports que nul n'oublie." This piece's scherzo includes the first major use of ancient cymbals. The last number of this piece is an "Oath of Reconciliation" called "Jurez donc par l'auguste symbole." This piece includes an A-major "Scène d'amour" and begins with a fugal brawl in the strings, with trombones representing the "intervention of the prince." This symphony's finale includes the aria "Pauvres enfants que je pleure" sung by Friar Lawrence, and it includes the "Queen Mab" Scherzo. For 10 points, name this symphony with choruses that was composed by Hector Berlioz.
    ANSWER: ***Roméo et Juliette***, **H. 79**, **Opus 17** [or ***Romeo and Juliet***; accept any underlined part]

12. Solutions of this equation that map to Euclidean space correspond to instantons with action given by the Dirichlet energy. For a certain set of solutions to this equation, taking the complex conjugate is equivalent to negating the second degree parameter and multiplying by the Condon-Shortley phase. Those solutions to this equation, the simplest of which is one-half times the square root of one over pi, are eigenfunctions of the square of the orbital angular momentum operator. Substituting this equation into the expression for the energy of a dipole in a constant magnetic field results in Earnshaw's theorem. In two dimensions, this equation's fundamental solution is "negative log r over two pi," and in three dimensions, it is the electric potential generated by a point charge. This equation governs the velocity potential of an incompressible flow and the steady-state distribution of heat. For 10 points, harmonic functions satisfy what equation written "del squared u equals zero"?
ANSWER: **Laplace**'s equation [do not accept or prompt on more general answers such as "Poisson's equation" or "heat equation"]

13. Poet Allan Ramsay witnessed this event, which followed a robbery at Pittenweem. After this event, Alexander Wilson, the Lord Provost, was prevented from holding any future governmental positions. Prior to this event, George Robertson managed to escape while attending a church service after the heroics of a compatriot who held off four guards. Following this event, its namesake requested and received a reprieve from Queen Caroline. Armed men broke into Tolbooth prison and hanged the namesake of this event on a signpost in the street. This event occurred after the hanging of the smuggler Andrew Wilson, at which the namesake Captain of the City Guard's attempts to quell a mob by firing randomly into the crowd, killing innocent civilians. The gruesome manner of this event's namesake is described in a novel chronicling the lives on Effie and Jeanie Deans. For 10 points, name these Edinburgh riots that were described in detail in Sir Walter Scott's *The Heart of Midlothian*.
ANSWER: **Porteous** Riots

14. In one text, this author defines the balance between the "mass element," the "principal cohesive element," and the "intermediate element" as part of the theorem of fixed proportions. One of his essays that discusses force and consent posits that those two topics comprise the philosophy of the epoch. In one of his books, the section "Against Byzantism" argues against the "theoreticism" of Louis Althusser. That book by this man discusses the necessity of repressing the sexual instinct in order for a passive revolution to occur within the constraints of society. This author distinguishes between traditional scholars and those who speak for the interests of a specific class of people, whom he dubs "organic intellectuals." That book by this man argues that the ruling class can dominate the working class by using their worldview and norms, which he termed "cultural hegemony." For 10 points, name this author of the *Prison Notebooks*.
ANSWER: Antonio **Gramsci**

15. One author who used this language wrote a poem describing people leaping to their deaths from the World Trade Center in the collection *Monologue of a Dog Ensnared in History*. A discursive monologue written in this language uses Manichaeism, Swedenborg, and Dostoyevsky to explain the cataclysmic split from the body and soul that happened during the Enlightenment. An anti-Communist novel written in this language is entitled *Ashes and Diamonds*, and its author was fictionalized as "The Moralist" in a book that calls one of his compatriots "The Troubadour." This language was used to write *The Land of Ulro* and another book that fictionalizes four literary intellectuals who are drawn to Communism named Alpha, Beta, Gamma, and Delta. A poem written in this language compares Stalin to an abominable snowman and is called "Calling Out to Yeti." For 10 points, name this language used by Wislawa Szymborska and Czeslaw Milosz.
ANSWER: **Polish** [or jezyk **polski**; or **polszczyzna**]

