

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

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TOSSUPS:

1. In his opening monologue, one character in this play says that he is “the opposite of a stage magician” because he presents truth in the guise of illusion, not vice versa. That character in this play describes “attempting to find in motion what was lost in space” after “descending the steps of this fire escape for a last time.” Two characters in this play share a dance and a kiss in the dark, because an aspiring poet who works at a shoe warehouse neglected to pay the electric bill, causing the lights to go out. This play ends with one character saying: “blow out the candles” to a girl whose unicorn figurine broke in an earlier scene. For 10 points, the “gentleman caller” Jim O’Connor pays a visit to the sickly Amanda Wingfield in what “memory play” by Tennessee Williams?

ANSWER: *The Glass Menagerie*

2. A controversial project in this desert led to the discovery of multiple obviously illegal slush funds owned by a deputy speaker of parliament, which led him to declare to reporters, “I should probably resign”; he did not resign. Rio Tinto is backing that project at this desert's Turquoise Hill Mine. The Three-North Shelterbelt Program is a giant ring of forests being built in a desperate attempt to curb the unrelenting onslaught of this desert. The Przewalski's horse can be found in special protected zones in this desert, which sadly do not also contain its mythical death worms. This desert, whose Nemegt basin is home to numerous fossils, lies north of the Hexi Corridor and east of the Taklamakan. For 10 points, name this large desert of China and Mongolia.

ANSWER: Gobi Desert

3. Five of these molecules are complexed to each of the pyrazine-linked ruthenium atoms in the Creutz-Taube complex. A solution of potassium tetra-iodo-mercurate turns yellow in the presence of this compound in one test for it. Two chlorines and two of these ligands are bound to the central platinum of the apoptosis-inducing cancer drug cisplatin. Quantum tunneling of one atom in this molecule is responsible for its umbrella inversion. This substance dissolves silver oxide in the preparation of Tollens' reagent. The Birkeland-Eyde process for producing this compound was replaced by one that uses iron-based catalysts to cleave a triple bond. For 10 points, name this compound synthesized through the Haber-Bosch process, which has chemical formula NH<sub>3</sub>.

ANSWER: ammonia [accept NH<sub>3</sub> before mention, accept ammines, do not accept or prompt on ammonium]

4. Book 7 of the Denkard recounts how King Vishtaspa was converted when Zoroaster healed one of these creatures which had become paralyzed. A ritual involving one of these animals could provoke war if it was killed while wandering around nearby lands with a trail of warriors behind it. That sacrifice ritual involving this animal was known as the Ashvamedha. Along with Channa, one of these animals was present during the witnessing of the Four Sights. That one of these animals, Kanthaka, was then abandoned after Buddha chose a spiritual life. 7 of them draw Surya across the sky. White, red, black, and pale examples of these animals feature in the Book of Revelation. For 10 points, name this animal that bears owned War, Famine, Pestilence, and Death during the Apocalypse.

ANSWER: horse

5. One candidate in this election surprised voters by endorsing the Nixon-Wandt act to ban the Communist Party despite being a liberal from Minnesota, which led to the famous response “you can’t shoot an idea with a gun” during the first-ever radio debate. Justice William Douglas declined the winning vice presidential spot in this election. Glen H. Taylor joined the new Progressive Party formed for this election by recently-fired Commerce Secretary Henry A. Wallace. The Southern vote was split by Fielding Wright and Strom Thurmond's Dixiecrat party in this election, which was won by a ticket featuring Alben Barkley despite the prediction of the *Chicago Daily Tribune*. For 10 points, name this presidential election in which Harry Truman defeated Thomas Dewey.

ANSWER: Presidential Election of **1948**

6. This film’s opening alternates between still photographs and the credits, which initially appear in white text that turns blood red. Gene Wilder’s big-screen debut was in this film as Eugene, who is kidnapped with his girlfriend Velma. This film popularized the banjo piece “Foggy Mountain Breakdown,” which was used in some of its car chase scenes. One of this film’s protagonists suggestively caresses the other’s gun and dares him to “use it”, which he does. Bosley Crowther’s firing from *The New York Times* purportedly resulted from his repeated criticisms of this film’s violence, including the climactic shootout in which the title characters are gunned down by the police. For 10 points, name this 1967 Arthur Penn film in which Warren Beatty and Faye Dunaway play the title bank robbers.

