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

1. One character in this play is scandalized to hear that another character spent his Sundays in "irregular homes" where men lived with the mothers of their children. Two characters in this play are repeatedly described as having "the joy of life" in them. In this play, one character is blackmailed by another character who claims to have seen him toss a snuffed candle into a pile of wood shavings. One character in this play falls in love with a maid who turns out to be his half-sister, named Regina. Pastor Manders convinces the protagonist not to buy insurance for an orphanage that burns down, and the protagonist's son demands to be euthanized from the syphilis he inherited from his father. For 10 points, name this play in which Mrs. Alving is haunted by the legacy of her dead husband, by Henrik Ibsen.
ANSWER: _Ghosts_ [or _Gengangere_]

2. One factor in this event was the disruption of surgeon Thomas Jamison's meticulously-constructed shadow economy. A key figure in this event had to return home alone after his daughter was seduced by Maurice O'Connell, whose 73rd Regiment of Foot had been sent to stabilize the situation. That match was orchestrated by Elizabeth Macquarie, whose husband Lachlan took over after this event. This event followed the earlier Castle Hill Rebellion, which itself was put down by one of this event's major architects, Major George Johnston. The arrest of John Macarthur precipitated this uprising, which targeted the former captain of the HMS _Bounty_. For 10 points, name this 1808 uprising in New South Wales that deposed William Bligh, disingenuously named for a popular alcohol.
ANSWER: The **Rum Rebellion**

3. The appearance of one of these creatures prevented Auge from striking down her lost son Telephus. A person with the lower half of one of these creatures was succeeded as king by Cranaus, and served as judge during a race that ended with the planting of an olive tree. Herse, Aglaurus and Pandrosus jumped to their deaths from the Acropolis after they opened a box containing baby Erichthonius and one of these creatures. Calchas prophesied that Troy would fall ten years after one of these animals devoured a bird and its chicks. After interrupting a copulating pair of these creatures, Tiresias was transformed into a woman. Two of these creatures are entwined around the _caduceus_ staff belonging to Hermes. For 10 points, name these animals that include one slain at Delphi by Apollo named Python.
ANSWER: **snake**s [or **serpent**s]

4. One type of this procedure involves forming an inclusion complex between cyclodextrins and the chiral compound being studied. The resolution between two peaks on a readout from this technique can be calculated using an equation named for J.H. Purnell. That equation about a type of this procedure features the square root of a quantity which is equal to the total bed height divided by that quantity's namesake height equivalent; that quantity can be calculated using the van Deemter equation. The time in between injection and detection of the analyte in these techniques is called the retention time. For 10 points, name this class of techniques in which a mobile phase passes through a stationary phase to separate mixtures, types of which include high-performance liquid and column.
ANSWER: **chromatography** [accept any specific forms of chromatography]

5. The Zohar relates that one figure in this book was later brought back to life after being killed when a man's recently-judged soul passed through it. According to midrash, one character in this book had earlier incorrectly prophesied about the destruction of Jerusalem. Despite the inhabitants of a city in this book not being able to distinguish their right hand from left, that city's king wears sackcloth and covers himself in ashes to repent. God sends a worm in this book to kill a gourd vine that provides shade to its protagonist. The title character runs away on a boat from Tarshish because he doesn't want to travel to Nineveh, but is thrown overboard by the sailors to appease God during a storm. For 10 points, name this Old Testament book whose title prophet is swallowed by a giant fish or whale.
ANSWER: Book of **Jonah**

6. NOTE: Two answers required. A member of one of these teams was described with the phrase "God don't like ugly" after Jermaine O'Neal took a shot to the knee. After being bumped by Dahntay Jones during an interview, a player on one of these teams started printing shirts reading "COOL STORY GLENN." Before leaving for Memphis in 2016 and punching Derek Fisher for banging his wife, Matt Barnes instigated a number of conflicts between these teams. The rivalry between these teams is mainly a function of continued violence between big men like Andrew Bogut, DeAndre Jordan, Draymond Green, and Blake Griffin – particularly since Chris Paul has been regularly abused by Steph Curry. For 10 points, identify these Western Conference teams both based in California.
ANSWER: The **Los Angeles** **Clippers** and **Golden State** **Warriors** [prompt on just "Los Angeles," but accept either name for Golden State]