16. This man likens prayers to wrinkled daughters of Zeus who hobble after sin but never catch up to it. In Sophocles' *Philoctetes*, Neoptolemus falsely claims that this man is leading a Greek expedition to Lemnos. The *Bibliotheca* lists this man's sister as the mother of Ctesippus by Heracles. This man's relatives hold continuous watch over him for nine days and nights to prevent him from leaving home, but on the tenth night he escapes. This brother of Astydamia sleeps with his father's concubine Clytia at the urging of his mother, leading his father to blind him and curse him with infertility; he has his sight restored by Chiron and becomes king of Dolopia thanks to his benefactor Peleus. With Ajax the Greater and Odysseus, this son of Cleobule and Amyntor gives an impassioned speech exhorting his one-time pupil to resume fighting in the Trojan War. For 10 points, name this Greek hero who shares his name with an animal that arose from the ashes of its predecessor every 500 years.
ANSWER: **Phoenix**

17. Examples of this type of musical instrument in Eastern Europe include the Croatian *istarski mih*, the Russian *volynka*, and the Polish *dudy*. Cristina Pato is a self-proclaimed "diva" of a Galician and Asturian instrument of this name called a *gaita*. The Italian Christmas carol "Tu scendi dalle stelle" is based on music for a traditional Italian instrument of this type called a *zampogna*. Another version of this instrument can be played in the Cameron style. W.H. Grattan Flood's "history" of instruments of this type gave the name "uilleann" to the ones found in Ireland. In another country, where instruments of this type include "reel," "border," and "small" variants, they are often played in the *ceol mor* or *pibroch* style. Common elements of these instruments include a drone, a chanter, a reed, and a namesake component often made from goatskin. For 10 points, name this type of aerophone instrument exemplified by the "great highland" ones of Scotland.
ANSWER: **bagpipe**s [prompt on "pipe(s)"; prompt on "aerophone(s)" before "aerophone"]

18. It is not a-bar, but the value of this parameter can be estimated by the Bateman–Mukai method using data collected from M-A experiments. Drake's rule predicts that the product of this parameter and capital-G is constant across groups. This parameter is multiplied by four and "N-sub-e" to generate the Watterson estimator, which is symbolized theta-W. This parameter is negatively correlated with effective population size according to the drift-barrier hypothesis, and a population's expected heterozygosity is positively correlated with both population size and this parameter. The value of this parameter is higher in SSR loci due to strand slippage, and the substitution rate is equal to the value of this parameter at neutral sites. If this parameter is constant, it can be used to estimate the divergence time of two taxa in molecular clock techniques. For 10 points, name this parameter that estimates the frequency with which deviations are introduced into DNA sequences, which is symbolized mu.
ANSWER: **mutation rate** [accept **mu** before "mu"; prompt on partial answer; accept equivalents or word forms such as **rate of mutation**]

19. One section of this book relates the victories of the Cappadocian Atrius Flaminius, and another section relates how the music critic Juan Longo suffers from a deteriorating liver because his wife feeds him a thick soup made from cream. In this novel, Farraluque accepts an offer to whitewash a house, but he gets distracted and instead has sex with an obese, sleeping maid. After Albornoz is penetrated by Llaregas in this book, he tries to commit suicide by setting his boat on fire. The asthmatic protagonist of this novel is the son of a mysterious colonel and scares the maid Baldovina when he urinates an orange liquid in its first chapter. This novel's protagonist discusses the nature of homosexuality with his good friends Fronesis and Focion and is guided spiritually by the poet Oppiano Licario. For 10 points, name this novel that follows the development of Jose Cemi in pre-Castro Cuba, the masterpiece of Jose Lezama Lima.
ANSWER: ***Paradiso***

20. One person with this surname described his birth in Franklin County, Virginia, and move to New York, where he influenced the visiting Dietrich Boenhoffer as the pastor of the U.S.'s largest Protestant congregation. Another person with this last name refused to pay a slander judgment for calling Esther James a "bag woman" and was punched by Democrat Cleve Bailey for repeatedly introducing a rider that prohibited the release of Federal funds to institutions that did not desegregate after *Brown v. Board*. That person with this surname was refused his seat by John William McCormick, leading to a Supreme Court case ruling that Congress cannot impose on its members requirements for good standing not explicitly elaborated in the Constitution. A man nicknamed "Mr. Civil Rights" had this surname and was, like his father, a pastor of the Abyssinian Baptist Church. For 10 points, give this surname of a U.S. congressman succeeded by Chuck Rangel, a Harlem-based social advocated named Adam Clayton.
ANSWER: **Powell** [accept Adam Clayton **Powell** Sr. or Jr.]