ANSWER: **Bonnie and Clyde**

7. This figure won a maiden’s hand in marriage and the accompanying dowry of ninety million horses after defeating seven bulls in combat. In the *Mausala Parva*, this figure transforms a piece of grass into an iron club and uses it to beat up a bunch of foes, but later dies of an arrow wound after he is mistaken for a deer by the hunter Jiru. As a child, this figure killed a demoness by nursing her to death, balanced a mountain on his little finger, and danced on the hood of a multi-headed cobra. This god seduced the gopi Radha, and declared: “I am destroyer of all the worlds” while serving as a charioteer in the *Bhagavad-Gita*. For 10 points, name this eighth avatar of Vishnu, a blue-skinned Hindu deity served as the charioteer of Arjuna.

ANSWER: **Krishna** [prompt on **Vishnu**]

8. An observer accelerating through a vacuum will observe an increase in this quantity equal to their acceleration times  $h$ -bar over quantity Boltzmann’s constant times  $2\pi c$ . When applying a set of laws about this quantity to a black hole, the place it usually occupies is filled by a constant multiple of kappa, the surface gravity. The energy to erase one bit of information is proportional to this quantity, according to Landauer’s principle. In the microcanonical ensemble, the partial derivative of entropy with respect to energy is the reciprocal of this quantity. The power per area of a blackbody equals the Stefan-Boltzmann constant times its fourth power. Gibbs free energy equals enthalpy minus entropy times this quantity. For 10 points, name this quantity which is equal for two bodies at thermal equilibrium.

ANSWER: **temperature**

9. Saint Jerome wrote that “the whole world groaned” in response to a council that ruled in favor of this belief. The Codex Argenteus in Sweden preserves a bible created to spread this belief by Ulfilas. The Council of Rimini ruled in favor of this belief, which Constantius II attempted to reconcile with mainstream Christianity. An advocate of this belief began urinating on the robe of his assailant its founder was punched in the face by Saint Nicholas. Popular among the Goths, its influence waned after Valens was killed at Adrianople. This faith was championed by Eusebius of Nicomedia, and holds that the Son is subordinate to the Father. For 10 points, name this belief declared heretical at the First Council of Nicaea, named for a 4th-century priest from Alexandria.

ANSWER: **Arianism**

10. A poem by this author describes the joy of discovering “my America, my new found land, my kingdom, safest when with one man manned.” That poem tells its addressee to “unpin that spangled breast-plate” and “unlace yourself,” before telling her to “license my roving hands, and let them go behind before, above, between, below.” Another of his poems declares that “dull sublunary lovers’ love ... cannot admit of absence.” That poem’s speaker says “Thy firmness makes my circle just and makes me end where I begun” as part of a conceit comparing him and his lover to a pair of compasses. For 10 points, name this Metaphysical poet who wrote “To His Mistress Going to Bed” and “A Valediction: Forbidding Mourning.”

ANSWER: John **Donne**

11. In one work, this philosopher considers the objection that a square tower might appear round from a distance. This philosopher argued that numerals are signs representing quantities of particulars and do not represent the abstract concept of “numbers”. This philosopher suggested that concepts like “action” and “reaction” are merely useful “mathematical hypotheses” that do not represent physical reality. He argued that we “mediately” perceive objects through “immediately” perceiving ideas. This author of *De Motu* formulated his “master argument” to support the principle that “to be is to be perceived”. A dialogue by him portrays John Locke as Hylas and himself as Philonous. For 10 points, name this Irish philosopher of *A Treatise Concerning the Principle of Human Knowledge*.

ANSWER: George **Berkeley**

12. Signorina Caporale is punched in the face during one of these events in *The Late Mattia Pascal*, during which the protagonist also has his first kiss with Adriana. Robert Browning mocked the organizer of one of these events in the poem “Mr. Sludge.” A woman recites a rhyme about “Little Tommy Tucker” and plays Irving Berlin’s “Always” on the gramophone at the beginning of one of these events, which is conducted so that a novelist can gather material for his novel *The Unseen*. That event of this type allows Elvira to re-enter the life of a man, whose second wife she kills in a car crash intended for him. For 10 points, name this type of event that occurs in Noël Coward’s *Blithe Spirit*, in which Charles Condomine’s dead first wife is summoned by the medium Madame Arcati.

