ACF Regionals 2014
Packet by WUSTL, Columbia B, and Berkeley A

Tossups

1. George Grote and Hilda Lorimer were two advocates for the now-contested view that these people's "revolution" due to new tactics led to rapid social and political changes. Peter Krentz argued against the idea that these people were involved in a massive shoving and pushing called the othismos. A formation used by these people is depicted on the Chigi olpe. A bronze spike called the sauroter was located at the end of a dory, the primary weapon used by these soldiers. A porpax and antilabe on an aspis were used by the left arms of these soldiers as part of their expensive panoply, with their right side protected by their neighbor's shield when in a phalanx. For 10 points, name this type of foot soldier that was the most common force used by armies fighting in ancient Greece.
ANSWER: **hoplite**s

2. The Heath-Jarrow-Morton model uses stochastic equations to model forward curves for this quantity. The TED spread uses the difference between two types of this quantity as a risk indicator. In macroeconomics, it is the independent variable of the IS curve. Inflation is the difference between two forms of this quantity that are related by the Fisher equation. Expansionary fiscal policy causes crowding out by increasing this quantity, which is depicted on the vertical axis of a loanable funds market graph. EURIBOR and LIBOR are notable examples of these quantities, for which a short-term value of zero may indicate a liquidity trap. For 10 points, name this value that a borrower pays for the use of a lender's assets.
ANSWER: real **interest** rate [accept nominal **interest** rate; prompt on "i" or "r"]

3. This author wrote about a paranoid king who sits in his castle and listens for sounds of rebellion in the story "The King Listens," part of a collection of three stories, each of which focuses on a different sense. He wrote a philosophical novel divided into three sections, each of which has three subsections, each of which has three chapters. He wrote a novel in which Cosimo refuses to eat the dinner of snails which his sister makes, and decides to flee society. He created the fictional country of Cimmeria in one novel. In that novel by this author of *Mr. Palomar*, the odd-numbered chapters are written in the second person and are about the reader's attempts to read the novel itself. For 10 points, name this author of *The Baron in the Trees* and *If on a winter's night a traveler*.
ANSWER: Italo **Calvino**

4. These people have been involved for twenty years in court cases against US Capital Energy over land in the Sarstoon-Temash National Park. In the mid-nineteenth century, these people were led in a rebellion by Jacinto Pat and Cecelio Chi during the Caste War. The building of the Chixoy Dam led to many of these people being killed in the Rio Negro Massacres. David Stoll wrote a book questioning some of the details in an autobiography by one of these people. That Nobel Prize-winning member of this indigenous people founded the Winaq political party and wrote the book *I, Rigoberta Menchu*. For 10 points, identify this name given to indigenous people in southern Mexico, Belize, and Guatemala, where a civilization of the same name built such sites as Tulum and Chichen Itza.
ANSWER: **Maya**ns [or **K'iche'**; or **Quiche** Maya; or Maya **Achi**]

5. One speech by this man relates the story of an atheist who prays for God to save him when he's trapped in an Alaskan blizzard, but does not interpret the fortuitous appearance of some Eskimos as proof of God's existence. That speech begins with a parable about two young fish and an older fish. This author, who delivered a Kenyon commencement address called "This Is Water," wrote about his unpleasant trip on the cruise ship *Zenith*, which he renames the *Nadir*, in the essay "A Supposedly Fun Thing I'll Never Do Again." His most famous novel is about a film so entertaining that anyone who watches it is unable to stop, and opens with a meeting about Hal Incandenza's time at the Enfield Tennis Academy. For 10 points, name this author of *Infinite Jest*.
ANSWER: David Foster **Wallace**

6. In a paper titled "Dancing Links," this scientist outlined a nondeterministic, recursive, backtracking algorithm for solving exact cover problems, which is known as his namesake "Algorithm X." He invented the WEB tool to carry out literate programming, a concept he also developed. He helped develop an algorithm which improves performance by keeping track of partial matches. This scientist invented the up-arrow notation for writing very large integers, and created a description language for vector glyphs called Metafont. This creator of a string-searching

algorithm with Morris and Pratt also developed the TeX [pron: "tek"] typesetting language. For 10 points, identify this Stanford-based computer scientist, the author of the classic textbook *The Art of Computer Programming*.
ANSWER: Donald Ervin **Knuth**