Tossups

1. This writer sent his wife Rosina into a madhouse, an experience detailed in *A Blighted Life*; Rosina later painted an unflattering portrait of him in her roman-a-clef *Cheveley*. For 10 points each:
[10] Name this Victorian novelist of *Paul Clifford* who wrote a "mystical mystery" called *Zanoni*, which focuses on a man who is immortal.
ANSWER: Edward **Bulwer-Lytton**
[10] Bulwer-Lytton wrote this play, in which the title statesman states that "the pen is mightier than the sword."
ANSWER: ***Richelieu**; Or the Conspiracy*
[10] This once-popular novel of Bulwer-Lytton, inspired by a campy Karl Briullov painting, features the nobleman Glaucus visiting the title town before a major calamity.
ANSWER: *The **Last Days of Pompeii***

2. This rule is often stated as "cells that fire together, wire together." For 10 points each:
[10] Name this rule stating that excitation of two neurons at the same time results in stronger connections between them. It was introduced by the Canadian neurobiologist who wrote *The Organization of Behavior*.
ANSWER: **Hebb**'s rule [accept **Hebb**'s postulate or **Hebb**'s theory; accept **Hebbian** instead of "Hebb"]
[10] Hebb's rule is an important result for this phenomenon, which states that the brain changes and adapts as a result of experiences, even after childhood.
ANSWER: brain **plasticity** [accept synaptic **plasticity**; accept **neuroplasticity**]
[10] These two contrasting concepts, which are the simplest examples of non-associative learning, describe the decrease or increase in the magnitude of response to a repeatedly presented stimulus. Name both.
ANSWER: **habituation** and **sensitization** [accept word forms for both parts; accept in any order]

3. This figure's wife allegedly claimed that Onini the python was shorter than a palm stick, a claim that he used to capture Onini. For 10 points each:
[10] Name this mythical character who was assisted by his wife Aso in gathering the creatures he needs to get the stories of the world.
ANSWER: **Anansi** [or Kwaku **Ananse**; or **Anancy**]
[10] Anansi captured the python, the leopard, the hornets, and the dwarf at the behest of this sky god, who gave him the stories in exchange.
ANSWER: **Nyame** [or **Nyambe**; or **Nyankopon**]
[10] Anansi's son Ntikuma caused him to drop a pot that held this abstract thing. The pot fell and broke, after which it was washed into the world, meaning that everyone, even Chris Ray, has some.
ANSWER: **wisdom** [or **knowledge**, accept any equivalents that indicates **smarts** or **intelligence**]

4. This woman was chosen to head the jury selection for the main competition at the 2014 Cannes Film Festival. For 10 points each:
[10] Name this director who, in 1993, became the first woman to win the Palme d'Or; in her winning film, *The Piano*, the mute Ada develops feelings for Baines.
ANSWER: [Elizabeth] Jane **Campion**
[10] Jane Campion hails from this country, whose landscapes were featured in the *Lord of the Rings* trilogy.
ANSWER: **New Zealand**
[10] Campion's jury awarded the Palme d'Or to this movie by Turkish director Nuri Ceylan. In it, Mr. Aydin struggles to maintain relationships with those near to him as he runs a hotel and writes for a local newspaper.
ANSWER: *Winter Sleep* [or *Kis Uykusu*]

5. This man's idea of the doctrine of flux is often embodied in a quote that one cannot step in the same river twice, though he more precisely stated that waters flowing through the same river are always different. For 10 points each:
[10] Name this Pre-Socratic philosopher who held that fire was the most important of the four elements.
ANSWER: **Heraclitus**
[10] A concept central to Heraclitus's idea of balance was this idea of order. Gnostics placed emphasis on this term, which was used to refer to a divine being by Philo of Alexandria.
ANSWER: **logos**
[10] This philosopher argued that Heraclitus believed the psyche ended with death in one paper, and provided an interpretation of several classic tracts, in the book *The Fragility of Goodness*.
ANSWER: Martha [**Craven**] **Nussbaum** [accept either underlined name]