ANSWER: **séances**

13. This is the alphabetically-latter of the two types of compounds which Schindler and Grabski found modulated tension in actin networks. An O-glucosyltransferase important for the activity of one of these compounds is encoded for by the ZOG1 gene. In *Arabidopsis*, these compounds are detected by receptors containing histidine kinases, which is why AHK mutants are used to study its function. Carlos Miller isolated the first of these compounds from herring sperm, and other examples of them include kinetin and zeatin. The ratio of auxins to these hormones determines whether root or bud growth dominates. For 10 points, what cell division-promoting plant hormones are named for the phase after mitosis?

ANSWER: **cytokinins**

14. During this ruler's tenure, most rural populations abandoned the once-popular practice of “night-crawling,” in which random dudes would wander into houses at night to illicitly bone young women as parents pretended not to notice. 24 anarchists were hanged over a plot to assassinate this ruler, whose police attacked a crowd waving red flags in another incident. Guido Verbeck supported a key naval tour launched under this ruler, who adopted the slogan “enrich the state, strengthen the military.” The High Treason Incident and the Iwakura Mission occurred during the reign of this ruler, who was installed after the Battle of Hakodate ended the Boshin War. The 5-article Charter Oath was promulgated during, for 10 points, what Japanese emperor's namesake “restoration?”

ANSWER: Emperor **Meiji** the Great

15. A black cat plays this instrument in *Lucifer's Dance* in Karlheinz Stockhausen's *Licht*. After the cornet solo that opens the first movement of Prokofiev's *Lieutenant Kijé*, this instrument plays the movement's main melody, accompanied by a side drum. There is a popular but mistaken belief that, along with the trombone, this instrument's first use in a symphony was in the final movement of Beethoven's Fifth. This instrument introduces the subject of the fugue that ends Britten's *Young Person's Guide to the Orchestra*. There is a famous obbligato for this instrument in the trio of "The Stars and Stripes Forever." It is called the *ottavino* in Italian because it sounds one octave higher than written. For 10 points, name this wind instrument that's similar to a flute, but smaller.

ANSWER: **piccolo** [do NOT prompt on or accept "flute"]

16. As a graduate student, this psychologist pinned a dead rat to the department bulletin board with a note reading "ran according to Tolman's theory," thus implying it had been murdered by his advisor, Kenneth Spence. This man theorized that attempts to justify inhumane acts led to the process of "moral disengagement," and under the tutelage of Robert Sears published a study on delinquent children, *Adolescent Aggression*. This man identified vicarious reinforcement as key in developing self-efficacy, which is aided by social observation. His most famous experiment found that children who viewed an object being attacked by adults proved more likely to demonstrate aggressive behavior themselves. For 10 points, name this Stanford psychologist who conducted the Bobo doll experiment.

ANSWER: Albert **Bandura**

17. NOTE: TWO ANSWERS REQUIRED.

The O'Donnell family holds a dukedom in one of these countries named for a battle that forced the other to go into debt to Britain. One of these countries dispatched a GOE commando team after military cadets from the other set up a makeshift training base on a barren island. Along with France, these parties at the Battle of Tetuán fought at the siege of Sidi Ifni during the Forgotten War. After one of these countries inflicted the Disaster of Annual on the other, Hugo Stoltzenberg helped supply chemical weapons that were used against Abd el-Karim in the Rif War, an early assignment for Francisco Franco. For 10 points, name these countries that fought over the exclaves of Ceuta, Melilla, and Gibraltar, and have capitals at Madrid and Rabat.

ANSWER: **Spain** and **Morocco**

18. This woman sits with an arched back and invitingly opens a curtain in the most famous painting by Alexandre Chantron. In one painting of this figure, two putti in the bottom right are sharpening arrows on a stone. One series of paintings of this figure show an elderly, ugly nursemaid to her right, who either shields her with a metal tray or prepares to cover her with a sheet. Those works depicting this figure are by Correggio and Titian respectively. A life-sized painting of this woman by Rembrandt was defaced by a man who threw sulfuric acid on it and cut it with a knife. This figure's hand clutches her right breast in a painting by Gustav Klimt in which she is showered with coins. For 10 points, name this daughter of Acrisius who was impregnated by Zeus in the form of golden rain.

