

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

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TOSSUPS:

1. NOTE: DESCRIPTION ACCEPTABLE.

This event led to the removal of a local mayor, Aref al-Aref, who then became its most prominent journalistic chronicler. A dissertation documenting the Alexandroni Brigade's role in facilitating this action at Tantura led to the high profile trial of Theodore Katz. This event accelerated rapidly after a massacre at Deir Yassin, whose survivors were paraded around in chains in the back of trucks. The idea that this event was voluntary has been effectively disproven by scholars like Ilan Pappé and Benny Morris, leaders of the New Historians, who suggest that it was executed as part of Plan Dalet by Irgun. Known in Arabic as the Nakba, for 10 points, identify this mass emigration that uprooted a national group during the 1948 Israeli Independence War.

ANSWER: The **Palestinian Exodus** [accept any reasonable equivalents; accept **Nakba** or **catastrophe** before mentioned; prompt on the **1948 War** or equivalents]

2. Mutations in the HNF or PDX1 genes can lead to a moderately-late onset form of this disease. Mice develop this disease after being subjected to high levels of streptozotocin. Many sufferers of stiff person syndrome will develop this disease, which like SPS causes high levels of GAD antibodies. Low levels of a 31 amino-acid connecting chain called the C-peptide are found in people suffering from one form of this disease, which can be treated by metformin. The leading cause of blindness in young American adults is the retinopathy caused by this disease. A lack of production of a certain hormone in the beta cells of the pancreas characterizes this disease's type 1. For 10 points, name this disease in which the failure of insulin signaling leads to high blood sugar.

ANSWER: **diabetes** mellitus [or type 1 **diabetes** mellitus; or type 2 **diabetes** mellitus]

3. At the end of Book XI of the *Odyssey*, the possibility of seeing one of these objects prompts Odysseus to flee from the realm of the dead. One of these objects led to the demise of Aconteus, Astyages, and nearly two hundred other men. A member of the Seven Against Thebes named Tydeus was denied immortality when Athena spotted him eating a part of one of these objects. One of these objects made a racket after the Maenads set it afloat towards the island of Lesbos. Another one of these objects was safely stored in a *kibisis*. Fifty of these objects belonged to each of the Hecatonchires. The removal of another of these objects spawned Chrysaor and Pegasus. For 10 points, name these body parts that include a snake-covered one with powers of petrification that belonged to Medusa.

ANSWER: **heads** [accept **brain**; accept "Medusa's **head**" or "Orion's **head**"]

4. A man from this country developed a ballet method taught by Cyril W. Beaumont and Ninette de Valois. A composer from this country arranged the standard 1895 revised version of Tchaikovsky's *Swan Lake*. One composer from this country adapted another composer's "Castor Oil" Waltz in a ballet about can-can-dancing dolls; that ballet is *The Magic Toyshop*. A ballet from here was animated with dancing ostriches and hippos in Disney's *Fantasia*; that ballet is the *Dance of the Hours* from the opera *La Gioconda*. Another opera from here features a "Triumphal March" in which Amonasro and other Nubians are led in by the victorious Radames. For 10 points, name this country of origin of Riccardo Drigo, Ottorino Respighi, and Giuseppe Verdi.

ANSWER: **Italy**

[First clue refers to Enrico Cecchetti]

5. One of this author's poems describes: "the exchanging of tips on the breeding of terriers, / The eager election of chairmen / By the sudden forest of hands." One of this poet's speakers asks: "Will time say nothing but I told you so?" This poet described a certain landscape "that we, the inconstant ones, are consistently homesick for." This author of "If I Could Tell You" wrote a poem whose speaker declares: "I thought that love would last forever; I was wrong," after calling a dead man "my North, my South, my East and West." This author of "Spain, 1937" and "In Praise of Limestone" wrote of sitting "in one of the dives on Fifty-Second Street" in a poem that states: "We must love another or die." For 10 points, identify this Anglo-American poet of "Funeral Blues," and "September 1, 1939."
ANSWER: W(ystan) H(ugh) **Auden**