7. This battle led to one of the losing commander's sons being locked up in a top Jesuit college in Rome, which only left his family further dismayed when they discovered years later that young Clemens August was exactly as ignorant and buffoonish as when he had been captured. This battle essentially ended the threat posed by Rakoczi's Revolt and led to the treaty of Ilbersheim, ending the war for Maximilian II of Bavaria. Ferdinand de Marsin repelled an attack at Oberglau during this battle, which took place near the Nebel River. Preceding similar victories at Ramillies and Oudenarde, this battle saw the Duc de Tallard captured by Grand Alliance forces under Eugene of Savoy and the Duke of Marlborough. For 10 points, name this 1704 battle in War of Spanish Succession.
ANSWER: Battle of **Blenheim** [accept Second Battle of **Hochstadt** before mention]

8. A statue of this figure is the best-remembered co-creation of Prospero Antichi da Brescia, and stands at the end of the rebuilt Acqua Felice Aqueduct in a fountain designed by Domenico Fontana. A structure named for this figure depicts the six men who foresaw the death of Christ surrounding its hexagonal base, and was created for the Chartreuse de Champmol by Claus Sluter. A statue of this figure in the San Pietro in Vincoli in Rome possesses an odd feature based on a description in the Vulgate Bible. That statue, which features this figure with horns and clutching his long beard, was commissioned by Pope Julius II for his tomb. For 10 points, name this prophet sculpted by Michelangelo carrying the Ten Commandments.
ANSWER: **Moses**

9. In this novel, a busybody old lady listens to a conversation through a door, and mistakenly thinks that two characters have gotten engaged, when in fact that man was giving a rectory to the lady's friend. One character in this novel abandons a trip to Whitwell at the last minute, to visit a girl thought to be his illegitimate daughter, but who is actually the daughter of his sister-in-law, with whom he was in love. Charlotte Palmer enjoys joking about the rudeness of her husband in this novel, in which Eliza Williams is impregnated by the scoundrel John Willoughby. This novel's protagonists marry Edward Ferrars and Colonel Brandon, respectively. For 10 points, name this first novel by Jane Austen, in which sisters Elinor and Marianne Dashwood represent the title mental characteristics.
ANSWER: ***Sense and Sensibility***

10. This real number is the largest which evenly divides all possible well-defined closed line integrals of the differential form x-dy minus y-dx all over x-squared plus y-squared, a fact that helps define the winding number. The integral of curvature on a compact boundaryless manifold equals this constant times the Euler characteristic, by Gauss-Bonnet. This number is the reciprocal of the magnitude of the complex constant in the Cauchy integral formula. The peak density of the unit normal distribution equals one over the square root of this quantity. Using a constant with this value instead of a related number is advocated by the "Tau Manifesto." The sine and cosine functions have this period. For 10 points, identify this number of radians in a circle, the ratio of a circle's circumference to its radius.
ANSWER: **2pi** [accept **tau** before mention, prompt on decimal approximations like 6.28..., obviously do not accept or prompt "pi"]

11. In a work titled for one of this philosopher's disciples, that disciple's belief that names capture the nature of their referents is opposed to the conventional theory of names argued by Hermogenes. Two of this philosopher's maxims claim that nature loves to hide its meanings and that a man's character is his destiny. This teacher of Cratylus was the subject of a University of Freiburg seminar by Eugen Fink and Martin Heidegger, which discussed his example of the "unity of opposites" through the bow and the lyre. This philosopher believed that fire is the fundamental element and that everything is in flux, and first suggested that the governing principle of the world is *logos*. For 10 points, name this pre-Socratic Greek philosopher who stated that one could not step into the same river twice.
ANSWER: **Heraclitus** of Ephesus

12. The protagonist of one of this author's novels is choked unconscious after discussing the *Rubaiyat* and *Ecclesiastes* with a man who had earlier won the protagonist's stolen money in a poker game with the cook Thomas Mugridge. In that novel by this author, the protagonist debates shooting the blinded antagonist, who repeatedly sabotages attempts to repair his ship and escape an island. In another his novels, the protagonist is saved from a trio's ill-advised attempts to cross a partially-frozen river by John Thornton. The protagonist of that novel by this author of *The Sea-Wolf* defeats Spitz in a fight to the death after being kidnapped from Judge Miller's house and shipped up north to the Yukon. For 10 points, name this author who wrote about the sled dog Buck in *The Call of the Wild*.
ANSWER: (John Griffith) "Jack" **London** [or John Griffith **Chaney**]

