Chicago Open 2014: A Redoubtable Coupling of Editors
Packet by Moose Drool. Cool, Cool, Cool. (Stephen Liu, Sriram Pendyala, Jonathan Magin, Ryan Westbrook)
Edited by Austin Brownlow, Andrew Hart, Ike Jose, Gautam & Gaurav Kandlikar, and Jacob Reed

Tossups

1. In the book with this number from Silius Italicus's *Punica*, Hannibal and Varro rouse their troops to fight the Battle of Cannae. Juvenal's satire of this number concerns Naevolus, a male prostitute upset because his patron won't give him money. Neifile sings the song "Io mi son giovinetta" at the end of this day of *The Decameron*, which is the only day besides the first in which the stories follow no prescribed theme. The line "no day shall erase you from the memory of time" is taken from this numbered book of *The Aeneid*, in which Nisus and Euryalus massacre sleeping Rutuli soldiers. Dante kicks the head of Bocca degli Abati in this circle of Hell, which is divided into regions including Antenora and Ptolomea. In a Petrarchan sonnet, this numbered line begins after the "volta," or "turn." Antaeus lowers Dante and Virgil into this circle of Hell, where Dante encounters Count Ugolino eating the head of Ruggieri. For 10 points, name this circle of Hell in which traitors are frozen in a lake of ice, the lowest circle of Dante's *Inferno*.
ANSWER: **nine** [or **ninth**; or **nove** if you have an Italian speaker]

2. An essay by William Hazlitt praises a fictional member of this profession named "Madame Pasta." In the 18th century, Aaron Hill wrote many works to instruct members of this profession, who were lampooned in Charles Churchill's satire *The Rosciad*. In 1809, members of this profession were interrupted at work by boisterous protests from London consumers during the Old Price Riots. Employment for members of this profession was artificially restricted when Charles II effectively granted a monopoly to Thomas Killigrew and William Davenant. Denis Diderot wrote a book about this profession's "paradox," which argues that people with this job should ideally be as emotionless as possible. Thomas Betterton was the leading figure in this profession in late-17th-century England, and he was later surpassed by Charles Macklin. In the 17th and 18th centuries, people in this profession worked at Covent Garden and Drury Lane. For 10 points, name this profession shared by Peg Woffington, Edmund Kean, and David Garrick.
ANSWER: **actor**s [or **actress**es; or **acting**; or **treading the boards**; or **performing in plays**; or anything indicating that someone is acting in a theatre or on a stage]

3. The floorplan of a building designed by this man consists of an equilateral triangle with a semicircle added to each side and a sector cut out from each corner. For his first independent commission, he designed a building around a pre-existing fountain featuring the River Tiber sitting under an oak tree next to a she-wolf. This nephew of Carlo Maderno worked on the Sant'Agnese in Agone, whose position on the Piazza Navona led to an urban legend that the figure of the Nile in the Fountain of the Four Rivers raises his hand to shield himself against its ugliness. This architect designed a building whose dome is tessellated with octagonal, hexagonal, and cross-shaped coffers surrounding a dove hovering below the lantern. He placed a corkscrew lantern atop his design for Sant'Ivo alla Sapienza. For 10 points, name this Italian Baroque architect of San Carlo alle Quattro Fontane, who loved undulating walls and ovals and hated Bernini.
ANSWER: Francesco **Borromini**

4. A political party from this country that was founded by a man named MGR has been led for the last 27 years by a woman who co-starred in several films with MGR. That AIADMK party split from the similarly named DMK party that emerged from this country's Self Respect Movement. Three generations of the Owaisi family have led the Majlis e Ittehad ul Muslimeen, a party representing this country's sixth-largest city in its national legislature. Legislation for an ombudsman to investigate anti-corruption cases is the major effort of the Aam Aadmi or "common man" party, which launched in 2012 in this country. The Thackeray family leads an ethnocentric regional party in this country, whose Communist party takes inspiration from Mao Zedong and aims to overthrow its government through the Naxalite uprising. For 10 points, name this country that has political parties led by Narendra Modi and the Nehru-Gandhi family.
ANSWER: [Republic of] **India** [or **Bharat** Ganarajya]