6. This historical period was first named by the cardinal and historian Caesar Baronius. For 10 points each:
[10] Give the two-word Latin term that describes this period of decadence in the early 10th-century church. Later German scholars referred to this period as the Pornocracy.
ANSWER: *saeculum obscurum*
[10] The *saeculum obscurum* was characterized by domination of the papacy by the secular nobility, particularly the counts of Tusculum from this family. This family's founder and namesake was the husband of the influential Theodora, whose questionable background gave the period another alternate name, the "Rule of the Harlots."
ANSWER: **Theophylact** family [or **Theophylacts**; or **Theophylacti**]
[10] For some reason, the *saeculum obscurum* was said to start seven years after an event in which Pope Stephen VI put his predecessor, Formosus, on trial, in this synod named for the fact that Formosus was dead.
ANSWER: **Cadaver** Synod [or **Corpse** Synod; or Synodus **Horrenda**; or **Cadaver Trial**; or Synodus **Cadaveris**]

7. One of this writer's books interweaves the story of a failed assassination of Mussolini with the day-to-day lives of each person who holds the title currency. For 10 points each:
[10] Name this writer of *A Coin in Nine Hands* who also wrote another novel in which the title character crafts a series of epistles to his eventual successor Marcus Aurelius.
ANSWER: Marguerite **Yourcenar**
[10] Yourcenar wrote this novel in which the protagonist meets his childhood friend Henry Maximilian at Innsbruck after the pilgrim Perrotin is taken by the devil. Its protagonist abandons the priesthood to pursue secret knowledge.
ANSWER: *The **Abyss*** [or ***Zeno of Bruges*** or ***L'Œuvre au noir***]
[10] Because of her novel *Memoirs of Hadrian*, Yourcenar was given a chair in this cultural institution. Its members once included Anatole France.
ANSWER: **French Academy** [or L'**Académie française**]

8. A formalism in this discipline uses the linear adiabatic wave equation when higher order pulsations can be neglected. For 10 points each:
[10] Name this discipline that probes stellar interiors through energy pulsations, analogous to how geophysicists probe the Earth's interior by studying p-waves and s-waves.
ANSWER: **asteroseismology** [accept descriptive equivalents such as **stellar seismology** or the study of **seismology in stars**; do not accept or prompt on answers including "starquakes"]
[10] The rapid pulsation of AP stars and ZZ Ceti stars is driven by this phenomenon, in which opacity increases as a star's interior becomes more pressurized. The Kramer's relation describes this phenomenon.
ANSWER: **kappa** mechanism
[10] By assuming the Eddington model of pulsation, one can use the equation of state for a star in hydrostatic equilibrium to derive the equation named for the pulsation period and this other quantity. That equation states that the pulsation period is inversely proportional to this state variable of a star.
ANSWER: mean **density** [accept the **period mean density relation**]

9. This type of person was usually depicted with voluptuous features and a slim waist, and, though she might be independent, she would not have been a suffragette. For 10 points each:
[10] Give this term, derived from a series of drawings by a namesake artist, for an ideal of feminine beauty that emerged in late-19th-century America.
ANSWER: **Gibson Girl**s
[10] The Gibson Girl was a hypersexualized version of this type of female who was educated and career-focused; the term was coined by Henry James.
ANSWER: **New Woman** [accept word forms]
[10] This woman, one of the leading sex symbols of the 1920s, became known as "The It Girl" after starring in such movies as *It*, *Mantrap*, and *Wings*.
ANSWER: Clara [Gordon] **Bow**