ANSWER: **Danaë**

19. Walter Adams could have done this action if he'd only realized the importance of the single rotational line he found in cyanogen's spectrum. A misunderstanding of Ohm's paper about Gamow's predictions led Doroshkevich and Novikov to incorrectly explain away an occurrence of this action. The paper that occurred as a result of this achievement cites an explanation by Robert Dicke, who learned via phone call that he'd been scooped. Pigeon droppings were cleaned out of the Horn Antenna used to accomplish this result when its operators at Bell Labs thought an observation of 2.7 Kelvin excess temperature was a mistake. For 10 points, identify this achievement that won Arno Penzias and Robert Wilson the Nobel, and involved finding the radiation leftover from the Big Bang.

ANSWER: **discovering** the **CMBR** [or **noticing** the **cosmic microwave background** radiation, accept answers with synonyms for discover/notice]

20. A poem frequently misattributed to this author begins “If I were able to live my life again, next time I would try to make more mistakes”, and is titled “Moments.” In one work by him, a religious scholar concludes that because crucifixion does not compare to a lifetime of suffering and hatred, God must have incarnated himself as Judas Iscariot rather than Jesus. The fact that Fergus Kilpatrick quoted *Macbeth* shortly before his assassination is investigated in this author’s story “Theme of the Hero and the Traitor”. In a story by him, the narrator mourns for Beatriz Viterbo, whose cousin, the poet Carlos Argentino Daneri, writes a poem with the assistance of a point in space which contains all other points. For 10 points, name this Argentinean author of “The Aleph” and *Ficciones*.  
ANSWER: Jorge Luis **Borges**

BONUSES:

1. One of the creators of this item likened it to the “scepter of an Egyptian king.” For 10 points each:

[10] Identify this item, which was sold through the Paddle8 auction house. Cilvaringz [“silva-rings”] helped create it, and its owner suggested he would share it with Taylor Swift if she wanted.

ANSWER: **Once Upon a Time in Shaolin** [prompt on descriptions like “that new Wu-Tang album”]

[10] This self-identified “Pharma Bro” purchased the only copy of Wu-Tang Clan’s album *Once Upon a Time in Shaolin*. He was CEO of Turing Pharmaceuticals before being arrested for securities fraud.

ANSWER: Martin **Shkreli**

[10] Shkreli first gained notoriety after hiking the price of Daraprim, a drug used to treat toxoplasmosis in patients infected with this AIDS-causing virus.

ANSWER: **HIV** [or **human immunodeficiency** virus]

2. This man was jailed under the Sedition Act after publishing the pamphlet *The Prospect Before Us*, and also wrote the almost certainly worthwhile “Deformities of Samuel Johnson.” For 10 points each:

[10] Name this pamphleteer who remains best known for a series of articles alleging that Thomas Jefferson had a relationship with Sally Hemings.

ANSWER: James Thomson **Callender**

[10] Callender also reported on the relationship between Maria Reynolds and this first Secretary of the Treasury, who was killed in a duel by Aaron Burr.

ANSWER: Alexander **Hamilton**

[10] The vociferous prosecution of men like Callender for sedition led to the downfall of this Marylander, the only Supreme Court Justice to be impeached.

ANSWER: **Samuel Chase** [prompt on partial answer; do not accept “Salmon P. Chase”]

3. Because the wave functions involved in this structure are periodic, the higher orders may be “folded” back onto the first order, which contains all the unique information of the wave function. For 10 points each:

[10] Identify these things. The first of them is found the same way as the Wigner-Seitz cell but in the reciprocal instead of real space.

ANSWER: **Brillouin zones**

[10] This theorem states that a particle’s wavefunction on a lattice possess the same period as the lattice, and can in fact be written as a plane wave times an appropriate periodic function.

ANSWER: **Bloch**’s theorem

[10] Bloch’s theorem is most commonly applied to the case of an electron in one of these periodic lattices. Salt forms a structure of this type, with sodium and chlorine atoms regularly alternating.

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

4. Artemis killed a lot of people. For 10 points each:

[10] After Ares was freed from the jar he was held in by the Aloadae, Artemis turned into a deer, causing the Aloadae to die in this manner.