7. The first movement of an unfinished work of this type by this composer was reworked into the composer's third piano concerto, and its later movements were reworked into the *Andante and Finale* by Sergei Taneyev. The finale of one of these works by this composer includes a theme based on the folk song "In the Field Stood a Birch Tree." The second movement of the first of these works is called "Land of Desolation, Land of Mists." The only unnumbered one of these works is based on a poem by Byron. A bassoon solo marked with six *p*s appears in the sixth one, which ends with an *Adagio lamentoso* fourth movement. For 10 points, name these works by a Russian composer, which include ones nicknamed *Manfred* and *Pathétique*.
ANSWER: **symphonies** by Peter Ilyich **Tchaikovsky** [prompt on partial answers]

8. A series of lectures about this belief system contrasts the "In-Triple-World Law" with the "Beyond Triple-World Law." This system believes that a white substance translated as "virtue" accumulates in us with good deeds, and a black substance accumulates with bad karma. This practice's three central tenets are Truthfulness, Compassion, and Forebearance, which it believes to underpin the cosmos. Its followers try to open a "Celestial Eye" through "cultivation." The Kilgour-Matas report accused persecutors of this group of harvesting their organs. Lectures mentioning the arrival of UFOs to earth were given by its founder, Li Hongzhi. For 10 points, name this new spiritual movement and set of exercises which is being persecuted by the Communist Chinese government.
ANSWER: **Falun Gong** [or **Falun Dafa**; or **Dharma Wheel** practice; or Work of the **Law Wheel**; prompt on "*qigong*"; prompt on answers mentioning "cultivation" of energy, spirit, *qi*, etc. until "cultivation" is read; do not accept or prompt on "Buddhism" or "Daoism" at any point]

9. mKeima has a similar structure and function as this protein. Enhanced, superecliptic, pH-sensitive derivatives of this protein can be used to measure synaptic activity, and Lichtman and Sanes used Cre-Lox derivatives of it in order to study neural networks. This protein has an intrinsic Forster cycle. Lippincott-Schwartz et al. hybridized VSV G protein to this other protein to study the secretory system. Cameleon contains two derivatives of this protein, and is used in FRET. In this protein, the carbonyl from a serine residue is attacked by a glycine amino group, forming a five membered conjugated ring bonded to tyrosine. In its active form, this reporter has a quantum yield of around 80% and an emission peak around 500 nanometers. For 10 points, name this protein isolated from a jellyfish which glows.
ANSWER: **green fluorescent protein** [or **GFP**; or **eGFP**; accept **red fluorescent protein** or **RFP** until "cameleon"]

10. John Barclay wrote most of his works in this language. In one novel originally written in this language, the title character visits the planet Nazar, which is populated by intelligent trees. It's not Norwegian, but this language was used by Ludvig Holberg to write *Niels Klim's Underground Travels*. In *Tristram Shandy*, Hafen Slawkenbergius writes treatises in this language. An essay written in this language is about a goddess who was nursed by the nymphs Inebriation and Ignorance. A novel written in this language and dedicated to Pieter Gillis is about a traveler named Raphael Hythloday who discovers a perfect society on an island. For 10 points, name this language which was used to write *In Praise of Folly* and *Utopia*, a dead language formerly used by Seneca.
ANSWER: neo-**Latin**

11. A 2003 album named for this instrument's "evolution" contains nineteen tracks each in the style of a different master of it and was recorded by Arturo Sandoval. Another player of this instrument became the subject of Benny Golson's "I Remember Clifford" after dying in a car crash at the age of 25. It is also played by the Lincoln Center jazz director who composed the jazz oratorio *Blood on the Fields*. This instrument of Clifford Brown and Wynton Marsalis was played by a bandleader whose hits "Salt Peanuts" and "A Night in Tunisia" led him to be considered a cofounder of the bebop style along with saxophonist Charlie Parker. For 10 points, Dizzy Gillespie played a "bent" version of what instrument which was also played by Louis Armstrong?
ANSWER: **trumpet**