13. The plaintiff in a supreme court case arising in this city resurfaced in an insane 2007 dispute, disrupting the book signing for "Madea's Uninhibited Commentaries on Love and Life" after Tyler Perry demolished his mansion. This city's famous racists include Moreton Rolleston and a restaurateur who shut down to protest integration, future governor Lester Maddox. The aforementioned case from this city was decided along with one dealing with Ollie's Barbecue in Birmingham, *Katzenbach v. McClung,* and found that the Commerce Clause and proximity to the interstate allowed congress to apply the Civil Rights Act to a motel named for the "Heart of [this city]." For 10 points, name this namesake of Booker T. Washington's "compromise," the largest city in Georgia.
ANSWER: **Atlanta**

14. In one work by this artist, two figures with fish-like torsos and human legs sit on a rock by the ocean, as the silhouette of a ship can be seen in the background. This artist of *The Wonders of Nature* showed a male-female couple kissing while their heads are covered by white cloths in his *Lovers* series. In one painting by him, a copy of *The Narrative of Arthur Gordon Pym* sitting on a mantelpiece is reflected correctly in mirror, which shows the back rather than the front of a man's face. He painted a series of paintings showing nighttime streets lit by solitary street lamps, underneath daytime skies. Those paintings are "Not to Be Reproduced" and *The Empire of Lights*. For 10 points, the sky rains men with bowler hats in *Golconde*, a painting by what Belgian surrealist?
ANSWER: René (François Ghislain) **Magritte**

15. MODERATOR NOTE: Slow down while reading the bolded formula.
This physicist is the namesake of a quantity calculated similarly to the cavitation number. One theorem named for this man says that, for a function g, **x, dot the gradient of g at x, equals k times g of x** if and only if g possesses a certain property. He's the alphabetically-prior namesake of an equation stating that the partial of L with respect to q equals the time derivative of the partial of L with respect to q-dot. This mathematician proved that all rigid body motions which fix a point are rotations about an axis through that point. The zero-viscosity case of the Navier-Stokes equations is named for him. The orientation of rigid bodies can be represented in terms of phi, theta, and psi, this man's three namesake angles. For 10 points, identify this Swiss mathematician whose namesake number is the base of the natural logarithm.
ANSWER: Leonhard **Euler**

16. Concerns about ethnic brutality in this nation were not helped when police "randomly" chose the name of an aggressive garden weed for their 1987 crackdown against dissidents. A battle off of this present-day country saw the French *Mosquet* and Russian *Zhemchug* sunk by Germany's SMS *Emden* during World War I. In the wake of major racial violence, this site of Operation Lalang adopted the *Rukunegara*, or National Principles, as well as the New Economic Policy, which favored its native "bumiputera." Those race riots of May 13, 1969 led to the resignation of its first Prime Minister, Tunku Abdul Rahman. Formed from the union of Penang, Sabah, and Sarawak, for 10 points, name this country separated by the Straits of Johor from Singapore, whose capital is Kuala Lampur.
ANSWER: **Malaysia** [or **Malaysian Federation**; or **Federation of Malaysia**]

17. One of these poems begins with the declaration: "Deliverance is not for me in renunciation". Another of these poems discusses how "children have their play on the seashore of worlds" and declares that "they seek not for hidden treasures, they know not how to cast nets". The final poem in this collection discusses a "rain-cloud of July hung low for its burden of unshed showers" and features the refrain "one salutation to thee." Another poem in this collection discusses a "frail vessel thou emptiest again and again, and fillest it ever with fresh life" and begins with the line: "Thou hast made me endless, such is thy pleasure." For 10 points, a noted preface was written by William Butler Yeats for what collection of 103 poems by Rabindranath Tagore?
ANSWER: *Gitanjali* [or *Song Offerings*]

18. This thinker suggested that beliefs should be evaluated according to the four criteria of: volume, intensity, rigidity, and content. This thinker defined one of his most important concepts as: "any way of acting […] capable of exerting over the individual an external constraint". He argued that an increase in population per area and degree of social interaction produces greater "dynamic density", which precipitates a move from mechanical to organic forms of solidarity. He created the concepts of the "social fact" and the "collective consciousness". This author of *The Rules of Sociological Method* wrote a work that contrasts egoistic, altruistic, fatalistic, and anomic motivations for taking one's own life. For 10 points, name this French Sociologist who wrote *The Division of Labor in Society* and *Suicide*.
ANSWER: (David) Emile **Durkheim**