5. This ruler set up a library at his court that was headed by Mir Naqqash, as described by calligrapher and chronicler Dust Muhammad. Early on, a rebellion against him was led by his brother Alqas Mirza, whom he locked away in the fortress at Qahqaha. Upon his death, his son Mohammad Khodabanda, who was nearly blind, was passed over for the throne but seized power anyway. This ruler sent his legate to Erzerum to enter into the Peace of Amasya, allowing his empire to retain control of Azerbaijan and Armenia. He moved his capital inward to Qazvin, where his court became a haven for Humayun, who fled the invasion of Sher Shah. This man's father, Ismail, commissioned the miniature paintings in this man's namesake version of the *Shahnameh*. This ruler, who fought several battles with Suleiman the Magnificent and shares his name with a man deposed by Nader Shah, ruled from 1524 to 1576. For 10 points, name this man who succeeded his father, Shah Ismail I, to become a great ruler of the Safavid Empire.
ANSWER: Shah **Tahmasp I** [prompt on "Tahmasp"]

6. This text reminds readers that the grammarian Priscian would have approved of Augustine's instruction in *On Christian Doctrine* for the Christian teacher to leave out the confusing bits of dogma. The prologue to this text opens by citing Matthew 19:28, in a discussion of why one should not judge. It analyzes Boethius's claim in the *Topics* that accident and substance were the two "primary kinds of things" and develops an argument about the prevalence of "opinion." This text adopts the dialectical approach of Gratian in a section that opens with the inquiry of whether human faith must be "completed by reason" and goes on to ask whether faith only concerns unseen things, and whether there is any knowledge of unseen things. It states that if "God permits errors to befall the saints themselves, this occurs in matters which do no harm to the faith," and presents 158 questions in an attempt to resolve inconsistencies between church fathers. For 10 points, name this text by Peter Abelard.
ANSWER: *Sic et Non* [or *Yes and No*]

7. They are not orbitals, but Kenichi Fukui used intuition from the Born Oppenheimer approximation to propose an 'intrinsic' form for these entities. In one algorithm, these entities exert a spring-like force on their neighbors to maintain even spacing as they evolve, while in another they evolve like a 'growing string.' A quality metric for these entities borrows from Onsager's theory of ion recombination and measures their commitment probability. The aforementioned algorithms calculate a specific example of these entities using the 'synchronous transit' approach. These entities are sometimes approximated by the bond-order. These entities form the x-axis in potential energy surface diagrams and they are points in configuration space that represent the progress of a reaction. Reactants and products are extremal examples, while the highest energy one is the transition state. For 10 points, identify these entities, whose name suggests that they are points along a dimension describing a reaction.
ANSWER: reaction **coordinate**s [accept descriptive answers that suggest "discrete **points** through which a **reaction** proceeds'; accept "reaction **path**" until 'quality metric'; anti-prompt, i.e. "Can you be less specific?" on "transition state"]

8. This city was home to a large circular cupola construction called the Rotunde that was built for its 1873 World Expo. This city's airport, along with Rome's Leonardo da Vinci, was bombed in a 1985 attack on Israelis by the Palestinian splinter group Abu Nidal Organization. Despite parliamentary immunity, Robert Blum was killed in the suppression of the 1848 uprising in this city, which included the lynching of the Minister of War, Count Baillet von Latour. During the 1918 "flight over" this city, led by Gabriele D'Annunzio, thousands of green, white, and red propaganda leaflets were dropped on it. The defeat at Aspern-Essling forced Napoleon to attempt another crossing of the Danube near this city at the Battle of Wagram, resulting in the end of the Fifth Coalition at the Treaty of Schönbrunn signed here. A meeting in this city set off the Concert of Europe in the wake of Napoleon's defeat. For 10 points, name this city where Klemens von Metternich held a Congress from 1814 to 1815.
ANSWER: **Vienna** [or **Wien**]

9. A domain interaction observed in this protein can be inhibited by the compounds GIND-25 and GIND-105. That interaction is absent in mice, which lack an Arg-61 residue that interacts with the C-terminal Glu-255 residue of this protein in a human isoform. The major polymorphisms between isoforms of this protein occur on residues 112 and 158, which are occupied by arginine or cysteine. This protein aids in the clearance of a molecule whose concentrations are the subject of the "peripheral sink" hypothesis, and a rare isoform of this protein is the major cause of HLP type III. This protein tightly binds to a protein whose deposits are visualized using PiB. The buildup of NFTs is observed in patients with one isoform of this protein that causes hyperphosphorylation of tau protein. The presence of its 4 variant can lead to the buildup of amyloid plaques, and it normally functions as a lipid transporter. For 10 points, name this protein whose polymorphisms are a leading risk factor for Alzheimer's disease.
ANSWER: **apolipoprotein E** [or **APOE**; accept **apolipoprotein E4** or **APOE4** or **APOE epsilon 4** or **apolipoprotein epsilon 4** or **AD2** or **LPG** or **LDLCQ5**; prompt on "apolipoprotein" or "APO"]