ANSWER: they accidentally threw **spears** at each other [prompt on “they accidentally **killed each other**” or similar answers]

[10] There are various stories about the death of this hunter, including the story that he was killed by Artemis’s bow. In any case, Zeus transformed him into a namesake constellation.

ANSWER: **Orion**

[10] Artemis shot the daughters of this woman for boasting that she had fourteen children, whereas Leto only had two.

ANSWER: **Niobe**

5. This author turned his experiences marching with the Red Army into the long poem *Prussian Nights*. For 10 points each:

[10] Name this author who exposed the conditions in labor camps in *The Gulag Archipelago* and wrote the novel *One Day in the Life of Ivan Denisovich*.

ANSWER: Aleksandr **Solzhenitsyn**

[10] In this Solzhenitsyn novel, Oleg Kostoglotov has romances with Zoya and Vera Gangart in the hospital where he is being treated.

ANSWER: **Cancer Ward**

[10] On the day he leaves the hospital, Kostoglotov visits one of these places, where he sees a sign about the “senseless cruelty” of an “evil man.”

ANSWER: a **zoo**

6. Answer the following about atomism, for 10 points each.

[10] In ancient times, atomism developed in both Greece and this country. Atomic elements called *kalapas* were theorized by Theravada Buddhists in this country.

ANSWER: **India** [or **Bharat**]

[10] In Greece, atomism was pioneered by Democritus and this teacher of his, although Diogenes Laertius reports that according to Epicurus, this philosopher never actually existed.

ANSWER: **Leucippus**

[10] Atomism can be contrasted with this theory of Aristotle, which states that natural bodies consist of matter and form.

ANSWER: **hylomorphism**

7. The alcoholic Tom Kernan has an ill-informed conversation about religion with three of his friends in this author’s short story “Grace.” For 10 points each:

[10] Name this Irish author of *Dubliners* and *Ulysses*.

ANSWER: James (Augustine Aloysius) **Joyce**

[10] “Grace” includes the image of men at a church service arranged in this pattern, which is used to structure Lawrence Durrell’s *Avignon Quintet*. Thomas Browne’s *The Garden of Cyrus* reflects on this pattern in depth.

ANSWER: **quincunx**

[10] In this other story from Joyce’s *Dubliners*, Maria sings the aria “I Dreamt That I Dwelt in Marble Halls” and ominously touches a piece of the title substance instead of a ring during a game in which she is blindfolded.

ANSWER: “**Clay**”

8. In 1848, this ruler proclaimed a namesake “statute” that formed the basis for a later state’s constitution. For 10 points each:

[10] Name this king, nicknamed “the Hesitant,” who lost the Battle of Novara.

ANSWER: **Charles Albert** I of Sardinia [or **Carlo Alberto** I]

[10] Under Charles Albert, Sardinia fought an independence war against this empire, whose general Joseph Radetzky defeated them. It united with Hungary in 1867.

ANSWER: **Austrian** Empire [or Kaisertum **Österreich**]

[10] The “compromise” which formed the Austro-Hungarian empire is known in German by this name.

ANSWER: **Ausgleich**

9. A variety of the *putida* species of this bacterium was given the first patent for a genetically modified organism after Ananda Mohan Chakrabarty engineered it to degrade oil. For 10 points each:

[10] Give this genus of aerobic bacteria, the *aeruginosa* species of which causes infections in burn injuries.

ANSWER: **Pseudomonas**

[10] Quorum sensing in *Pseudomonas* leads to the production of extracellular polymeric substance, and causes bacteria to adhere to a surface, forming one of these dense structures.

ANSWER: **biofilms**

[10] Because it doesn't have a thick peptidoglycan layer and thus does not retain crystal violet stain, *Pseudomonas* returns a negative result for this bacteria-staining test.

ANSWER: **Gram** staining [accept **Gram**'s method]

10. The namesake genre of street-music from this country inspired the *Choros* pieces of a composer from here, who also composed the tone poem *Amazonas*. For 10 points each:

[10] Name this home of Heitor Villa-Lobos, who titled his Bach-style *Bachianas* for this country.

ANSWER: Republic of **Brazil**

[10] Villa-Lobos' *Bachianas Brasileiras No. 5* is scored for soprano soloist and an orchestra consisting entirely of these instruments.