19. An unusual L2 dimeric form of this enzyme was found in *Rhodospirillum rubrum*. Magnesium ions facilitate the formation of a carbamate about a lysine residue at the active site of this protein. This protein typically consists of eight L and S subunits, and is very prevalent in the pyrenoids of algae. Its namesake activase removes the inhibitor CA1P. This enzyme catalyzes the carboxylation of a five carbon compound, producing two molecules of 3-phosphoglycerate. In the stroma of the chloroplast, this enzyme catalyzes photorespiration when there isn't enough carbon dioxide to fix. For 10 points, name this protein that catalyzes the first step of the Calvin Cycle, the most abundant enzyme on Earth.
ANSWER: **RuBisCO** [or **ribu**lose-1,5-**bis**phosphate **c**arboxylase **o**xygenase]

20. This composer wrote a piece for string orchestra which begins with the violas playing "E – D-sharp – E" in a dotted rhythm in 6/8 time, in a movement marked *Allegro piacevole*. The second movement of this composer's second symphony is a *Larghetto* funeral march in C minor. Beatrice Harrison was the soloist on both recordings he conducted of a concerto of his that was popularized by a recording made by John Barbirolli and a 20-year-old Jacqueline Du Pré. E minor is the key of this composer's *Serenade for Strings, Opus 20* and his Cello Concerto. He portrayed his wife Alice as "C.A.E." and his friend August Jaeger as "Nimrod" in a series of musical portraits, which are variations on an unknown theme. For 10 points, name this English composer of the *Enigma Variations*.
ANSWER: Edward (William) **Elgar**

BONUSES:

1. People who undertake this profession are trained by figures called "aunts" at the Red Center. For 10 points each:
[10] Name this profession, whose red-robed practitioners are meant to be impregnated during a sexual ritual called "The Ceremony".
ANSWER: **handmaid**
[10] Those handmaids appear in *The Handmaid's Tale*, a work of "speculative fiction" by this Canadian author of *Oryx and Crake*.
ANSWER: Margaret (Eleanor) **Atwood**
[10] In this other novel by Atwood, Elaine Risley keeps the title marble in a red purse and paints it as a motif in her feminist artworks.
ANSWER: *Cat's Eye*

2. Identify the following about ranching, for 10 points each:
[10] This German economist's *The Isolated State* posited a relationship between rent and geography. Ranching is the outermost of his four concentric rings surrounding the city in his agricultural model.
ANSWER: Johann Heinrich von **Thünen**
[10] One member of this Nevada-based ranching family refuses to pay grazing fees to the federal government. Another member of this family led the recent occupation of a wildlife refuge in rural Oregon.
ANSWER: Ammon/Cliven **Bundy**
[10] In 2015, this brand introduced a limited-edition rainbow product, available for those who donated to the It Gets Better project. Despite the cool colors, they actually taste the same as this brand's Cool Ranch chips.
ANSWER: **Doritos**

3. The energy levels of this system are of the form n-squared times Planck's constant squared over the quantity 8 times mass times the length squared. For 10 points each:
[10] Name this quantum system in which the central entity cannot escape a region of specified length. That is, the space outside the confining walls can be viewed as having an infinite potential.
ANSWER: **particle in a box** [accept **infinite square well**, prompt on "infinite potential well"]
[10] Whereas the potential outside the box is infinite, this is the value of the potential inside the box. By Newton's second law, if the forces on an object are balanced, its acceleration will have this value.
ANSWER: **zero**
[10] For a particle in a box, this quantity equals the box volume divided by the cube of the thermal de Broglie wavelength.
ANSWER: **partition function**

4. This man wrote a "Chart of Successive Years" entitled *Liniantu* before writing a major work that spans sixteen dynasties. For 10 points each:
[10] Name this Chinese historian whose major work was created for Yingzong and Shenzong. He wrote a number of "memorials" against the Baojia plan.
ANSWER: **Sima Guang** [prompt on partial answer; in particular, do not accept "Sima Qian"]
[10] Sima Guang's conservative faction resisted the reforms of Wang Anshi during this Chinese dynasty, which was founded by Taizu in 960 AD.
ANSWER: **Song** Dynasty
[10] At the 1273 Battle of Xiangyang, the Southern Song under Lu Wenhuan surrendered to this man. This grandson of Genghis founded the Yuan dynasty.
ANSWER: **Kublai** Khan [or **Shizu**]