10. Answer the following about electronic music, for 10 points each.
[10] This composer of *Musica Ricercata* and études like "Fanfares" and "The Devil's Staircase" wrote two electronic pieces, and imitated the *sound* of electronic music in a tone-cluster heavy, "micropolyphonic" orchestral piece.
ANSWER: György **Ligeti** [the piece is *Atmosphères*; "Gyorgy" is pronounced similar to "George"]
[10] Edgard Varèse, who wrote innovative pieces like *Poème électronique* and *Déserts*, which includes three "interpolations of organized sound," emigrated from France to this country. The composer of the electroacoustic piece *Philomela*, Milton Babbitt, hailed from this country, as did Charles Ives.
ANSWER: **United States** of **America** [accept either underlined part; accept **US**A]
[10] Gérard Grisey and Tristan Murail are known for working with this kind of electronic music, in which fast Fourier transforms are used either to modify acoustic signals or to aid in composition based on those signals.
ANSWER: **spectral** music [or **spectral**ism]

11. This book's author references his own previous book *Rocks of the Ages* to defend his "NOMA" principle, which posits that religion and science occupy non-overlapping "domains of teaching authority." For 10 points each:
[10] Name this posthumously published book in which Stephen Jay Gould examines the relationship between science and the humanities through history.
ANSWER: *The **Hedgehog, the Fox, and the Magister's Pox***
[10] The relationship between science and the humanities was also the focus of this scientist's Rede Lecture, *The Two Cultures*. This scientist also wrote a set of novels collectively titled *Strangers and Brothers*.
ANSWER: [Charles Percy] C.P. **Snow**
[10] In the last section of *The Hedgehog, the Fox, and the Magister's Pox,* Gould complains that, despite its importance, few modern scientists have read this thinker's *The Structure of Scientific Revolutions.*
ANSWER: Thomas **Kuhn**

12. In one story in this collection, the evil serpent-seductress Manago frames the boy Toyoo for theft; in another story, Kougi, an artist who draws fish, dies and comes back to life as a fish in Biwako. For 10 points each:
[10] Name this collection of nine horror stories by Ueda Akinari that includes "The Lust of the Snake" and "The Carp of My Dreams."
ANSWER: *Tales of the Moonlight and the Rain* [accept *Tales of the Moon and the Rain* or *Ugetsu Monogatari*]
[10] Horror writer Edogawa Rampo created a member of this profession named Kogoro Akechi, and Toru Takemitsu created a man of this profession in his only novel. Peter Wimsey is an amateur member of this profession.
ANSWER: **detective** [accept equivalents such as **sleuth**]
[10] This Japanese book contains a horror sequence in which Lady Rokujo's spirit possesses Yugao, which kills her.
ANSWER: *Genji Monogatari* or [*The **Tale of Genji***]

13. It states that the mean value of "e to the minus W over k T" equals "e to the minus delta F over k T." For 10 points each:
[10] Anyone, especially Chris Ray, can use this equality to determine the change in free energy when a system is driven out of equilibrium by averaging the work done over a large number of trials.
ANSWER: **Jarzynski** equality
[10] Importantly, the Jarzynski equality is valid for processes that do not satisfy this condition. This kind of process minimizes inefficiency due to heat loss and is exemplified by the Carnot cycle.
ANSWER: **reversible** [accept word forms; prompt on "quasistatic"]
[10] The Jarzynski equality can be derived from the Crooks equation, which is a special case of this theorem. It gives the probability that an isolated system's entropy will spontaneously decrease.
ANSWER: **fluctuation** theorem [do not accept or prompt on "fluctuation-dissipation (theorem)"]

14. This technique was introduced by Robert Solow in the 1950s and the residual from this process is usually interpreted as the total factor productivity. For 10 points each:
[10] Name this technique that seeks to attribute the increase in output over time to various factors of production.
ANSWER: **growth accounting** [accept word forms]
[10] Knowing the stock of this quantity is often a problem with growth accounting. It is one of the three traditional factors of production along with land and labor.
ANSWER: **capital** stock [accept **capital good**s or **real capital**]
[10] This man proposed that the initial capital stock can be approximated to be investment at the zeroth period divided by the sum of depreciation rate and output growth rate. A triangle named for him is used to estimate the excess burden of market-distorting policies.
ANSWER: Arnold **Harberger** [accept **Harberger triangle**]