10. A former student of this man disappears from a nursing home at the beginning of a novel set near the sinister Great Ohio Desert. That female student of this man passes down his theories to her granddaughter Lenore Beadsman in David Foster Wallace's *The Broom of the System*. Bruce Duffy fictionalized this man's relationship with two of his older colleagues in the novel *The World as I Found It*, whose title comes from one of this man's books. A novel named for this man begins with the line "in the beginning, sometimes I left messages in the street," and describes how the narrator drives to the great art museums of the world and burns the frames of paintings to keep warm. That novel named for this man is narrated by Kate, a woman typing a series of mostly one-sentence paragraphs in an East Coast beach house, who believes herself to be the last person on Earth. For 10 points, name this philosopher, who titles a David Markson novel about his "mistress."
ANSWER: Ludwig [Joseph Johann] **Wittgenstein**

11. This man, who lost sight in one eye due to injuries sustained in the trenches of Sevastopol, went on to fight in the Second Opium War, which he wrote about in the *Narrative of the War with China*. This soldier was made a baron after winning the Battle of Tel el-Kebir and suppressing the Urabi Revolt. He marched over a thousand troops along the uncompleted Dawson Road on his way to the bloodless capture of Fort Garry. This commander defeated Amanquatia at the Battle of Amoaful before forcing the Treaty of Fomena on the enemy, whose capital at Kumasi he burned down. The Battle of Ulundi was fought by Lord Chelmsford to secure a decisive victory before this man arrived to replace Chelmsford after the loss at Isandlwana. For 10 points, name this British general who was in command at the end of the Zulu War, suppressed Louis Riel's Red River Rebellion, and fought the Mahdist War and the Third Anglo-Ashanti War.
ANSWER: Garnet [Joseph] **Wolseley** [1st Viscount Wolseley]

12. In a 2010 piece, this thinker claimed that Federico Fellini wanted to cast her in *Casanova*, but instead, they ended up having a tryst instead. One book by this thinker, a picture collection of hundreds of aesthetically pleasing male youths, caused a ruckus by featuring Bjorn Andresen on its cover. Another book by this author, which argues that the poems supposedly addressed to the Fair Youth are actually addressed to Ann Hathaway, states that its goal is to fill the "wife-shaped void" in Shakespeare's biography. This author of *Beautiful Boy* and *Shakespeare's Wife* wrote another book suggesting that "if you think you are emancipated, then you might consider the idea of tasting your own menstrual blood" in its section "The Wicked Womb." That book by this author asserts that "women have very little idea of how much men hate them" and that the nuclear family stifles a woman's ability to be free, turning her into the title figure. For 10 points, name this Australian feminist who wrote *The Female Eunuch*.
ANSWER: Germaine **Greer**

13. Schumann's *Introduction and Allegro Appassionato*, Opus 92, begins with the piano soloist accompanying a clarinet, and then a solo for this instrument. In the *Rhenish* symphony's first movement, the lead-up to the recapitulation begins with these instruments playing the main theme fortissimo and in unison under string tremolos. The sixth of Brahms's *Haydn Variations*, which has a constant, quick "LONG short short LONG short short" rhythm, begins with the tune played by these instruments. In the last movement of Brahms's first symphony, one of them has a solo that sounds like the Westminster Chimes. Schumann wrote a *Konzertstück* for four of these instruments and orchestra. A pair of them enters in the second bar of Brahms's second symphony. The openings of both Brahms's second piano concerto and his fourth symphony's second movement are both solos for this instrument. For 10 points, Brahms wrote a trio for violin, piano, and which brass instrument?
ANSWER: French **horn**

14. The Kelvin waves caused by this phenomenon are forced by mesoscale thermal stochastic sources that can be visualized as a meridonial distribution. The Ekman effect is a proposed nonlinear mechanism for this phenomenon, which may be positively reinforced by ENSO. Nakazawa showed that this phenomenon may consist of supercloud clusters and inertial gravity waves that propagate in opposite directions. This atmospheric phenomenon strongly affects jet streams in the winter, splitting them prior to "pineapple-express" events. The width of the approximately two-dimensional intertropical convergence zone varies with this phenomenon. The presence of this phenomenon is associated with an "enhanced phase" and a "suppressed phase" of thunderstorm activity, which is felt as a midsummer break in the Asian monsoon. For 10 points, name this doubly eponymous atmospheric phenomenon commonly called the 30-60 day oscillation.
ANSWER: **Madden-Julian** oscillation [or **MJO**; accept **30-60 day oscillation** before "30-60"; prompt on "intraseasonal" (oscillation)]

