#### ACF Regionals 2016: Ben There, Didn't Do That

Edited by John Lawrence, Chris Ray, Max Schindler, and Itamar Naveh-Benjamin Packet by Yale A (Stephen Eltinge, Isaac Kirk-Davidoff, and Jacob Reed), Kentucky A (Rahul Annabathula, Michael Riggs, Neelav Dutta, and Morgan Vincent), Michigan B (Kenji Golimlim, Todd Maslyk, Collin Parks, and Mark Karabajakian), Cambridge (Ewan MacAulay, Evan Lynch, Richard Freeland, Samuel Cook)

#### TOSSUPS:

1. This author created a character who begins to adopt another character's use of the phrase "*sine pecunia*," meaning "without cost." In one of this author's novels, characters crucially begin to speak of "we up here," rather than "those up here." One of his protagonists is arrested while walking through Denmark to his hometown, and then hallucinates seeing his childhood friends Hans and Ingeborg dancing at a ball. In a novel by him, a woman named Tony goes to a Baltic sea resort to escape from Grünlich, who wants to marry her for her family's money. In another novel by this author of *Tonio Kröger*, Naphtha and Settembrini hold philosophical debates in the Swiss sanatorium in which Hans Castorp spends seven years. For 10 points, name this German author of *Buddenbrooks* and *The Magic Mountain*. ANSWER: Thomas **Mann** 

2. A group of revolutionary students in this city were made far, far more popular after they were very stupidly branded by the government as the "Four Desperados." The Independent Commission Against Corruption was established to deal with rampaging dirty cops in this city by Murray MacLehose. This city's St. Stephen's College was the scene of a brutal massacre during WWII, when its Gin Drinkers' line was breached during an invasion that culminated in Black Christmas. A candlelit vigil takes place every year on the 4<sup>th</sup> of June in this city's Victoria Park. Donald Tsang and C. Y. Leung were leaders of this city, where recent Pro-democracy demonstrations used the symbol of an umbrella. For 10 points, name this former British colony, returned in 1997 to China. ANSWER: Hong Kong [or Hsiang Kang, or Xiang Gang]

3. One pathogen of this type causes jaagsiekte, a foaming at the nose of sheep that have developed lung cancer due to it. In 1997, Patience et al. reported that an example of these organisms found in pig kidney cells could survive in humans. Peyton Rous discovered a carcinogenic one of these organisms that causes sarcoma in chickens. These organisms compose class VI of the Baltimore classification system. Temin and Baltimore discovered the enzyme central to their function. The most famous member of this family uses gp120 and gp41 glycoproteins to bind to CD4 and enter helper T cells. For 10 points, identify this class of viruses that reproduce via reverse transcription of their single-stranded RNA genome, the most famous of which is HIV.

ANSWER: retroviruses [or *Retroviridae*; prompt on "viruses"]

4. A pioneering one of these groups was led by Ignaz Schuppanzigh. One of these groups commissioned the first work to consistently employ metric modulation. A popular American one of these groups includes Lawrence Dutton and Eugene Drucker as members. One of these groups specializing in music of the Second Viennese School is called LaSalle. Clint Mansell's "Lux Aeterna" was written for one of these ensembles, which also commissioned Steve Reich's *Different Trains*. The soundtrack for Darren Aronofsky's *Requiem for a Dream* was performed by one of these ensembles called "Kronos." Count Razumovsky commissioned Beethoven to write works for this sort of ensemble. For 10 points, name these chamber music ensembles formed of two violins, a viola, and a cello. ANSWER: string quartets

5. Joshua Kertzer has used psychological testing to argue that this school of thought is heavily rooted in emotion, and that Americans intuitively hold a "folk" version of this belief. Randy Schweller and other scholars of this school's "neoclassical" branch complicate this theory by incorporating cognitive factors. The founder of this school theorized three levels of analysis in *Man, the State, and War,* and explained its emergence from a "classical" tradition established by E.H. Carr and Hans Morgenthau. Leading theorists of this school include Barry Posen, John Mearsheimer, and Kenneth Waltz. For 10 points, name this structuralist school of international relations that competes with constructivism and neo-liberalism.