6. Maya Jasanoff's book on these individuals relates how one of them was stuffed inside the belly of his slaughtered ox, tauntaun-style, before being marched 4 miles. Many of these individuals were held in a hellish 40-foot hole at the Simsbury Copper Mine. A pamphlet documenting the violence against these individuals was published by Peter Oliver, who presided over a trial ordered by Thomas Hutchinson. The *Book of Negroes* documented black men who joined this group in exchange for freedom. Emigration of these individuals pushed Canada away from a francophone population. Bostonian John Malcolm was the most notable victim of a popular attack on these people, tarring and feathering. For 10 points, name these colonials who maintained fealty to King George during the Revolution.
ANSWER: **Loyalists** [or **Tories**; or **Royalists**; or **King's Men**; prompt on descriptive answers; prompt on "colonials" or similar answers]

7. A character in this novel receives a cryptic telegram saying that another has suffered a "heartboot." This novel's protagonist describes being cured of typhus using snake venom in a chapter about the board game Snakes and Ladders. After a character in this novel recognizes the taste of a green chutney, he finds his old nanny working as a manager of a pickle factory, under the name Ms. Braganza. In this novel, the beautiful singing voice of the protagonist's sister causes her to become known as "Jamila Singer", thus supplanting her earlier nickname "Brass Monkey." A baby nicknamed "Shiva of the Knees" was switched at birth with this novel's protagonist, who has a telepathic nose. For 10 points, Saleem Sinai is one of many born on the hour of India's independence, in what novel by Salman Rushdie?
ANSWER: **Midnight's Children**

8. Psychologist and human pondscum John Money theorized "maps" named for this concept that he justified by traumatizing the hell out of twin children by forcing them to simulate graphic acts. One work about this concept claims that it is misunderstood in the modern era as an "egotism a deux," and advocates first applying it in regards to the self. Dorothy Tennov described intrusive and obsessive thinking patterns associated with this condition under the term "limerence." This concept is paired with "will" in a work by Rollo May, while Erich Fromm wrote about the "Art" of achieving it. Oxytocin is often known as this concept's namesake hormone. For 10 points, name this concept whose Greek name Freud paired with "Thanatos," which is often examined in platonic and erotic varieties.
ANSWER: **Love** [accept word forms, e.g. **loving**, etc.]

9. The finale of this composer's *Piano Trio No. 2* includes an oom-pah ostinato alternating between E-major and D-sharp dominant-seventh chords. One symphony by this composer quotes the song "You Fell a Victim" in its third movement, a funeral march in G minor titled "Eternal Memory." This man was the subject of a possibly fraudulent 1979 memoir titled *Testimony*, and was attacked in the article "Muddle Instead of Music." This composer of a symphony subtitled "The Year 1905" used the motive E-A-E-D-A to represent Elmira Nazirova in his *Symphony No. 10 in E minor*. Another symphony by him was inspired by the Nazi invasion of a certain city and features a 22-bar snare drum "invasion theme." For 10 points, name this Soviet composer of the "Leningrad" Symphony.
ANSWER: Dmitri (Dmitriyevich) **Shostakovich**

10. Wood's notation is used to describe the structures formed by this phenomenon and the subsequent reconstruction that occurs. The slip plane marks the outer edge of the region where this process occurs in Otto Stern's modification of the Gouy-Chapman model of double layers. This process is required for heterogeneous catalysis to occur.

According to one model, the fractional coverage in this process equals KP over quantity $1 + KP$. A multilayer correction was made by Brunauer, Emmett, and Teller to that model of this process named for Langmuir. This phenomenon is often accomplished using highly-porous materials like silica gel and activated carbon, due to their large surface area. For 10 points, name this phenomenon in which fluid molecules form a film on a solid surface.

ANSWER: **adsorption** [do not accept absorption, which is different]

11. This location is the setting for a film in which Val Kilmer's rescue team is terrorized by the robotic AMEE, which a recent reviewer was concerned to note looks almost identical to DARPA's killer robot cheetah. The protagonist of another film set at this location demands to be addressed as "Captain Blombeard," reasoning that it is under maritime law. Natives of this location place Sarah Jessica Parker's head on a chihuahua's body after executing President Jack Nicholson with a detachable scorpion hand in a horrendous 1996 film. Dr. Manhattan exiles himself to this location in *Watchmen*, and Mark Watney is stranded here in a 2015 film surprisingly branded as a comedy by the Golden Globes. For 10 points, name this setting for *Red Planet*, the fourth planet from the sun.