ANSWER: violon**cellos** [or **celli**; prompt on "strings" or "stringed instruments"]

[10] This Frenchman and member of *Les Six* was influenced by Brazilian music to compose the ballet *The Ox on the Roof*. He also borrowed from jazz music to write the ballet *The Creation of the World*.

ANSWER: Darius **Milhaud**

11. Mother Shipton is the first character to die in this story, after she starves herself so that Piney Woods might live. For 10 points each:

[10] Name this story in which John Oakhurst and The Duchess are among several characters who are stranded in a cabin during a snowstorm, after Uncle Billy steals all of their horses and mules.

ANSWER: "The **Outcasts of Poker Flat**"

[10] Bret Harte's "The Outcasts of Poker Flat" is set in this state, which is also the setting for most works by Frank Norris and Dashiell Hammett. John Steinbeck set much of his fiction in this state's Salinas Valley.

ANSWER: **California**

[10] In "The Outcasts of Poker Flat", John Oakhurst writes his suicide note on one of these objects, which he attaches to a tree.

ANSWER: a playing **card** [accept the **two of clubs**]

12. According to angry Serbian nationalists on Youtube, this dynasty's king Uros the Weak was appropriately named, because he "did not kill Muslim, he did not kill foreigners." For 10 points each:

[10] Name this major Serbian dynasty of the Middle Ages, which lasted from 1166 to 1371.

ANSWER: **Nemanjić** dynasty

[10] The kings of the Nemanjić dynasty took this personal name. A canonized ruler with this name founded the Arpad dynasty in another country.

ANSWER: **Steven** [or **Stefan**; or **Istvan**]

[10] The Greatest Nemanjić king, Dušan, is known for creating the major Serbian effort of this kind. Other efforts of this kind include Roger II's Assizes of Ariano, the Roman 12 Tables, and one named for Hammurabi.

ANSWER: A **law** code [accept any equivalents]

13. MODERATOR NOTE: SLOW DOWN WHILE READING THE BOLDED FORMULA, AND PAUSE BRIEFLY AT COMMAS

When problems of this type are regular, the eigenvalues are all distinct and real. For 10 points each:

[10] Identify this class of second-order differential equations, which are of the form: **negative d-dx of quantity p-of-x times y-prime, plus q-of-x times y, equals negative lambda times w-of-x times y.**

ANSWER: **Sturm-Liouville** equations or theory or operators or problems

[10] The eigenfunctions of regular Sturm-Liouville problems have this property relative to each other in the  $w$ -weighted L2 space. Two vectors have this property if their inner product is zero, so that they are perpendicular.

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

[10] That weighted L2 space is one of these spaces, with basis the eigenfunctions. These spaces are complete and have an inner product, and their namesake published a famous list of unsolved problems.

ANSWER: **Hilbert** spaces [or David **Hilbert**]

14. The Haredi are referred to as the “ultra-” type of this group. For 10 points each:

[10] Identify this large, relatively heterogeneous branch of Judaism. Its members pretty strictly follow the Torah, distinguishing it from more liberal movements like Reform Judaism.

ANSWER: **Orthodox** Judaism

[10] This eighteenth century rabbi founded the Hasidic movement of Orthodox Judaism. In a contest he had with a renowned doctor, the doctor failed to diagnose this man’s love of God, but this man discerned from the doctor’s pulse that the latter was a jewel thief.

ANSWER: **Baal Shem Tov** [accept **Besht** or **Yisrael ben Eliezer**]

[10] Hasidism teaches that a rare few “righteous” individuals referred to by this term have a special union with God, allowing them to act as an intermediary. This Hebrew term shares a root with the Jewish obligation of charity.

ANSWER: **tzadik** [don’t accept tzedakah; that’s the word for charity]

15. One figure in this work is a crazed woman who grasps her hair, thought to represent either Envy or the effects of syphilis. For 10 points each:

[10] Name this painting depicting two title Roman deities incestuously embracing, while two title allegorical figures watch on.

ANSWER: ***Venus, Cupid, Folly, and Time***

[10] Two of these birds sit in the lower left corner of *Venus, Cupid, Folly, and Time*. They are often used to represent the Holy Ghost, and Picasso’s painting of one was adopted as the symbol of the World Peace Congress.