ANSWER: Neorealism [accept structural realism and other variants]

6. In a scene by this director, men sit impassively at tables with red-and-white tablecloths while a woman in a sailor suit sings and performs a striptease directly into the camera. This director created a sunglasses-wearing author who claims, during an interview, that his greatest ambition is to become immortal, and then die. In that film by this director, a man says he will count to 8, and then strangle his girlfriend if she doesn't smile; that girlfriend sells the Herald Tribune. Jean-Claude Brialy plays Émile, who loves a dancer played by Anna Karina in his film *A Woman is a Woman*. In a film by him, Patricia, played by Jean Seberg, is the lover of the Humphrey Bogart-obsessed Michel, who shoots a policeman after stealing a car. For 10 points name this French New Wave director of *Breathless*. ANSWER: Jean-Luc **Godard** 

7. This is the innermost of the two structures treated by Lineberry's layering modifications to the Jacchia model. Scientists never figured out the cause of a 2009 "collapse" of this structure that was much larger than sunspot cycles could explain. This region receives most of its energy from solar EUV rays, which is why its size changes so much seasonally. Air molecules in this region become sufficiently far apart that humans cannot hear sound past where its anacoustic zone begins. Astronautics begins at this region's Karman Line. The International Space Station orbits within this layer, which extends up to about 700 kilometers. For 10 points, identify this second-outermost layer of earth's atmosphere, named for the high temperatures reached within.

ANSWER: <u>thermosphere</u> [prompt on <u>ionosphere</u>, I guess, but none of the clues are specifically about that, prompt on <u>outer atmosphere</u>]

8. One king of this name was opposed by Ivo of Chartres for attempting to ditch his wife Bertha of Holland in favor of Bertrade de Montfort, and was later excommunicated at the Council of Clermont. A later king of this name died retreating from the Aragonese Crusade, which he led in response to the Sicilian Vespers. The navy of the sixth king with this name was destroyed at the Battle of Sluys, while the first king of this name was known as "the Amorous." A more famous king with this name launched the Albigensian crusade and defeated Otto IV at Bouvines. Another king of this name lost the Battle of the Golden Spurs to Flanders, kicked the Jews out of France, and destroyed the Knights Templar. For 10 points, give this first name of medieval French kings nicknamed "Augustus" and "The Fair."

ANSWER: **Philip** [accept more specific Philips like **Philip II** Augustus]

9. A book in this tradition reversed the negative perception of the "Saturnine humor" by producing the modern idea of a "melancholy genius." One thinker from this movement posited a higher and lower soul, the latter of which inclines towards the body. Frances Yates established the influence of occult and Hermetic thought on this tradition. This philosophy, which was promoted by Iamblichus and Proclus, was mixed with Christian theology in the *Three Books on Life*. Philosophers in this tradition often focused on *henosis*, or unity with "the one." This tradition was revived by students of Marsilio Ficino at the Florentine Academy, and its earlier exponents included Porphyry and Plotinus. For 10 points, name this philosophical tradition adopted in the Renaissance, to revive the author of *The Republic*.

ANSWER: Neoplatonism

10. The speaker of one of this author's poems describes how "mournful lean Despair / Brings me yew to deck my grave". This author described a bard who has heard "The Holy Word / That walk'd among the ancient trees". One poem by this author ends with a character stating that "God and his priest and king" "make up a heaven of our misery." He wrote a poem in which an angel with a bright key opens several coffins to lead "Dick, Joe, Ned, and Jack" to a green plain. Characters cry "Weep!" in that poem by him, about Tom Dacre, whose hair is stained with soot. The speaker of one of his poems describes an animal "burning bright / In the forests of the night." For 10 points, name this English poet who included "The Chimney Sweeper" and "The Tyger" among his *Songs of Innocence and Experience*.