15. This man led the Citizens Railway Company that fought the "Battle at Depot Street" with rival politician C.C. Howell. He promulgated General Order 27, which mandated equal pay for black and white railroad employees, as president of the Hudson & Manhattan Railroad Company, in which role he also completed the first tunnel under the Hudson River. Late in life, this author of the memoir *The Crowded Years* divorced his wife and married a 26-year-old nurse while serving as a U.S. senator from California. Though he led on the first ballot, his political hopes were dashed for a second time at the Klanbake Convention, where he was supported by the KKK, and both he and his rival Al Smith lost the nomination to John W. Davis. This man closed the New York Stock Exchange for nearly four months in his highest political office, in which he was succeeded by Carter Glass in 1918. For 10 points, name this man who married Eleanor Wilson while serving as Secretary of the Treasury under her dad Woodrow.
ANSWER: William Gibbs **McAdoo**

16. For a construct of this type with only two outcomes, the formula "bp minus q, all over b" gives the Kelly criterion. Ambiguity aversion, which was first demonstrated in an experiment asking participants to value these constructs, is illustrated by the ones central to Daniel Ellsburg's paradox. The study of that paradox and Allais's paradox, which also centers on a set of constructs of this type, led to the development of the "rank-dependent" or "anticipated" theory of John Quiggin. Daniel Bernoulli developed expected utility theory to resolve the question of why a construct of this type with an infinite expected value is nonetheless worth very little, the so-called St. Petersburg paradox. Amos Tversky and Daniel Kahneman illustrated prospect theory with contrasting constructs of this type in which participants become risk-seeking or risk-averse depending on the certainty or possibility effects. For 10 points, name these constructs that can be set up to turn a guaranteed profit if there is a "Dutch book" set of odds.
ANSWER: **bet**s [or **gamble**s; or **wager**s; or **lottery** games; accept word forms of all answers such as **gambling** or **betting** or **wagering**; prompt on "game" or "investment" or word forms of either]

17. This being, which is often depicted as having the head of a dog and the claws of a lion, first materialized in China, where natives fought a war over its body parts. One legend states that this figure was an attendant of the Queen of Sheba that had a face of silver and a peacock's tale. In one story, this figure instructs a prince to bring her seven bull hides filled with water. In a different story, this figure is first summoned when a magician climbs a high peak and darkens the air by burning a feather in a brazier. Most stories relate how this figure possesses all of the world's wisdom and has thrice seen the destruction of the world. This figure leads a hero to a tamarisk tree where the hero uses a branch to forge an arrow that will defeat Esfandyar. A hoopoe leads 30 others to this creature's residence, only to discover that this creature is actually a reflection of their collective being. In a text by Ferdowsi, this being helps Zal with a C-section so that Rostam can be born. For 10 points, name this huge bird from Persian folklore.
ANSWER: **Simorgh** [or **Simurg**h; or **Simourv**] ["see-more"; accept reasonable phonetic pronunciations]

18. A description of this conflict contrasts one character's "sun-bright chariot" with a superior chariot that burns with "thick flames." At the beginning of the second day of this conflict, a group of characters advance in a "hollow cube" in order to hide a recent invention. "The Rape of the Lock" parodied a scene in this conflict by describing how the Baron cuts a sylph in half using a pair of scissors. In that scene of this conflict, one character first experiences pain when a sword slices through him but is unable to kill him. On the first day of this conflict, a council resolves to dig up "sulphurous and nitrous foam" in order to create gunpowder. In response, a group of characters uproot and throw mountains in this conflict to bury the other side's cannons. This conflict ends with the Son charging into battle and driving the enemy forces into Chaos, where they fall for nine days before waking up in a lake of fire. For 10 points, name this conflict that Raphael describes to Adam in Book 6 of *Paradise Lost*.
ANSWER: the **war in heaven** [or the **war** between **rebel angels**; or **Satan's rebellion against God**; or equivalent answers that mention that Satan/Lucifer and his angels are **rebelling against God**]

19. This artist traded one of his artworks for a bag of gold dust and a receipt, then threw the gold dust into the Seine and burnt the receipt. This artist painted canvases and fastened them to his Citroën car to subject them to rain, wind, and dirt to create artworks for his *Cosmogonies* series. This artist's fascination with Rosicrucianism led to his obsession with emptiness, as demonstrated in a photograph in which he is seen jumping out of a second-story window into nothingness. In 1958, he exhibited an empty display case in the Iris Clert Gallery in an exhibition called *The Void*. This artist soaked nude models in paint and had them roll on a canvas to create paintings in his *Anthropometries* series. His series of *Monochromes* featured canvasses painted entirely one color, many of which were executed in a shade based on synthetic ultramarine. For 10 points, name this artist who named an "international blue" pigment after himself.
ANSWER: Yves **Klein**