15. A character in this play has changed his name from Alexander to Ned in honor of a character from Philip Barry's play *Holiday*. For 10 points each:
[10] Name this play in which Ned struggles to gain money and approval from his brother, a wealthy lawyer, while Dr. Emma Brookner attempts to raise awareness about the oncoming AIDS epidemic.
ANSWER: The ***Normal Heart***
[10] *The Normal Heart*, as well as its adaptation for the screen, was written by this author of the drama *The Destiny of Me* and the controversial novel *Faggots*.
ANSWER: Larry **Kramer**
[10] HIV is also a theme in this two-part "Gay Fantasia on National Themes" by Tony Kushner, in which Prior Walter contrasts the disease and Roy Cohn is visited by the ghost of Ethel Rosenberg.
ANSWER: ***Angels in America***

16. This event was planned as retaliation to the USS *Samuel B. Roberts* barely surviving a minefield. For 10 points each:
[10] Name this 1988 military operation in which American forces attacked oil platforms and various ships in the Persian Gulf.
ANSWER: Operation **Praying Mantis**
[10] Operation Praying Mantis occurred during this war. The western combatant in this war authorized "Chemical" Ali to conduct a genocide against its Kurdish population.
ANSWER: **Iran-Iraq** War [accept in reverse order; accept **Tanker** war]
[10] The Kurdish genocide was codenamed the "campaign" of this eighth sura of the Quran, whose English translation is roughly "the spoils of war."
ANSWER: al-**Anfal** [accept al-**Anfal campaign** or **Operation Anfal**]

17. Josef Olbrich designed a building known as the Golden Cabbage to house the works of this art movement, which was partly a reaction against the conservatism of Eugen Felix. For 10 points each:
[10] Name this movement that included much of the output of Joseph Maria Olbrich and Otto Wagner.
ANSWER: **Vienna Secession** [or **Wiener Secession**; prompt on partial answer]
[10] One of the leaders of the Vienna Secession was this artist who showed an armored knight in opposition to the forces of Typhon in his *Beethoven Frieze*.
ANSWER: Gustav **Klimt**
[10] This magazine, which published poetry by noted authors and had square pages, was published by the members of the Vienna Secession for the better part of five years at the turn of the 20th century.
ANSWER: *Ver Sacrum*

18. Answer the following about some revolting peasants, for 10 points each.
[10] This leader of the English Peasant's Revolt was stabbed by the Lord Mayor of London after he swished water in his mouth "in a very rude and disgusting fashion."
ANSWER: Wat **Tyler**
[10] Followers of this Kentish rebel put the heads of James Fiennes and William Crowmer on pikes so that they appeared to kiss before they were defeated in a dramatic battle on London Bridge.
ANSWER: Jack **Cade**
[10] This Hungarian was set to be a commander of an army of Crusaders against the Ottomans in 1514, but instead led a peasant army against the nobility. He was eventually captured and made to sit on a scalding iron throne while his followers were forced to bite off and eat chunks of his flesh.
ANSWER: György **Dózsa** (or György **Székely**; or Gheorghe **Doja**]

19. Points lower on these graphs represent increasingly stable species. For 10 points each:
[10] Name these representations that are constructed by calculating the standard electrode potentials for species in various oxidation states for a given element, and fitting a curve through those points.
ANSWER: **Frost**-Ebsworth Diagrams
[10] A convex curve connecting species A, B, and C in a Frost diagram suggests that species A and C will undergo this type of reaction.
ANSWER: **comproportionation** [or **symproportionation**; do not accept or prompt on "disproportionation"]
[10] Frost diagrams are constructed at a constant value for this property, which is commonly measured using electrodes that exploit the fact that the electrode potential is roughly proportional to this quantity.
ANSWER: **pH**

20. A fish tries to eat this man's foot, but he pulls the fish onto land and eats most of it. For 10 points each:
[10] Name this biblical character who travels with Azariah, secretly the angel Raphael, in order to get money that his father left in Media.
ANSWER: **Tobiah**
[10] Tobiah's father, Tobit, was blinded when he slept in a courtyard and this kind of animal pooped into his eyes. In Jewish mythos, Ziz is a giant animal of this type.
ANSWER: **bird** [accept **avian**s or other equivalents; accept **sparrow**s]
[10] Tobit became blinded after the death of this ruler; earlier, Tobit secretly buried Jews who were put to death by this ruler. In Second Kings, God kills this man's army after hearing Hezekiah's prayers.
ANSWER: **Sennacherib** [or **Sin-ahhi-eriba**]