ANSWER: **doves**

[10] In *Venus, Cupid, Folly, and Time*, Folly is represented as a serpent-tailed figure holding this substance. A Piero di Cosimo painting titled for this substance depicts Bacchus egging on satyrs and maenads to bang noisemakers.

ANSWER: **honeycomb**

16. After this character burns her mouth eating curry, Joseph tricks her into eating a chili because its name makes it sound cold. For 10 points each:

[10] Name this former classmate of Amelia Sedley who distracts men during card games so that her husband, Rawdon Crawley, can cheat them.

ANSWER: **Becky Sharp** [accept either name; or **Rebecca Sharp**]

[10] Becky Sharp is the anti-hero of this “novel without a hero” by William Makepeace Thackeray, whose title comes from *The Pilgrim’s Progress*.

ANSWER: **Vanity Fair**

[10] Thackeray’s novel *Catherine* satirizes a genre of novels named after this place, which was the namesake of a calendar also called *The Malefactors’ Bloody Register*. Another literary character reunites with her “Lancashire husband,” Jemy, here.

ANSWER: **Newgate** Prison [accept **Old Bailey**, since the Newgate novels are sometimes called Old Bailey novels]

17. Answer the following about theories on the origin of language, for 10 points each.

[10] This primatologist proposed, not very convincingly, that language evolved from social grooming. He also proposed that there is a limit to the number of stable relationships humans can maintain, which is around 150.

ANSWER: Robin (Ian MacDonald) **Dunbar**

[10] This linguist argues that the complexity of language must have arisen from a single mutation. He basically founded modern linguistics, wrote *Syntactic Structures*, and proposed the theory of Universal Grammar.

ANSWER: (Avram) Noam **Chomsky**

[10] Some theorists have proposed that the fact that the larynx and hyoid underwent this process in humans, unlike in related species, was crucial for the development of speech.

ANSWER: they **descended** [or **lowered** or other synonyms]

18. This dance company was co-founded by Gerald Arpino, who led it from 1988 to 2007. For 10 points each:

[10] Name this Chicago-based ballet company. Ballets written for this company include Twyla Tharp’s *Deuce Coupe*.

ANSWER: **Joffrey** Ballet

[10] In 1987, the Joffrey Ballet performed a reconstructed version of this experimental Igor Stravinsky-composed ballet about a human sacrifice, whose 1913 premiere caused a riot.

ANSWER: *The Rite of Spring* [or *Le sacre du printemps*]

[10] The Joffrey Ballet revived this choreographer’s *Afternoon of a Faun*. He also served as the choreographer for the original production of *The Rite of Spring*.

ANSWER: Vaslav **Nijinsky**

19. These compounds produce a large crystal field splitting energy which is greater than their spin pairing energy, so they are characterized by low spin. For 10 points each:

[10] Name these compounds that act as pi-acceptors and lie on the right side of the spectrochemical series, like carbon monoxide.

ANSWER: **strong-field ligands** [or **high-field ligands**; prompt on **ligands**]

[10] The spectrochemical series orders ligands by the splitting in these orbitals, which can contain up to 10 different electrons.

ANSWER: **d** orbitals

[10] A common introductory application of crystal field theory is explaining the color of a ruby by examining effects on the 3+ cation of this metal.

ANSWER: **chromium**

20. This event required the impromptu conversion of 3 French commandos, and ended after authorities drilled holes in the ceilings and began indiscriminately dropping grenades onto perpetrators and hostages alike. For 10 points each:

[10] Name this 1979 event that ended after Juhayman al-Otaybi's "Ikhwan" militants were captured with the help of Pakistani SSG operatives.

ANSWER: the seizure of the **Grand Mosque** in Mecca [or the seizure of al-**Masjid al-Harm**; accept anything indicating the Grand Mosque was captured by whackos, and/or then recaptured by other whackos]

[10] The Grand Mosque seizure in Mecca led the royal house of this country to become even more Wahhabist than it already was. Its current ruler, King Salman, is awful. Also everyone who has ever run this country was awful.

ANSWER: **Saudi Arabia**

[10] This then-President of Pakistan faced the similar 2007 siege of Lal Masjid. He ousted Nawaz Sharif in a coup in 1999.

ANSWER: Pervez **Musharraf**