20. One particle's value of this quantity has a sixth-order component for which the first term of the analytic expression contains a factor of 28,259 over 5,184. The interaction of two forms of this quantity generates an energy proportional to two-thirds vacuum permeability; that is the Fermi contact contribution to s-orbital hyperfine structure. This quantity's volume density oscillates in the de Haas-van Alphen effect. The mirror force is proportional to this quantity, and it is the first adiabatic invariant of a plasma. The classical prediction for the electron's value of this quantity is incorrect by a factor of slightly more than two. Subtracting one from half the g-factor gives the anomalous value of this quantity, and dividing this quantity by angular momentum gives the gyromagnetic ratio. For 10 points, name this quantity, defined as the product of the current enclosed by a loop and the vector area of that loop, whose SI unit is the Bohr magneton.
ANSWER: **magnetic** dipole **moment** [accept **anomalous magnetic moment** of the electron before "two forms"]

Bonuses

1. For 10 points each, name these Pulitzer Prize-winning plays.
   [10] William Inge won the 1953 prize for this play about the budding relationship between Madge Owens and Hal Carter during preparations for the title event.
   ANSWER: *Picnic*
   [10] The 2009 prize was awarded to this Lynn Nottage play about female refugees caught up in the civil war of the Democratic Republic of the Congo.
   ANSWER: *Ruined*
   [10] The 2002 prize went to this play by Suzan-Lori Parks that centers on Booth, a man who opens this drama by playing three-card monte, and Link, who is employed as an Abe Lincoln impersonator.
   ANSWER: *Topdog / Underdog*

2. You are a Tokugawa official tasked with uncovering Kakure Kirishitan, or hidden Christians. You also have a terrible secret of your own: you are Auroni Gupta. For 10 points each:
   [10] You hope no one notices your UCSD sweatshirt under your kimono as you try to identify Kirishitan by seeing who refuses to step on these flat images of Christian symbols, whose name literally means "stepping-on pictures."
   ANSWER: **fumi-e** [or **fumie**]
   [10] As you shoot the breeze with your fellow Tokugawa officials, you casually mention that the Christian daimyo Koshini Yukinaga refused to commit this type of belly-slashing ritual suicide, and you even-more-casually mention that you learned this fact by being a completely normal Japanese man, not by playing *Dynasty Warriors*.
   ANSWER: **seppuku** [or **hara-kiri**]
   [10] You begin discussing this sect of "separated" Kirishitan, who kept their hidden practices after Christianity was officially legalized in the 1870s. When you realize that the 1870s haven't happened yet, you break down and tearfully confess that you are Auroni Gupta.
   ANSWER: **Hanare** Christians

3. According to Apollodorus, this figure was punished for his best-remembered action by Demeter, who pinned him under a boulder, but was freed by Heracles. For 10 points each:
   [10] Name this Hadean spirit who, in the *Metamorphoses*, was turned into an owl when water from the Phlegethon was thrown on him by Persephone.
   ANSWER: **Ascalaphus**
   [10] The *Bibliotheca* names this god as the father of Ascalaphus by Gorgyra. This figure, the son of Helios, was changed into his "river of woe" form when he supplied the Titans with drinks during the Titanomachy.
   ANSWER: **Acheron**
   [10] A different Ascalaphus who was the king of Orchomenus was killed by this Trojan warrior, who was the third and final husband of Helen of Troy. This figurewas murdered after his wife let Menelaus enter his bedchamber.
   ANSWER: **Deiphobus**

4. Examples of these algorithms include perceptrons and the work function algorithm. For 10 points each:
[10] Name these algorithms that process an input piece-by-piece in the order in which it was fed; they may be forced to make decisions that later turn out to be suboptimal.
ANSWER: **online** algorithms
[10] This problem concerns a weighted graph in which some edges are unreliable and may or may not be removed at the time of traversal. Its objective is to find the online algorithm that minimizes the ratio of its traversal cost to that of the offline algorithm that knows in advance which edges will be removed.
ANSWER: **Canadian traveler** problem [accept **CTP**]
[10] When all unreliable edges fail, the Canadian traveler problem reduces to this type of graph theory problem. For graphs with negative edge weights, Bellman-Ford is the optimal algorithm for this task.
ANSWER: [single-source, all-paths] **shortest-path** algorithm [accept **path-finding**]