ANSWER: **Mars**

12. In order to avoid being made a cardinal, one member of this family, Francis, fled into the Basque hinterlands with the aid of his mentor, Ignatius of Loyola. A member of this family left the mutilated corpse of Ramiro d'Orco on display after taking control of the Romagna, an action that was memorably described as "satisfying and stupefying." Halley's Comet was apocryphally excommunicated by a pope from this family, Callixtus III. Its most famous member began the custom of opening a holy door during Jubilee years and was a lover of Giulia Farnese. That man's daughter married Giovanni Sforza and Alfonso I d'Este, and his son organized the lascivious Banquet of the Chestnuts. For 10 points, give this surname of Lucrezia, Cesare, and Rodrigo, who became Alexander VI.

ANSWER: **Borgia**

13. While examining the lace for one character's wedding sheets, a character in this play says if she were rich she would buy underwear from Holland, as it is one of the few pleasures she has left. A character in this play describes how her husband used to breed finches, until she killed them all with a pestle. A senile old woman in this play believes that a lamb is her baby. At the close of Act II of this play, one character eggs on those who would use olive branches to whip to death a woman who killed her own illegitimate child. In this play, a stolen portrait is found in the bed of Martirio, who admits to her sisters that she is in love with Angustias' betrothed, Pepe el Romano, who loves Adela. For 10 points, name this play about the daughters of the title strict Spanish matriarch, by Federico Garcia Lorca.

ANSWER: *The **House of Bernarda Alba*** [or *La **Casa de Bernarda Alba***]

14. Laws pertaining to this subject comprise the last three chapters of *Melachim u-Milchamot* ["M'lah-KHEEM oo meel-kha-MOAT"], the final section of the *Mishnah*. This occurrence is the subject of the fifteenth part of the *Amidah*. The twelfth of Maimonides' thirteen principles is an expression of faith about it. The appearance of a tenth red heifer coincides with this occurrence, as does a state of the world in which either everyone is good or everyone is wicked. An Olam Haba will follow this occurrence, which could happen if everyone observes two consecutive Shabbats. Followers of Sabbatai Zevi and Bar Kokhba believed that this event had happened. This event will see a descendant of David re-establish the Sanhedrin and build the Third Temple. For 10 points, what is this event, after which an anointed Jewish figure will usher in the End of Days?

ANSWER: coming of the **Messiah** [or **Mashiach**, accept synonyms, do not accept the Second Coming]

15. Since systems with this property must lie in projective space of dimension “ mn minus 1,” they lie in the Segre embedding of their components. In six or fewer dimensions, this property is equivalent to a partial transpose having non-negative eigenvalues, according to the Peres-Horodecki criterion for it. A system possesses this property if and only if the Schmidt rank is one. Two particles have this property if their combined wavefunction can be written as a product of their individual wavefunctions, so measuring one does not affect the other. ODEs with this property can be solved by simply integrating each side. For 10 points, give this term that describes particles which are not entangled, or differential equations where the x and y terms can be put on different sides of the equals sign.

ANSWER: separable [accept word forms]

16. This thinker said that to say that a rose “really is red” is the same as saying it would look red to a normal person in normal lighting. This thinker distinguished between an object of perception as *percept* and how it appears to the mind as *perceptuum*. He distinguished between *dicents*, which are affected by the objects they represent, and *rhemes*, which represent objects as qualitative possibilities. The *object*, the *representamen*, and the *interpretant* are the three components of his triadic conception of semiotics. One essay by him defines three grades of clarity of apprehension, while another rejects the “method of authority” and the “method of tenacity.” For 10 points, name this American Pragmatist philosopher who wrote “The Fixation of Belief” and “How to Make Our Ideas Clear.”

ANSWER: C(harles) S(anders) Peirce

17. NOTE: DESCRIPTION ACCEPTABLE.

A study by the de la Fuente Marcos brothers confirmed that a set of evidence for this hypothesis was not due to observational bias. A paper on this subject notes that there is insufficient mass for Madigan and McCourt’s suggestion of inclination instability. An anomalous cluster of omega values librating about zero is consistent with the Kozai mechanism that would be implied if it were true. This hypothesis was originally put forth after simulations meant to refute Sheppard and Trujillo’s observations actually provided evidence for their proposal. The results of those simulations about this hypothesis were announced by Konstantin Batygin and famed “Pluto-killer” Mike Brown in a January 2016 paper. For 10 points, what is this hypothesis that a large gas giant is lurking in the Kuiper Belt?