5. One social scientist with this surname, James, is a leading theorist of violent behavior who ran the Center for the Study of Violence at Harvard Medical School. For 10 points each:
[10] Give this surname of a psychologist whose *Mapping the Moral Domain* builds upon an earlier work that champions an ethic of care rather than an ethic of justice.
ANSWER: Carol **Gilligan**
[10] Gilligan's *In a Different Voice* criticizes this male-centered nature of this psychologist's six stages of moral development. Those stages are divided into pre-conventional, conventional, and post-conventional levels.
ANSWER: Lawrence **Kohlberg**
[10] Both Gilligan and Kohlberg build on the model of this Swiss thinker, who traced development through sensorimotor, pre-operational, concrete operational, and formal operational stages.
ANSWER: Jean **Piaget**

6. One line on this diagram terminates at the critical point in its upper-right. For 10 points each:
[10] Name this type of diagram, that depicts the state a substance is in at a given temperature and pressure. Three equilibrium lines meet at a triple point in it.
ANSWER: **phase** diagram/chart
[10] For a pure substance, the region where three phases can co-exist is zero-dimensional because of this law, stating that the number of degrees of freedom equals the number of components minus the number of phases plus two.
ANSWER: **Gibbs**' phase rule
[10] This locus of points within an unstable region of a phase diagram contains inflection points in the Gibbs Free energy. The critical points are where it meets the coexistence curve.
ANSWER: **spinodal** curve/locus [accept word forms]

7. He steals the Sampo from Pohjola with the help of Seppo Ilmarinen and Lemminkainen, and he was conceived when his mother Ilmatar was impregnated by the sea and wind. For 10 points each:
[10] Name this Finnish magician from the *Kalevala*.
ANSWER: **Vainamoinen** [or **Wainamoinen**]
[10] Vainamoinen created the stringed *kantele* from the jawbone of an enormous one of these creatures. Aphrodite and Eros were rescued from Typhon by a pair of these creatures known as the Ichthyes.
ANSWER: **fish** [or **pike**]
[10] This brother of the maiden Aino loses in a singing competition with Vainamoinen; out of spite, he then shoots Vainamoinen's stag.
ANSWER: **Joukahainen** [or **Youkahainen**]

8. In this opera, the titular characters sing an *a capella* rataplan chorus praising their leader Admiral Coligny. For 10 points each:
[10] Name this grand opera in which Valentine breaks her engagement with the Count de Nevers in order to marry Raoul. It is set during the lead-up to the St. Bartholomew's Day Massacre.
ANSWER: Les **Huguenots** [or The **Huguenots**]
[10] *Les Huguenots* is by Giacomo Meyerbeer, who used his influence to stage the premieres of this composer's *Rienzi* and *The Flying Dutchman*. This ingrate would go on to attack Meyerbeer in the essay "Jewishness in Music".
ANSWER: (Wilhelm) Richard **Wagner**
[10] A rataplan chorus is led by the gypsy Preziosilla in this other 19th century opera, which features the prayer "Pace, pace mio Dio", and whose overture begins with a three-note "Fate" motif in the brasses.
ANSWER: La **Forza del Destino** [or The **Force of Destiny**]

9. This 1378 event was led by such men as Michele di Lando and had a populist faction known as the "Eight Saints." For 10 points each:
[10] Name this uprising led by wool carders against the Arte Della Lana that laid the basis for the rise of the Medicis in Florence.
ANSWER: Revolt of the **Ciompi** [or **Ciompi** Revolt]
[10] This region's wool trade with England led to its rising cloth industry, as witnessed in towns such as Ghent and Bruges. Its name was eventually applied to the Dutch-speaking portion of Belgium.
ANSWER: **Flanders** [or County of **Flanders**]
[10] Marshal Soult was sent to brutally suppress the 1831 Canut Revolt by this city's silk industry, but artfully negotiated a peaceful surrender. This was actually pretty dumb, since all the angry workers were still there, revolted again 3 years later, killed a bunch more people, and then had to be butchered anyway.
ANSWER: **Lyon**s