5. Because of this effect, a ship traveling eastward has less weight than if it were traveling westward. For 10 points each:
[10] Name this effect in which an object moving horizontally on the Earth's surface experiences a vertical deflection. ANSWER: **Eötvös** effect [do not accept or prompt on "Coriolis effect"] ["UT-vush"; accept reasonable phonetic pronunciations]
[10] Loránd Eötvös conducted experiments demonstrating that there is no difference between inertial mass and gravitational mass, a result that has this two-word name. Einstein formulated its "strong" version.
ANSWER: **equivalence principle** [accept **strong equivalence principle**; prompt on "equivalence"]
[10] The lower the Eötvös number, the more this phenomenon's effects dominate those of gravity. The Eötvös rule assumes a linear relationship between this phenomenon and temperature.
ANSWER: **surface tension**

6. Name these psychologists who fashioned theories about adolescence, for 10 points each.
[10] This man, the first president of Clark University, used the phrase "storm and stress" to characterize the intense emotional oscillation during adolescence in a theory that prompted Edward Thorndike's amazing criticism: "It was chock full of errors, masturbation, and Jesus. He is a mad man!"
ANSWER: Granville Stanley **Hall**
[10] This pioneering thinker coined the idea of the "identity crisis" as arising from a failure of the adolescent to attain fidelity and falling prey to role diffusion in books like *Childhood and Society*.
ANSWER: Erik [Homburger] **Erikson**
[10] This Canadian developmental psychologist built on Erikson's work by outlining four categories of "identity statuses": diffusion, foreclosure, moratorium, and achievement. He theorized that adolescents attain a mature identity based on the two variables of "crisis" and "commitment."
ANSWER: James E. **Marcia**

7. This man led the Romans to victory against the deposed supporters of Tarquinius Superbus at the Battle of Silva Arsia, after which he inaugurated the tradition of riding a four-horse chariot at triumphs. For 10 points each:
[10] Name this colleague of Lucius Junius Brutus, who replaced Collatinus to become the third consul of the Roman Republic.
ANSWER: **Publius Valerius Publicola** [accept either underlined part; accept **Poplicola**]
[10] After a 508 BCE war with this man, Publicola surrendered his daughter Valeria as part of the peace treaty. This man survived an assassination attempt by Gaius Mucius Scaevola.
ANSWER: **Lars Porsena** [prompt on partial answer]
[10] According to legend, during Lars Porsena's invasion of Rome, Publius Horatius Cocles held off the invading force at the Sublicius, an example of this type of structure.
ANSWER: **bridge** [or **pons**]

8. Answer the following about films referenced in NBC's *Community*, for 10 points each.
[10] In season two, Jeff joins Abed for a meal at a "restaurant for grown-ups," despite having planned a surprise *Pulp Fiction* birthday party for him. After hearing a made-up story about how Abed soiled his pants on the set of *Cougar Town*, Jeff learns that Abed had been trying to act out this 1981 film.
ANSWER: *My Dinner with Andre*
[10] Abed's documentary on Dean Pelton's attempt to create a new TV commercial for Greendale emulates this film based on footage shot by Eleanor Coppola. The Dean's obsessive demands harms the mental health of Annie, Troy, and Britta, echoing the production problems for a Francis Ford Coppola project documented in this film.
ANSWER: *Hearts of Darkness: A Filmmaker's Apocalypse*
[10] In a season four episode, Troy, Annie, and Abed escape from Shirley's Thanksgiving dinner using a hole in the wall covered by a poster, referencing this film in which Andy Dufresne escapes prison in a similar manner.
ANSWER: *The Shawshank Redemption*

9. This group first came together at a dance school in Grunewald in 1904, and in 1917 they all took on the surname of their adoptive mother. For 10 points each:
[10] Name this group of six German girls, including Anna Denzler and Elizabeth Milker, who were taught by an American dancer and were given their collective name by the poet Fernand Divoire.
ANSWER: **Isadorables**
[10] The Isadorables were adopted by this woman, their teacher, for publicity purposes some time before the tragic meeting of this woman's scarf with the wheel of a car.
ANSWER: [Angela] Isadora **Duncan**
[10] Emile Bourdelle's Duncan-inspired bas reliefs adorn the Theatre des Champs-Elysees, where this 1913 event occurred despite the entreaties of manager Gabriel Astruc.
ANSWER: *Rite of Spring* **riot** [accept equivalents]