ANSWER: Planet Nine [accept descriptions like “the recent paper about another planet out there”, accept answers about trans-Neptunian planets or fifth gas giants, prompt on “planet migration” or the Nice model]

18. This artist showed two dogs standing near a child dressed to look like a Holbein portrait in his painting of the three-year-old Master Crewe as Henry VIII. The title myopic literary critic, dressed in brown, holds a book directly up to his nose, in this artist’s portrait of Giuseppe Baretti. He showed an admiral in the reverse pose of the Apollo Belvedere in one of his portraits of Augustus Keppel. He painted two aristocrats taking aim with bows and arrows in a forest in his *Colonel Acland and Lord Sydney: The Archers*. A pale woman, modeled after Melpomene, sits in front of allegories of Pity and Terror, respectively holding a cup and dagger, in his *Sarah Siddons as the Tragic Muse*. For 10 points, name this English proponent of the “Grand Style” and first president of the Royal Academy of Arts.

ANSWER: Sir Joshua Reynolds

19. A woman in this novel disguised herself as a man before being raped to death by railroad workers who then raise her son as recompense. A character in this novel throws a box with a dead rabbit and love note out of her car window because she thinks there is a snake inside. One character in this novel catches a fever when a woman he assists through birth labors bites him on the hand. That woman in this novel uses chicken blood to fake her own death in the housefire that she sets to kill her own parents, and later poisons a woman named Faye and takes over running Faye's brothel. In this novel, the Chinese servant Lee and Samuel Hamilton aid Adam in raising his sons Cal and Aron. For 10 points name this biblically-titled novel about many generations of the Trask family, by John Steinbeck.

ANSWER: **East of Eden**

20. During a civil war in this country, people who were suspected of leftist sympathies were denied the Certificate of Political Reliability, which gave them the right to vote and work. This nation doubled in size during the rule of a man invited by the Military League to rule after the Goudi Coup; that politician catalyzed this country's split into royalists and Venizelists. When Mussolini tried to pressure this country into stationing Italian troops, he received the terse reply "okhi," – simply, "no." Foreign leaders who sought a union with this country include Georgios Grivas and Archbishop Makarios, advocates of enosis, or the joining of Cyprus and this country. For 10 points, name this country with capital at Athens.

ANSWER: **Greece** [or **Hellas**; or **Hellenic Republic**]

BONUSES:

1. This man dispatched the Gihae Eastern Expedition against Japanese pirates. For 10 points each:

[10] Name this Choseon king who received advice from the Hall of Worthies, a group of twenty Confucian scholars, and invented the script Hangul.

ANSWER: **Sejong the Great**

[10] Like other Choseon kings, Sejong the Great ruled over this peninsula. Other kingdoms located on this peninsula included the Silla and Goguryeo.

ANSWER: **Korean** Peninsula

[10] The only other Korean ruler to receive the epithet “The Great” was this man, a king of the Goguryeo. His son erected a twenty-three foot tall stele on his gravesite honoring his expansive victories.

ANSWER: **Gwanggaeto** [or **Yeongnak**]

2. The title subject of this poem is described as “gray and bare” and “tall and of a port of air”. For 10 points each:

[10] Name this poem about an object that “did not give of bird or bush, / Like nothing else in Tennessee” after it was placed on a hill.

ANSWER: “**Anecdote of the Jar**”

[10] “Anecdote of the Jar” appears in *Harmonium*, the first poetry collection of this 20th-century American poet of “The Emperor of Ice-Cream” and “Thirteen Ways of Looking at a Blackbird”.

ANSWER: Wallace **Stevens**

[10] An anthology of Stevens’ collected poems is titled “The Palm at the End of the Mind,” which is the first line of this Stevens poem, which describes a bird singing in a tree whose “fire-fangled feathers dangled down.”

ANSWER: “**Of Mere Being**”

3. This reaction is accelerated by adding an electron-withdrawing group to one of its components to decrease the gap between that reactant’s LUMO and the other reactant’s HOMO. For 10 points each:

[10] Name this [4+2]-cycloaddition, which forms substituted cyclohexenes.

ANSWER: **Diels-Alder** reaction

[10] Diels-Alder reactions are sometimes catalyzed by one of these compounds, which Lewis defined as electron pair acceptors.