10. In one play by this author, the title Venetian nobleman tries to rape Celia. For 10 points each:
[10] Name this English playwright who wrote *Volpone* and a play in which the title character Subtle turns Sir Epicure Mammon's goods into gold, *The Alchemist*.
ANSWER: Ben(jamin) **Jonson**
[10] In this play by Jonson, Old Knowell receives a letter signed by Wellbred intended for his son Edward. This play's characters include the braggart captain Bobadil, and a mischievous servant named Brainworm.
ANSWER: *Every Man in His Humour*
[10] Jonson collaborated on *Eastward Ho* with John Marston and this playwright of *Bussy D'Ambois*. He inspired a poem that begins "Much have I travell'd in the realms of gold/ And many goodly states and kingdoms seen."
ANSWER: George **Chapman**

11. Levi Lincoln's retort to this speech implored listeners to recall how bad things had been, citing a stained washing basin so disgusting that James Monroe's maintenance crew literally refused to even remove it. For 10 points each:
[10] Name this speech delivered over three surreal days to the House of Representatives, the same year that Democrats refused to re-nominate Richard Mentor Johnson.
ANSWER: "**Gold Spoon** Oration"
[10] Charles Ogle's "Gold Spoon Oration" decried this former Governor of New York for lavish refurbishments of the White House. This man ran later ran with Charles Francis Adams for the Free Soil Party.
ANSWER: Martin **Van Buren**
[10] Ogle's accusations seem less convincing in light of the fact that the 1840 White House was actually a putrid, decrepit death trap that helped caused the death of this man, Van Buren's successor and the hero of Tippecanoe.
ANSWER: William Henry **Harrison**

12. Wanda Landowska gave the nickname "black pearl" to this piece's 25th movement, which is in the parallel key of G minor. For 10 points each:
[10] Name this work consisting of an aria da capo and 30 short movements which use the same bass-line. Every third movement in this work is a canon.
ANSWER: *Goldberg Variations*
[10] This German Baroque composer of the *Brandenburg Concertos* wrote the *Goldberg Variations*.
ANSWER: **J**ohann **S**ebastian **Bach** [prompt on **Bach**]
[10] The 25th Goldberg Variation is often considered one of these slow dances in triple time, which generally appear after a courante in a Baroque suite. The fourth and most famous movement of Bach's Cello Suite No. 5 is one of these.
ANSWER: **sarabande**

13. This author's story "Venus on the Half-Shell" was expanded into a novel by Philip José Farmer, while writing under this author's name. For 10 points each:
[10] Name this author whose novel *Now It Can Be Told* inspired the used car salesman Dwayne Hoover to believe that all other people are really robots. The life of this author's son Leon was chronicled in the novel *Galapagos*.
ANSWER: **Kilgore** **Trout** [accept either name]
[10] Kilgore Trout is a fictional author who appears in such novels as *Breakfast of Champions* and *Slaughterhouse Five* by this real-life American author.
ANSWER: Kurt **Vonnegut**
[10] The only fan letter Kilgore Trout ever receives is from this hospital roommate of Billy Pilgrim in *Slaughterhouse Five.* He is the title character of another Vonnegut novel, in which he starts a namesake philanthropic foundation.
ANSWER: **Eliot** **Rosewater** [accept either name; also accept Mr. **Rosewater**]

14. This book rips on the fraudulent twin studies of Cyril Burt, though it claims his real mistake was attempting to reify intelligence numbers. For 10 points each:
[10] Name this work whose 1996 edition includes a critical review of *The Bell Curve*. It was written by Stephen Jay Gould.
ANSWER: *The **Mismeasure of Man***
[10] Gould and Eldredge proposed this theory of evolution in a 1972 paper. It contrasts with gradualism and suggests that evolution proceeds through relatively stable periods of stasis interspersed with bursts of cladogenesis.
ANSWER: **punctuated equilibrium**
[10] The theory of punctuated equilibrium built heavily on this man's work on peripatric speciation in birds. This German evolutionary biologist wrote *Systematics and the Origins of Species.*
ANSWER: Ernst Walter **Mayr**

15. Paul Feyerabend established his reputation through his opposition to this idea. For 10 points each:
[10] Name this idea which involves formulating a hypothesis that produces testable predictions, and conducting experiments to verify those hypotheses.
ANSWER: **scientific method**
[10] In *Against Method*, Feyerabend also rejects this concept popularized by Karl Popper in his *Logic of Scientific Discovery*. It states that hypotheses are only truly scientific if they have the potential to be disproven.
ANSWER: **falsificationism** [or **falsifiability**; accept word forms such as "**falsifiable**"; but don't accept word forms of just "false"]
[10] This is the name of the philosophical position that Feyerabend promoted in *Against Method*. It states that there are no exceptionless rules that can govern the means by which knowledge is acquired and defined.
ANSWER: **epistemological anarchism** [accept word form such as "**epistemological anarchy**"]