12. Bessie Green claimed that members of this man's group gave money to Tom Brown's campaign for sheriff. Eugene Boiseneau was killed in an attempt to capture this man, who traveled briefly with Herbert Youngblood after

getting help from lawyer Louis Piquette. This man evaded pursuers by escaping out the back of the Little Bohemia Lodge. Harold Cassidy and Wilhelm Loeser operated on this man and Homer Van Meter to change their appearance and fingerprints, which helped Jay Robert Nash claim that Jimmy Lawrence died after this man met with Polly Hamilton and Anna Sage. The Woman in Red helped Melvin Purvis and the FBI find and shoot this man outside the Biograph Theater in Chicago. For 10 points, name this bank robber who was the FBI's first Public Enemy Number One.
ANSWER: John Herbert **Dillinger**

13. This adult's "ethics of irresponsibilization" are examined in chapter 3 of Jacques Derrida's *Gift of Death*, which also looks at his tendency to keep silent. Proverbs about weaning a breast-feeding child appear in four versions of his story in a text about him which was published on the same day as the treatise *Repetition*. A narrator fails to understand this man in a "Preliminary Expectoration" which follows after an "Exordium." This specific individual, like a graceful ballet dancer landing on her feet, stood above the universal and got everything back "by virtue of the absurd." To Johannes de Silentio, this man typifies a "teleological suspension of the ethical." For 10 points, name this adult praised as a "knight of faith" in Kierkegaard's *Fear and Trembling* for his willingness to sacrifice Isaac.
ANSWER: **Abraham** [or **Avraham**; do not accept "Abram" or "Ibrahim"]

14. In one poem from this collection, the speaker is compared to "one who sits and gazes from above, over the rivers to the bitter sea." Another poem in this collection describes a "ministering life-angel" with an "appealing look upcast to the white throne of God." One poem in this collection begins "Let the world's sharpness like a clasping knife shut in upon itself and do no harm." The first poem in this collection evokes "how Theocritus had sung of the sweet years." Its most famous poem declares that "if God choose, I shall but love thee better after death." For 10 points, name this poetry collection which includes the lines "call me by my pet name" and "How do I love thee? Let me count the ways," and which was written by Elizabeth Barrett Browning.
ANSWER: *Sonnets from the Portuguese*

15. A female figure appears at this event using snakes as reins to ride an angry wolf, which was subdued by four warriors after she dismounted. A riddle contest ends with a question about this event in the *Vafthrudnismal,* stumping a giant who did not know what was whispered here. A dwarf named Lit ran the wrong way and got killed at this event, at which a blood-red wake appeared on the water after the giantess Hyrrokin pushed the ship Hringhorn out to sea. A resident of the hall Breidablik named Nanna collapsed at this event. This event became necessary when the rider Hermod failed to convince Thokk to weep. The self-replicating armband Draupnir was dropped onto a pyre at this event. For 10 points, name this event commemorating the mistletoe-induced death of the Norse god of beauty.
ANSWER: **Baldur**'s **funeral** pyre [do not accept "death of Baldur"]

16. For an oscillating electric field, the square of this quantity can be expressed as the electrical permittivity plus the quantity four-pi-i times the electrical conductivity divided by the angular frequency. The Fizeau experiment showed that in luminiferous aether theory, the Fresnel drag coefficient for propagation of light in a medium is equal to one minus one over this quantity squared. This quantity experiences a shift that is linear or quadratic in the applied electric field in the Pockels and Kerr effects, resulting in birefringence. Fermat's principle of least time can be used to derive a relation in which a ratio of values of this quantity equals a ratio of sines of angles; that law is Snell's law. For 10 points, name this ratio of the speed of light in a vacuum to the speed of light in a medium.
ANSWER: **index of refraction** [or **refractive index**]

17. One work by this artist appears in another artist's painting in which people like Paul Sérusier and Odilon Redon stand around that painting and discuss it. That painting is Maurice Denis' *Homage to [this artist]*. In 2008, his painting *The Boy in the Red Vest* was stolen from a Zurich museum. In one painting, this man showed himself sitting on a couch with his tophat behind him watching a servant rip the covers off the title naked woman. In one of his paintings, a triangular stand of trees frames a group of nude women. In one painting, he depicted two men in brown hats sitting at a table engaged in the title activity, with the one on the left smoking a pipe. For 10 points, name this artist of *A Modern Olympia*, *The Large Bathers*, and *The Card Players*, a French post-Impressionist.
ANSWER: Paul **Cezanne**