ANSWER: Lewis **acids**

[10] Adding an electron-*donating* group to the dienophile results in this Diels-Alder variant, in which the dienophile’s HOMO interacts with the diene’s LUMO. It is useful for synthesizing heterocyclic compounds.

ANSWER: **inverse electron-demand** Diels-Alder reaction [or **IEDDA**]

4. This goddess landed in Hawaii after being chased from her homeland by her sister, Namakaokahai. For 10 points each:

[10] Name this goddess. She is the rival of the snow goddess Poliahu, who somehow also lives in Mauna Kea.

ANSWER: **Pele**

[10] Pele brought this goddess to Hawaii in the form of an egg under her armpit, but their relationship turned sour over their love for the chieftain Lohi’au. Pele also killed this goddess’s best friend Hopoe.

ANSWER: **Hi’iaka**

[10] Hi’iaka is often represented as a patroness of this traditional Hawaiian dance, along with her sister Laka.

ANSWER: **hula**

5. A portrait of this man “talking,” shows him sitting on an office stool in a purple-walled room with a red carpet, with one yellow lightbulb hanging from the ceiling. For 10 points each:

[10] Name this man whose 1971 suicide inspired an artist to paint his *Black Triptychs* as tribute.

ANSWER: George **Dyer**

[10] George Dyer was the lover and muse of this Modern British artist of *Three Studies for Figures at the Base of a Crucifixion* and the *Screaming Popes* series.

ANSWER: Francis **Bacon**

[10] Bacon’s *Screaming Popes* series was inspired by a portrait of Innocent X by this Spanish Baroque painter of *Las Meninas*.

ANSWER: Diego (Rodriguez de Silva y) **Velázquez**

6. Identify the following about the beautiful dictionary between algebra and geometry, for 10 points each:

[10] By Hilbert’s Nullstellensatz, affine varieties correspond to these subsets of the polynomial ring, which are closed under polynomial multiplication. If a power of a polynomial P is in one of these sets, then P must be too.

ANSWER: **radical ideals** [prompt on partial answer]

[10] Irreducible varieties, as their name suggests, are in correspondence with ideals of this type. Numbers of this type only have two factors, and the largest currently-known one of them was discovered in January 2016.

ANSWER: **prime** ideals/numbers

[10] The Nullstellensatz only works when the field in question has this property. The Fundamental Theorem of Algebra guarantees that the complex numbers have this property.

ANSWER: **algebraic closure** [accept word forms]

7. Identify the following about the man who designed the Kingo Houses a few years after designing his own house in Hellebaek, for 10 points each.

[10] Name this architect of those houses who also designed the Bagsvaerd Church and the Kuwait National Assembly Building. He sometimes collaborated with his sons Kim and Jan.

ANSWER: Jorn Oberg **Utzon**

[10] Jorn Utzon is perhaps better known for designing an opera house whose roof looks like concrete shells in this city. This city is also home to the Anzac Bridge.

ANSWER: **Sydney**, Australia

[10] A planned stadium in Jeddah exemplifies Utzon’s use of this approach that attempts to capture organic growth. Utzon took inspiration for this approach from the design of Chinese temples.

ANSWER: **additive** architecture

8. This book opens with a criticism of John Austin’s “command theory,” and distinguishes between “social habits” and “social rules.” For 10 points each:

[10] Name this book-length exposition of the philosophy of legal positivism by H.L.A. Hart.

ANSWER: *The* **Concept of Law**

[10] A foundational principle of H.L.A. Hart’s legal positivism is that all legal systems must have this kind of meta-rule that can be used to test the validity of a law.

ANSWER: **rule of recognition**

[10] In a debate with H.L.A. Hart, Patrick Devlin defined “common morality” as what is acceptable to someone serving on one of these bodies. In the US, these bodies have twelve people in their “trial” or “petit” form.

ANSWER: **juries** [or **jury**]

9. Dawn shows up for lessons in Unamunda in this author's play *The Universal Language*. For 10 points each:
[10] Name this contemporary American playwright whose collection *All in the Timing* includes *Sure Thing* and *Variations on the Death of Trotsky*.

ANSWER: David **Ives**

[10] In David Ives' play *Words, Words, Words*, three monkeys try to replicate this Shakespeare play by randomly banging on typewriter keys. This play includes the "To be or not to be" soliloquy.

ANSWER: **Hamlet**

[10] David Ives wrote a play based on this novella, in which Severin von Kusienski is degraded and whipped while serving as a sex slave to Wanda von Dunajew.