#### ANSWER: William Blake

11. The king would perform this action once every seven years in the practice of *Hakhel*. A *maftir* is the final person to do it on a given day. People performing this action must have earlier studied the associated *neginnot* and trope symbols, which can be found in a *tikkun*. The central object of this practice is divided into 54 *parashot* ["pah-rah-SHOTE"], one of which is for it each week. A prayer said before it occurs begins *Barchu et Adonai hamvorach*. This action's performer stands on a *bimah* and makes use of the *yad*, a pointer that prevents damage from oily fingers. Before this action takes place, the central object is removed from the ark and carried through the synagogue. For 10 points, identify this practice where one chants passages from a Jewish holy book. ANSWER: **reading** from the **Torah** [accept just about any reasonable verb in place of reading, like reciting or chanting, accept **kriat Torah**, **leining**, or **cantillation**, or word forms thereof]

12. In one play from this country, a madwoman collects every flower petal that falls in a river, because the flower shares the name of her son. In another play from this country, two hippies wonder whether the title object might have been thrown off a playground on top of a department store, until they are accosted by the Woman from Hell. One playwright from this country wrote about a woman who performs a celestial dance to entice a fisherman to give her a feather robe that he found stuck in a pine tree. *The Man Who Turned into a Stick* was written in this country of origin of two plays about "love suicides." A performance manual on this country's "Flower of Acting" style was written by Zeami Motokiyo. For 10 points, name this country of origin of the *noh*, *bunraku*, and *kabuki* genres. ANSWER: State of Japan [or Nippon or Nihon]

13. At the end of the *Simpsons* episode "Moe'N'a Lisa," a J.K. Simmons-voiced character demands both some of these works and poems about their subject. Discussions about these works often end with the question, "What are you waiting for? Chinese New Year?" In an internet meme, one of these images hangs on a wall behind its subject at a desk, usually above the caption "and I'm just sitting here masturbating." In a 2007 film, one character complains, "I haven't printed a retraction in twenty years!" after firing Eddie Brock for doctoring some of these images to depict their subject robbing a bank. The freelance photographer tasked with producing these images often fails, since they secretly must be self-portraits. For 10 points, identify these images demanded by J. Jonah Jameson, which might depict a wall-crawler battling the Green Goblin.

#### ANSWER: pictures of Spider-Man [or photographs of Spider-Man]

14. The collapse of the Union Guardian Trust Company led this man into a public feud with E. D. Stair. Herbert Bigelow allied himself with this man in Cincinnati. Eugenio Pacelli and Francis Spellman collaborated to take down this man, who was harshly criticized by John Ryan. This man advocated disbanding the Federal Reserve and edited the rather ironically-named newspaper *Social Justice*, which prompted the creation of the Christian Front. This man founded the National Union party, which ran William Lemke for president. This man was shielded for much of his career by Michael Gallagher, the archbishop of the Diocese of Detroit. For 10 points, name this priest at the Shrine of the Little Flower who ranted about Jews and the New Deal on his radio sermons. ANSWER: Father Charles E. **Coughlin** 

15. The functions corresponding to these entities are the simplest ones that can be added to polarize a chemical basis set. The A1, B1, and B2 symmetries in a C2v point group correspond to these specific entities. The wavefunctions of these things have n-minus-two radial nodes. In octahedral complexes in ligand field theory, they correspond to t-sub-1u. These orbitals donate more character to electronegative substituents, according to Bent's rule. The Huckel method writes related objects as linear combinations of them. In benzene, these orbitals combine to form a delocalized pi system. They have angular momentum quantum number 1. For 10 points, identify these dumbbell-shaped atomic orbitals, three of which are hybridized in tetrahedral structures with an *s* orbital. ANSWER: *p* orbitals [prompt on atomic orbitals, do not accept or prompt on "molecular orbitals" or "pi orbitals"]