10. Answer the following about King Faisal I of Iraq, for 10 points each.
[10] Faisal was one of the leaders attacked by this camel-riding militia, which takes its name from the Arabic for "brotherhood." This religious force helped to install Ibn Saud as ruler of Saudi Arabia, and he used them as his elite army, until they led a namesake revolt against him that was quashed at Sabilla in 1929.
ANSWER: **Ikhwan** [or **Akhwan**]
[10] Under Faisal, the Iraqi army carried out the Simele massacre of members of this ethnic group in northern Iraq. The *Sayfo* is a term for how these people were, like the Armenians and Greeks, the subject of an Ottoman genocide.
ANSWER: **Assyrian**s [accept **Syrian**s or **Syriac**s or **Aramean**s or **Chaldean**s]
[10] Faisal was a member of this dynasty that descended from Husayn ibn Ali, the emir of Mecca. It includes Abdullah and every other king of Jordan since 1921.
ANSWER: **Hashemite** Dynasty or kingdom or family [or **Hashimite**]

11. French Baroque music commonly used this feature of the organ to play a cantus firmus in the opening "Kyrie" of an organ mass. For 10 points each:
[10] Name these features of an organ, often used to play the lowest notes in the texture, that are played using the feet.
ANSWER: organ **pedal**s [or **pedal** keyboard/clavier; or **pedal**board]
[10] The mutation stops on a French Baroque organ include the *nazard* and *larigot*, which sound at multiples of the fifth away from the fundamental, and stops that sounded at octave multiples of *this* interval away from the fundamental. Several French Baroque organ pieces use this stop "en taille."
ANSWER: **third** [or **tierce**; accept "**tierce** en taille"]
[10] This composer and organist wrote one of the most famous *Tierce en taille*s, in his *Messe pour les Paroisses*, which also contains an *Offertoire sur les grands jeux*. His non-organ pieces include "Les barricades mystérieuses."
ANSWER: François **Couperin** le Grand [do not accept or prompt on "Louis Couperin"]

12. At the beginning of this poem, Pedro de Valdivia is captured and killed. For 10 points each:
[10] Name this 16th-century epic poem written by Alonso de Ercilla. It focuses on the rebellion of Caupolican against the Spanish in modern-day Chile.
ANSWER: *La **Araucana*** [or *The **Araucaniad***]
[10] *La Araucana* was written during this period of culture, in which the painter Diego Velazquez and the authors Lope de Vega and Miguel de Cervantes flourished.
ANSWER: Spanish **Golden Age** [or **Siglo de Oro**]
[10] During the Spanish Golden Age, this nun worked to reform the Carmelite order. This mystic advocated "mental prayer" in books like *The Interior Castle* and *The Way of Perfection*.
ANSWER: Saint **Teresa** of Avila [or **Teresa** de Cepeda y Ahumada]

13. An 1855 international incident between the U.S. and this country was resolved by the paying of a $10,000 indemnity and possibly sexual favors offered by Irish vixen Eliza Lynch, the mistress of its president. For 10 points each:
[10] Name this landlocked country to which the U.S. sent what was then its largest-ever peacetime military expedition in 1857 as a result of that incident, in which this country fired upon an American surveying ship.
ANSWER: [Republic of] **Paraguay** [or República de **Paraguay**]
[10] The brouhaha erupted when a Paraguayan gunboat opened fire on this U.S. ship captained by Thomas Page, which was on a scientific expedition in the area, resulting in the death of an American seaman.
ANSWER: USS *Water Witch* [accept *Water Witch* **incident** or equivalents]
[10] This U.S. Minister to the UK quickly fired off a telegram blasting the attack as "unprovoked, unwarrantable, and dastardly." Two years later, he succeeded Franklin Pierce as president and ordered the expedition to Paraguay.
ANSWER: James **Buchanan**

14. Graham Greene sued the author of this novel for plagiarizing from his book *It's a Battlefield*. For 10 points each:
[10] Name this novel about Raymond Spartacus Kassoumi, who returns to his home country, Nakem, after being educated in France. It won the Prix Renaudot in 1968, and was written by Yambo Ouologuem.
ANSWER: ***Bound to Violence***
[10] Ouologuem is an author from this African country, which shares its name with an empire described in the *Epic of Sundiata*.
ANSWER: [Republic of] **Mali** [or République du **Mali**]
[10] Marysé Conde, who wrote about Mali's Bambara Empire in her novel *Segu*, also wrote about a woman from this country in *I, Tituba*. An autobiographical novel set in this country, which focuses on G growing up here, is George Lamming's *In the Castle of My Skin*.
ANSWER: **Barbados**