ANSWER: **Venus in Furs** [or **Venus im Pelz**]

10. Members of this group were derided as "Crocker's Pets," after Central Pacific Railroad executive Charles Crocker. For 10 points each:

[10] Identify this ethnic group, the primary labor source for the Transcontinental Railroad. They were subject to a namesake 1882 "Exclusion Act."

ANSWER: **Chinese**-Americans

[10] This event enabled numerous Chinese immigrants to adopt the "paper son" strategy, claiming American citizenship based on missing papers.

ANSWER: 1906 **San Francisco Earthquake** [prompt on San Francisco Fire; prompt on partial answer]

[10] The 1907 Gentlemen's Agreement with Japan led to a spike in the arrival of these individuals, who took advantage of a loophole enabling family members to immigrate. They were often selected from catalogues by young migrant workers.

ANSWER: **Picture Brides**

11. This faith reveres the god Bondye, who can be accessed by intermediaries known as loa. For 10 points each:

[10] Name this Haitian religion, whose priests are called houngans or mambos.

ANSWER: **Voodoo** [accept **Vodou**; accept **Vodun**]

[10] This loa is often depicted as an old, sometimes crippled man wearing a straw hat and smoking a cigar. He can be sought out at the crossroads, but doing so without rum, coffee, or some other offering can be... unwise.

ANSWER: **Papa Legba**

[10] In her Rada form, Freda, this loa of love and beauty wears three wedding rings, one for each of her husbands. Dutty Boukman sacrificed a black pig at Bois Caiman to her other aspect, Dantor, who is basically the loa of stabbing assholes.

ANSWER: **Erzulie** [or **Erzili**; or **Ezili**]

12. William Wilberforce led this movement in Parliament, and it helped established Freetown in modern-day Sierra Leone. For 10 points each:

[10] Name this movement that boycotted sugar to end the trafficking of human beings using the Middle Passage.

ANSWER: British **abolition** movement [accept equivalents mentioning **stopping slavery** or the slave trade]

[10] This 1772 case, decided by Lord Mansfield, was an early victory for the British abolition movement. It held that English and Welsh common law did not support chattel slavery, effectively banning it in England proper.

ANSWER: **Somerset v Stewart** [or **Sommersett's case**]

[10] This famous freed slave helped spur the passage of the Slave Trade Act of 1807 with his wildly popular autobiography, *The Interesting Narrative of the Life of* [this man].

ANSWER: Olaudah **Equiano** [or Gustavus **Vassa**]

13. A February 2015 paper showed that reslizumab, a drug that reduces the number of these cells, may treat serious asthma. For 10 points each:

[10] Name these white blood cells with bi-lobed nuclei that target large parasitic infections. These cells are rare in the blood but common in the mucous membranes, and they are named for the acidic red dye that stains them.

ANSWER: **eosinophils**

[10] In some patients, reslizumab may prevent the need for the oral variety of these drugs which include cortisone and cortisol. The anabolic variety of these hormones is used by athletes as a doping agent.

ANSWER: **steroid** hormones

[10] Reslizumab targets one of these compounds that was first discovered as an eosinophil colony-stimulating factor. Another one of them causes neutrophil chemotaxis.

ANSWER: **interleukins** [or **IL**, the interleukins mentioned in the question are 5 and 8 respectively]

14. Luddites attack Robert Moore's mill in this author's novel *Shirley*. For 10 points each:

[10] Name this Victorian author who wrote about a woman who marries Edward Rochester in her novel *Jane Eyre*.

ANSWER: **Charlotte Brontë** [prompt on "Brontë"]

[10] Edward Rochester upsets Blanche Ingram and Jane herself when he disguises himself as a woman with this profession.

ANSWER: **fortune-teller** [accept obvious equivalents, even loose ones like **soothsayer**; do NOT prompt on or accept "gypsy", as that is not a profession!]

[10] In this work by Charlotte Bronte, her last published novel, Lucy Snowe travels abroad to teach in a boarding school and falls in love with Paul Emanuel in the title fictional Belgian town.

ANSWER: **Villette**

15. The fourth movement of this piece derives from a dance originating in Brittany, called a *passepied*. For 10 points each,

[10] Name this piano suite. Its third movement takes inspiration from Paul Verlaine's poetry and is titled "Clair de lune".