16. In the *Aeneid*, the Cumaean Sybil informs Aeneas that this deity appointed her to guard the Avernian grove. According to the *Theogony*, Zeus granted this deity a "share of the earth and the unfruitful sea," since Zeus honored this deity above all. During the Gigantomachy, this deity killed Clytius. For delaying the birth of Heracles, Galinthias was transformed into a weasel and became this deity's sacred animal. For murdering some Thracian thieves, Hecuba was transformed into an animal that served as this deity's servant. This goddess was typically depicted grasping a pair of torches, which she used on one occasion to aid Demeter in her search for Persephone. In art, this goddess was usually accompanied by a black dog. For 10 points, name this Greek goddess of necromancy and witchcraft.

#### ANSWER: Hecate

17. The narrator of a story named after this process cites the cases of Edward Stapleton and Victorine Lafourcade to justify his fear of them. That narrator conquers his fear of this process after finding himself in the berth of a sloop in which he had fallen asleep. One character removes thirty-two teeth from a woman who suffers this fate; that woman is Egaeus' cousin Berenice. A character who underwent this process interrupts the tale of Sir Ethelred and the dragon, causing another character to yell "Madman! I tell you that she now stands without the door!" Only the ringing of jester bells is heard after a character who dies in this manner yells "For the love of God, Montresor!" For 10 points, name this fate that befalls Fortunato and Madeline Usher, a common trope in Edgar Allan Poe stories. ANSWER: being **buried** alive [or being **walled** alive; or being **entombed** alive; accept premature **burial**]

18. They aren't Georgians, but a rock relief created by these people may have been ordered by a ruler known as "the builder" who signed a 30-year peace treaty with Leo the Armenian. The Madara Rider was created under Omurtag, a ruler of these people. These people had only "sorrow and a great stench" according to Vladimir the Great, who chose not to convert to Islam after learning from these people that Muslims could not drink alcohol. Justinian II bestowed the title "Caesar" on a ruler of these people, Tervel. Nikephoros I had his skull lined with silver and used as a cup by another king of these people, Krum. After the Battle of Kleidion, 99 out of 100 soldiers in an army of these people were blinded. For 10 points, name these people who were defeated by the Byzantine emperor Basil II. ANSWER: **Bulgar**s

19. To show that this quantity is unique for a given physical system, one shows that the difference between two distinct solutions for it would have a gradient whose square would have volume integral zero. This quantity is set equal to zero in the incomplete Weyl gauge. It may be written as a sum of solid harmonics times multipole moments in the Laplace expansion. This quantity's Laplacian equals charge-density over permittivity, according to Poisson's equation. This quantity is constant everywhere along a conducting surface. By integrating Coulomb's Law, one finds that this quantity for a point charge equals kQ over R. For 10 points, identify this electrostatic quantity, whose negative gradient is the electric field, and which has units of Joules per Coulomb.

ANSWER: electric **potential** [or scalar **potential**, or **voltage**, prompt on "phi" or "V", do not accept "potential energy"]

20. In a painting from this city, a woman on the right pours a glass pitcher of water into a marble basin, while a redclad youth in the center plays a lute, sitting across from a man with a recorder. Masked people from this city examine a rhinoceros named Clara in a painting by Pietro Longhi. Its painter Francesco Guardi depicted nuns in its Church of San Zaccaria. The earliest known depiction of Chinese porcelain in European art is in a painting from this city that shows Olympic deities picnicking on the grass; that is *The Feast of the Gods* by Giovanni Bellini. A painter from here showed a white and brown dog sleeping at the feet of a reclining love goddess in the *Venus of Urbino*. For 10 points, Titian was from what city whose native son Canaletto painted views of its Grand Canal? ANSWER: **Venice** [or **Venezia**]

#### BONUSES:

1. The only regular polygons that can be used in this process are the hexagon, square, and equilateral triangle. For 10 points each:

[10] Name this process of tiling a plane using only one polygon.