16. In this field, variables can only take on values of zero or one. For 10 points each:
[10] Identify this field of logical algebra, which uses operations like "or" and "not" to figure out truth values of statements. It is named after its English developer.
ANSWER: **Boolean** algebra
[10] This other Boolean operation, sometimes called the Sheffer stroke, returns false if both inputs are true, and true if at least one of them is false. It is often denoted by a single vertical bar.
ANSWER: **nand** [or **not and**, accept **alternative denial**, do not prompt or accept partial answers]
[10] These Boolean components output a sum and carry given two inputs. They should not be confused with their counterparts, which take three inputs, one of which is a carry bit.
ANSWER: **half-adder**s [prompt on partial answer, do not accept "full adder"]

17. A shipwreck from around 1300 BCE off of Uluburn, Turkey corroborated these documents' description of ornate gifts like chariots covered in gold. For 10 points each:
[10] Name these Bronze Age correspondences between various Near East rulers and the Egyptian pharaohs Amenhotep III and Akhenaten. They were discovered and named for Akhenaten's capital.
ANSWER: **Amarna** Letters
[10] The name of this woman is written on a gold scarab at Uluburun, in a form that may suggest she was pharaoh of Egypt at the time. She was queen and possible co-regent with Akhenaten, as memorialized in a famous bust.
ANSWER: **Nefertiti**
[10] The majority of the Uluburun shipwreck consists of pottery from Alashiya, which most scholars link to this modern country. It provided the ancient Bronze Age Near East with much of its supply of a certain metal.
ANSWER: **Cyprus**

18. Answer these questions about creatively-martyred saints, for 10 points each.
[10] Often seen as the first martyr, he was stoned to death outside of Jerusalem after being accused of blasphemy. His feast day is December 26th in Western Christianity.
ANSWER: Saint **Stephen**
[10] This saint was executed by being hung on a wheel. When the wheel broke, she was beheaded by Maxientus. Hers was one of the voices Joan of Arc supposedly heard.
ANSWER: Saint **Catherine** of **Alexandria** [prompt on "Catherine"]
[10] Unlike numerous fellow maidens who were beheaded, Saint Ursula was killed in this manner by angry, lust-filled Huns. A more famous saint is often erroneously believed to have been killed in this manner, but was actually healed by Irene before being bludgeoned to death.
ANSWER: Shot with an **arrow** [accept equivalents, including **crossbow bolt** (which is what killed Ursula); prompt on just "shot"]

19. A man in red climbs over a garden balcony in "The Meeting", the second entry in this series. For 10 points each:
[10] Name this series of four paintings commissioned by Madame Du Barry for her villa. A woman holds a wreath above a man's head in its third entry "The Lover Crowned".
ANSWER: *The **Progress of Love*** [or *Les **progrès de l'amour** dans le coeur d'une jeune fille*]
[10] *The Progress of Love* is by this French Rococo painter who depicted a shoe flying off a lady's foot in his painting *The Swing*.
ANSWER: Jean-Honoré **Fragonard**
[10] Many of the most celebrated portraits of Madame Du Barry, including one in she wears a hat with three blue feathers, are by this French painter, who was the official portraitist for Marie Antoinette.
ANSWER: (Louise) Élisabeth **Vigée-Le Brun** [or **É**lisabeth **Le Brun**; prompt on "Le Brun"]

20. In one of these works, Gritzvi comes to learn from Kauderer about the rye-drying machines, near the town of Malbork. In another of them, a man hears phones ringing in every house he passes as he jogs. For 10 points each:
[10] Name these works. One of them involves people named Ruedi and Bernadette who carry around Jojo's corpse in two sacks. In the first of them, an unnamed narrator tries to hand off a suitcase to a contact at a railway station.
ANSWER: Fictional **books within *If on a winter's night a traveler*** [or **even-numbered chapters** of *If on a winter's night a traveler*; or Ermes **Marana's translations**; accept anything that says the title of the book, and then makes clear that these are stories/tales/etc. within the book]
[10] *If on a winter's night a traveler* is by this Italian author of *Cosmicomics* and *Invisible Cities*.
ANSWER: Italo **Calvino**
[10] The cities in *Invisible Cities* are described by this real life European historical figure, as he recounts his travels.
ANSWER: Marco **Polo**