ANSWER: **Suite bergamasque**

[10] *Suite bergamasque* is by this French Impressionist composer of *La Mer* and the *Children's Corner Suite*.

ANSWER: Claude(-Achille) **Debussy**

[10] This orchestral suite by Debussy includes an extended middle movement, titled "Iberia". It is believed the Andre Caplet may have orchestrated portions of its first movement, titled "Gigues".

ANSWER: **Images pour orchestre**

16. Common tools for solving problems with these systems include Norton's theorem and Kirchhoff's laws. For 10 points each:

[10] Identify these systems, which model current flowing through closed loops of wires and elements like resistors and capacitors.

ANSWER: electrical **circuit** diagrams [or electrical **networks**]

[10] This theorem states that all circuits with resistors and sources of voltage or current behave the same as a voltage source in series with a resistor.

ANSWER: **Thévenin's** theorem

[10] Also helpful in simplifying circuit diagrams is this trick, in which a triangle of resistors can be interchanged with a set of three resistors attached to one central node.

ANSWER: **wye-delta** transform [accept in either order, also accept answers with star in place of wye, and triangle in place of delta]

17. This paper explores the seeming contradiction that “the morning star” and “the evening star” are the same star, and yet one cannot interchange those two names while preserving truth values. For 10 points each:

[10] Name this paper by Gottlob Frege that distinguishes between the object designated by a word and the meaning expressed by a word.

ANSWER: “On Sense and Reference” [or “On Sense and Nominatum”; or “Über Sinn und Bedeutung”]

[10] Frege’s *Foundations of Arithmetic* suggested that math is an extension of this branch of philosophy, whose “predicate” form he pioneered. The “syllogistic” form of this discipline was advocated by Aristotle.

ANSWER: logic

[10] This other logician introduced the notion of “logical deducibility” or *Ableitbarkeit* as emerging from a grounding-consequence relation, in his 1837 *Wissenschaftslehre* or *Theory of Science*.

ANSWER: Bernard Bolzano

18. Answer the following about rulers of Castile, for 10 points each:

[10] This man wrote the law code of *Siete Partidas*, written in the Castilian Spanish he sponsored throughout his reign. He also vied with Richard of Cornwall and Rudolph I to become Holy Roman Emperor.

ANSWER: Alfonso X [or Alfonso the Wise; or Alfonso el Sabio; or Alfonso the Learned]

[10] This queen married Ferdinand of neighboring Aragon. She also decided to help subsidize Christopher Columbus’ expedition to the New World.

ANSWER: Isabella I of Castile

[10] Henry II founded this House after defeating his half-brother, Pedro the Cruel. A rift in this house ended with the Pact of Los Toros de Guisando, which recognized Isabella I over her niece Juana.

ANSWER: House of Trastámara [prompt on House of Burgundy]

19. The protagonist of this story learns how to speak after being forced to drink alcohol by a sailor who abuses him. For 10 points each,

[10] Name this story in which an ape delivers a lecture on how he acquired the ability to act like a human.

ANSWER: “A Report to an Academy” [or Ein Bericht für eine Akademie]

[10] This author of “A Report to an Academy” wrote about Gregor Samsa’s title transformation into a hideous insect in his *The Metamorphosis*.

ANSWER: Franz Kafka

[10] This other Kafka story is narrated by an unspecified animal who is obsessed with finding the source of a whistling sounds that echoes through the home he is proud of having built for himself.

ANSWER: “The Burrow” [“Der Bau”]

20. After peaking above 5000 last summer, the index corresponding to stocks traded at this exchange has dropped over forty percent, despite restrictions on short-selling. For 10 points each:

[10] Identify this stock exchange, which trades stocks whose A-shares cannot be bought by foreign investors.

ANSWER: Shanghai Stock Exchange [accept Shanghai Composite Index]

[10] The A-shares traded at the SSE are denominated in this Chinese currency. This currency was devalued by nearly two percent in August 2015.

ANSWER: yuan [or renminbi, accept CNY or RMB]

[10] The Chinese crash was one reason Janet Yellen didn’t make this one-quarter of a percent increase happen until December 2015, when good job numbers made this “liftoff” more viable.

ANSWER: the Federal Reserve raising interest rates [accept equivalents like rate hike, accept any answer that indicates interest rates, which were once zero, are now higher than they were before, prompt generously]