ANSWER: **tessellation** [accept word forms]

[10] In 2015, Mann, McLoud, and Von Derau discovered a fifteenth convex polygon with this many sides that can tile a plane. The complete graph on this many vertices is the smallest that is non-planar.

ANSWER: five

[10] Roger Penrose found a bunch of cool tilings. With E.H. Moore, he names the canonical one of these things, which for a given rectangular matrix, can be found using its singular value decomposition.

ANSWER: Penrose-Moore **pseudoinverse** [don't prompt on partial answer]

2. Answer the following about some anthropological hoaxes, for 10 points each:

[10] Derek Freeman wrote about the "fateful hoaxing" of this anthropologist, whom he claimed was fooled by the subjects of her seminal *Coming of Age in Samoa*.

#### ANSWER: Margaret Mead

[10] This name was given to a previously unknown species of human whose skull was found by Charles Dawson. It turned out this species was previously unknown because it was totally made up; the skull had a human cranium and an orangutan jaw.

ANSWER: Piltdown Man

[10] In the 1970s, Ferdinand Marcos took advantage of the publicity surrounding this tribe from Mindanao, a supposed remnant of Stone Age culture. It remains a source of anthropological debate. ANSWER: <u>Tasaday</u> people

3. The poem in which this object appears repeats the description that it "snarled and rattled." For 10 points each: [10] Name this object. When one character says "Supper," this object seems to leap out "As if to prove [it] knew what supper meant" and takes off a boy's hand.

ANSWER: a buzz<u>saw</u>

[10] That buzzsaw kills a boy in "Out, Out-", a poem by this American author, who described two roads diverging in a yellow wood in "The Road Not Taken."

ANSWER: Robert (Lee) Frost

[10] The speaker and his grouchy neighbor repair the stones of the title object every spring in this Frost poem, which features the line "Good fences make good neighbors."

### ANSWER: "Mending Wall"

4. Answer some questions about the life of famous Yippie Jerry Rubin, for 10 points each.

[10] Rubin rose to prominence in the Berkeley Free Speech Movement along with this activit, who implored young Americans to "put your bodies upon the gears" in 1964.

ANSWER: Mario Savio

[10] Rubin was the preferred running mate of this man's Peace and Freedom Party candidacy in 1968. This author of *Soul on Ice* was a major leader of the Black Panthers along with Bobby Seale.

ANSWER: (Leroy) Eldridge Cleaver

[10] Rubin got stoned out of his mind and dressed up like a colonial general to appear before this anti-Communist body. Fortunately, this committee had long since lost the ability to blacklist people that it wielded under McCarthy, though it did bar Rubin from trying to return dressed as Santa and shouting, "HO HO HO CHI-MIN." ANSWER: <u>H</u>ouse <u>U</u>n-American <u>A</u>ctivities <u>C</u>ommittee

5. Knud Jeppesen wrote a comprehensive study of this often homophonic vocal genre, whose prominent composers include Bartolomeo Tromboncini and Marchetto Cara. For 10 points each:

[10] Give this umbrella term for several Italian secular genres at the beginning of the 16<sup>th</sup> century. This kind of work developed from Italian practices of improvising a song and its lute accompaniment.

#### ANSWER: **frottola** [or **frottole**]

[10] The frottola was a predecessor to this genre of *a cappella* secular music of the 16<sup>th</sup> and early 17<sup>th</sup> centuries, known for its word-painting. Luca Marenzio and Carlo Gesualdo composed many of these pieces.

### ANSWER: madrigals

[10] This Italian Baroque composer courted controversy with his *Fifth Book of Madrigals*, which included "Cruda Amarilli." You may know him better for his operas *L'Orfeo* and *The Coronation of Poppea*.