15. Name the following about titrations, for 10 points each.
[10] This technique is used to quantify the dissolved oxygen in environmental water samples. Manganese(II) sulfate is added to solution, which is subsequently oxidized in its first step, and later the solution is re-acidified and an iodometric back-titration is performed to quantify the oxidized manganese.
ANSWER: **Winkler** test
[10] Another titration method involves the indirect measurement of this quantity, which is related to electrophoretic mobility by the Henry equation. Ionic polyelectrolytes are used in water treatment to effect changes in this quantity and induce greater stability or flocculation of suspended particles.
ANSWER: **zeta potential** titration
[10] When performing titrations, you usually want to stop at this point, at which the analyte is effectively consumed by the titrant. It is also the point at which titration curve has the highest slope.
ANSWER: **equivalence** point

16. A namesake molecule produced by this organism is a potent RNA polymerase II inhibitor. For 10 points each:
[10] Name this basidiomycete studied by Heinrich Wieland. It produces a different toxin that inhibits the depolymerization of a compound that comes in filamentous and globular forms.
ANSWER: ***Amanita* phalloides** [or ***A. phalloides***; accept **death cap** fungus or **death cap** mushroom; accept alpha **Amanitin**]
[10] The phalloidin toxin inhibits the depolymerization of this protein, whose nucleation is aided by the Arp2/3 complex. This protein forms microfilaments that slide past myosin fibers during muscle contraction.
ANSWER: **actin**
[10] In the steady state, actin filaments display this behavior in which molecules are added on or dissociate at the tails, but the overall length of the filament remains the same.
ANSWER: **treadmill**ing

17. In this painting, a red-haired woman in a black hat sits with a closed fan, sleeping dog, and open book on her lap. For 10 points each:
[10] Name this painting in which the young girl accompanying the woman has her back to the viewer as she stares through the heavy iron bars of a fence at steam rising in the background.
ANSWER: The **Railway** [or *Gare Saint-Lazare*; or *Le **Chemin** de **fer***; or The **Railroad**]
[10] *The Railway* depicts Victorine Meurent, the frequent model of this painter; Meurent also appears nude in front of a black servant in this man's *Olympia*.
ANSWER: Édouard **Manet**
[10] Manet's *Olympia* is found in this Parisian museum, a converted train station, which also houses Manet's *Luncheon on the Grass*.
ANSWER: Musee d'**Orsay**

18. This ethical thought experiment was proposed by Philippa Foot in 1967. For 10 points each:
[10] Name this conundrum in which inaction leads to the death of five people by a certain type of vehicle, but action leads to the death of only one.
ANSWER: **trolley** problem
[10] This ethical doctrine, which is first found in Aquinas, roughly states that it is sometimes permissible to bring about, as a foreseeable secondary result, an action that would be impermissible to intentionally bring about directly. Foot applied it to the abortion debate in a 1967 paper.
ANSWER: doctrine of **double effect**
[10] This American philosopher proposed the "fat man" version of the trolley problem and used the "unconscious violinist" thought experiment to defend abortion in "A Defense of Abortion."
ANSWER: Judith **Jarvis Thomson** [accept either underlined name]

19. This novel centers on Lizzie Greystock, a fortune hunter who pursues Lord Fawn and Lord George Carruthers after the death of her husband Sir Florian. For 10 points each:
[10] Name this novel in which Lizzie is disgraced after the theft of the title jewels on a necklace.
ANSWER: The **Eustace Diamonds**
[10] *The Eustace Diamonds* is the third in this British author's six *Parliamentary* novels about the Palliser family. He also wrote *Barchester Towers*.
ANSWER: Anthony **Trollope**
[10] This massive novel by Trollope focuses on the suspicions of Louis Trevelyan, who travels to the Mandarin Islands and marries Sir Marmaduke's daughter Emily Rowley. Olivier Dimsdale starred in its BBC adaptation.
ANSWER: *He Knew He Was Right*

20. The losing side in this battle was routed after getting caught between Marcantonio Colonna's cavalry charge and the frontal attack by Il Medeghino. For 10 points each:
[10] Name this clash during the Italian War of 1551, fought on the Scannagallo River near Arezzo. It resulted in Siena losing its independence and becoming part of the Grand Duchy of Tuscany.
ANSWER: Battle of **Marciano** [prompt on Battle of **Scannagallo**]
[10] The Battle of Marciano was fought between Siena and this Italian city-state, whose forces were led by Gian Giacomo Medici, a poor and far-flung Milanese relation of its ruler at the time, Cosimo.
ANSWER: **Florence** [or **Firenze**]
[10] The Milanese Medicis made it big in the world when this younger brother of Gian Giacomo, born Giovanni Angelo Medici, was named pope. He presided over the last session of the Council of Trent.
ANSWER: **Pius IV** [prompt on "Pius"]