### ANSWER: Claudio Monteverdi

6. In perhaps the most Spanish quote ever, this man was credited with observing that politics is "like sex" – you start off doing badly, but get better with experience." For 10 points each:

[10] Name this iconoclastic political science professor whose party, Podemos, won 20% of the vote in the recent Spanish election.

ANSWER: Pablo Manuel Iglesias Turrion

[10] Iglesias is a strong supporter of Alexis Tsipras, the Prime Minister of Greece, who leads this leftist party. ANSWER: **SYRIZA** [accept **Coalition of the Radical Left**, *Synaspismós Rizospastikís Aristerás*]

[10] Joining SYRIZA and Podemos in the recent rise of left-wing movements in Europe is Jeremy Corbyn, the radical pacifist vegetarian leader of this mainstream party in Britain, which opposes the Conservatives. ANSWER: (UK) **Labour** Party

7. The scala tympani and scala vestibuli in this structure are filled with perilymph. For 10 points each:

[10] Identify this snail-shaped portion of the inner ear. It contains the organ of Corti, in which vibrational signals are transduced into neuronal action potentials.

## ANSWER: cochlea

[10] The primary receptors of the cochlea are these long, thin cells arrayed along the basilar membrane. They have stereocilia which project into the scala media and bend to cause changes in ion concentration.

## ANSWER: hair cells

[10] This motor protein present in the outer hair cells changes length in response to voltage changes inside the cells. That phenomenon, called electromotility, helps this protein amplify auditory signals.

## ANSWER: prestin

8. This historian claimed that history should reconstruct "how things actually were." For 10 points each:

[10] Name this nineteenth-century German historian who influenced modern historiography with his emphasis on primary sources and novelistic narrative.

## ANSWER: Leopold von Ranke

[10] Ranke's controversial book on papal history was defended by this historian and politician, who remains famous for opining, "Power tends to corrupt, and absolute power corrupts absolutely."

ANSWER: Lord Acton [or John Emerich Edward Dalberg-Acton, 1st Baron Acton]

[10] Rankean historian Arnold Toynbee famously endorsed this leader, whose desire for greater understanding from Britain and improvement of the German nation Toynbee judged as sincere. Unfortunately it turned out that this man wanted greater understanding of his desires to invade Poland in 1939.

ANSWER: Adolf Hitler

9. This novel's characters include Doctor Bormenthal and Philip Philipovich Preobrazhensky, the latter of whom transforms its central character into Polygraph Polygraphovich. For 10 points each:

[10] Name this 20<sup>th</sup>-century Russian novel in which a canine named Sharik turns into a human and takes up a job strangling stray cats.

ANSWER: *Heart of a Dog* [or *Heart of the Dog*; or *Sobach'e serdtse*]

[10] This author of *Heart of a Dog* wrote about how Satan, disguised as Professor Woland, wreaks havoc on various characters in Moscow in *The Master and Margarita*.

### ANSWER: Mikhaíl Bulgakov

[10] This writer depicted Bulgakov's relationship with Joseph Stalin in his 2012 Olivier Award-winning play *Collaborators*. He wrote the screenplay for the film adaptation of Irvine Welsh's *Trainspotting*.

### ANSWER: John Hodge

10. Charles Taylor called this practice a "vital human need" in an influential essay titled "Multiculturalism and the Politics of [this concept]." For 10 points each:

[10] Name this central concept in the philosophies of Nancy Fraser and Axel Honneth, who co-wrote a book advocating this practice over simple redistribution.

### ANSWER: recognition

[10] Axel Honneth is the current director of the Institute for Social Research at the University in this German city. Philosophers in this city's namesake "school" included Theodor Adorno and Herbert Marcuse.

### ANSWER: Frankfurt am Main [accept Frankfurt School]

[10] This work by Marcuse suggests that "advanced industrial society" creates the title complacent sort of person whose dialectical impulse is flattened out by a predigested view of the world.

ANSWER: One-Dimensional Man [or Der eindimensionale Mensch]

11. His works include *The Cup of Life*, which features a controversial portrayal of a child's death. For 10 points each:

[10] Identify this fictional author, whose second wife hires Alroy Kear as a biographer. He wrote his best works while he was married to his first wife, Rosie.

ANSWER: <u>Edward</u> "<u>Ted</u>" <u>Driffield</u> [accept any underlined portion]

[10] Driffield appears in *Cakes and Ale,* a novel by this British author, who wrote about the club-footed Philip Carey in *Of Human Bondage*.

### ANSWER: W(illiam) Somerset Maugham

[10] The phrase "cakes and ale" comes from a line spoken by Toby Belch to this pompous steward in Shakespeare's *Twelfth Night*. He is gulled by Toby, Maria, and others into making love to Olivia, and then imprisoned for his troubles.

### ANSWER: Malvolio

12. Answer these questions about the Middle Eastern theater of WWI, for 10 points each:

[10] One of the first battles where air power proved critical was this 1918 defeat for Liman von Sanders. Thutmose III won a much, much earlier battle here against some uppity fellow known only as the "King of Kadesh."

## ANSWER: Megiddo [prompt on Nablus, I suppose]

[10] This general commanded British forces in the Middle East, eventually linking up with T.E. Lawrence. He stuck around after the war as High Commissioner of Egypt.

ANSWER: Edmund <u>Allenby</u>, 1st Viscount <u>Allenby</u>

[10] Allenby famously entered this city's Jaffa Gate on foot, in stark contrast to the early entrance of the Kaiser, who had been on horseback. This city is holy to Judaism, Christianity, and Islam.

ANSWER: Jerusalem

13. This reaction is one of the most common ways to synthesize cyclo-hexenones. For 10 points each:

[10] Identify this two-step reaction which forms an unsaturated ring compound from a ketone and a vinyl ketone.

# ANSWER: **Robinson annulation**

[10] The first step of the Robinson annulation is a Michael addition, which involves a nucleophilic attack on an unsaturated ketone with this property. Systems with this property have alternating single and double bonds. ANSWER: **conjugation** [accept word forms, like **conjugated** system]

[10] A reaction of this type is the second step of the Robinson annulation. In it, an enolate reacts with a carbonyl, and then that intermediate is dehydrated to yield an enone.

ANSWER: aldol condensation [prompt on aldol reaction]

14. One figure of this name sentences Nehor to death after a rebellion. For 10 points each:

[10] Identify this name, shared by a father-son pair of judges. The elder man with this name was convinced to convert by Abinadi, and left the court of King Noah.

ANSWER: Judge <u>Alma</u> [accept <u>Alma</u> the Elder/Younger]

[10] Alma the Younger is the namesake of one section of this larger text. The angel Moroni presented some golden plates engraved with this book to Joseph Smith.

### ANSWER: Book of Mormon

[10] The Book of Mormon begins with a pair of books named after this prophet. This son of Lehi was commanded by God to kill Laban and snag the Plates of Brass.

ANSWER: <u>Nephi</u>

15. The five people in this altarpiece are juxtaposed with five floating Latin inscriptions. For 10 points each:

[10] Name this devotional triptych commissioned by a family from Tournai. Its center panel depicts Jesus holding a *globus cruciger* with John the Evangelist on his left and the Virgin Mary on his right.

### ANSWER: *Braque* Triptych

[10] This Flemish painter, a contemporary of Robert Campin and Jan van Eyck, painted the *Braque Triptych* as well as a *Descent from the Cross* in which a blue-robed Virgin Mary faints, mimicking the pose of the body of Christ. ANSWER: Rogier **van der Weyden** 

[10] When closed, the *Braque Triptych* shows a cross on the right side, and one of these objects resting on a brick on the left. An anamorphic one of these objects can be seen in the bottom half of Hans Holbein's *The Ambassadors*. ANSWER: a **skull** 

16. Jean-Baptiste Debret created many paintings drawing attention to slavery in this nation, particularly the sugar plantations of Bahia. For 10 points each:

[10] Name this South American country that saw the Male Revolt before slavery was ended by the Golden Law under Pedro II.

## ANSWER: Brazil

[10] Pedro's reforms were helped along by this advisor, a prolific statesman and thinker known as the "father of Brazilian diplomacy." He negotiated the Treaty of Petropolis with Bolivia.

ANSWER: José **Paranhos**, Baron of **Rio Branco** [accept either underlined portion]

[10] The predecessor to the Golden Law was named either for Rio Branco or for this principle, designed to gradually abolish slavery. Under this principle, children of slave mothers were no longer slaves from birth.

ANSWER: law of the **free womb** [or any phrase mentioning "free womb"]

17. René Wellek faulted this book for treating Coleridge as the primary progenitor of Romantic thought, rather than recognizing him as a plagiarist of German texts. For 10 points each:

[10] Name this 1953 work of literary criticism that analyzes the move from an eighteenth-century aesthetic of mimesis to a nineteenth-century aesthetic of illumination, which it traces back to Plato and Plotinus, respectively. ANSWER: *The Mirror and the Lamp* 

[10] *The Mirror and the Lamp* is by M.H. Abrams, who served as editor of this literature anthology series, which is the rival of the Oxford Anthology of English Literature.

ANSWER: Norton Anthology of English Literature

[10] Abrams' book *The Milk of Paradise* studies the influence of opium on several literary figures, including this author of *Confessions of an English Opium Eater* and *On Murder considered as one of the Fine Arts*. ANSWER: Thomas **De Quincey** 

18. Operas have a lot of characters, but those only come to life because real people sing the roles. For 10 points each:

[10] This 19<sup>th</sup>-century soprano, known as the "Swedish Nightingale," first gained fame for her 1838 performance in *Der Freischütz*, but spent the later part of her career as a travelling attraction for P.T. Barnum.

ANSWER: Jenny Lind [accept Johanna Maria Lind]

[10] This notoriously overweight Italian tenor was known as the "King of High C's," because of his performance as Tonio in *La fille du régiment*. Along with José Carreras and Placido Domingo, he was one third of the Three Tenors. ANSWER: Luciano **Pavarotti** 

[10] This contemporary German tenor is known for his performance of Massenet operas, including a 2014 production of *Werther* at the Met, and for his recent tour singing Schubert's *Winterreise*.

### ANSWER: Jonas Kaufmann

19. When we have good-good commutators, the light cone singularity vanishes, leading to this symmetry. For 10 points each:

[10] Identify this "scaling", in which certain properties of scattering processes remain the same even at high energies.

ANSWER: **Bjorken** scaling

[10] Bjorken scaling can be observed in this type of scattering process, in which hadrons are bombarded with very high-energy leptons.

ANSWER: <u>deep inelastic</u> scattering

[10] Deep inelastic scattering is a high-energy variant of this man's namesake scattering. In an experiment named for him, that scattering was observed when alpha particles were fired at a gold foil.

ANSWER: Ernest **<u>Rutherford</u>** [or <u>**Rutherford**</u> scattering]

20. Name these part-eagle beings from mythology, for 10 points each.

[10] These part-lion, part-eagle creatures were frequently depicted in Minoan art.

## ANSWER: griffins [or gryphons]

[10] This enemy of the *nagas* first appeared as a huge flame after hatching from his egg. This mount of Vishnu resided in Vaikuntha alongside his master.

## ANSWER: Garuda

[10] In a Babylonian story, Ninurta uses lightning bolts to pursue this creature, who stole the Tablets of Destiny from Enlil's sanctuary.

## ANSWER: <u>Anzu</u> [or <u>Imdugud</u>]