18. Though it's not an alcohol, strains of *Clostridia* are used to produce this compound from starch in the ABE

process. This compound, chloroform, and methanol form a ternary "saddle" azeotrope. When reacted with sodium hydroxide and iodine, it produces iodoform and acetic acid. This compound is formed from the propylene that adds to benzene and is oxygenated during the cumene process. If you hydrate propyne in the presence of mercuric cations, the enol tautomerizes to form this compound. The reaction of isopropanol with chromic acid will yield this compound, and that oxidation, named for Jones, usually uses this compound as the solvent since it's polar and aprotic. For 10 points, name this dimethyl ketone used as a laboratory solvent and in nail polish remover.
ANSWER: **acetone** [or **dimethyl ketone** before it is read]

19. Many folktales of these people have them tricking the wizard Stallo, who can change the appearance of the landscape to get people lost. Men of this culture sometimes wear the jester-like Four Winds hat, and both sexes wear a traditional costume called a "gakti" or a "kofte." Traditional dishes of these people include a meat stew called "renkok" and jam made from cloudberries. Kildin, Skolt, and Inari are three mutually unintelligible dialects of their namesake language, although the largest by far is the Northern dialect. They sing traditional folk songs called "joik" or "yoik." Every year, they have festivals in cities like Rovaniemi and Karasjok at which they eat salmon and race reindeer. For 10 points, name this long-persecuted indigenous people of northern Norway, Finland, and Sweden.
ANSWER: **Sami** people [or **Lapp**s, or **Lapplander**s]

20. This event resulted in a ruler paying off the gambling debts of Benjamin Constant, who died a few months after this event. Anger at a speech a few months before this event led to the Address of the 221. A group with a name meaning "help yourself, and heaven will help you" and the newspaper *Le Globe* were active in the years leading up to this event, which succeeded in the goals of the newspaper *Le National*. The Four Ordinances of St. Cloud caused this event, in which opposition to the Polignac ministry led to barricades being erected as part of the Three Glorious Days. The leader chosen during this event appeared on the balcony of the Hotel de Ville with Lafayette. For 10 points, name this 1830 event that replaced Charles X with Louis-Philippe and started in a namesake month.
ANSWER: **July Revolution** [or **July Days**; accept **Three Glorious Days** before it is read; accept **French Revolution of 1830** before "1830" is read; do not accept "French Revolution"]

TB 1. In the 1880s, Paul Vieille invented a considerable improvement on this substance, which led to the introduction of the Lebel. William Rubruck's account of this substance may have led to its description in the *Opus Majus* of Roger Bacon. In a legend, this substance was created by the monk Berthold the Black. Grinding components of this substance separately before combining them made the serpentine form of it; combining the components in water to make a slurry created the more effective corned form. The priming version of this substance sometimes only made a flash in the pan. For 10 points, name this substance made from a mixture of saltpeter, charcoal, and sulphur that once caused battlefields to be covered in smoke, and whose combustion was used to shoot bullets out of firearms.
ANSWER: **gunpowder** [or **black powder**]

Bonuses:

1. Name some things about how languages interact in their natural habitat, for 10 points each.
[10] This term, also called "loan translation," refers to phrases directly translated from the original language, with the result often making less sense in the target language. English ones include "moment of truth" and "flea market."
ANSWER: **calque**s
[10] Multilingual speakers perform this action when they alternate between multiple languages in a single conversation or sentence.
ANSWER: **code-switching**
[10] These are languages that develop between groups that do not speak the same language. They can become creoles if they are learned as a first language by a new generation.
ANSWER: **pidgin**s

2. Answer these questions about important walls in Jewish tradition, for 10 points each.
[10] The Western Wall is the last remnant of this holy structure. Commandments relating to animal sacrifice no longer apply since it was destroyed in 70 CE by the Romans.
ANSWER: Second **Temple** [or **Beit Ha-Mikdash** Sheni; or Herod's **Temple**; do not accept "First Temple"]
[10] Before bringing down the walls of Jericho, Joshua served in this role with Caleb at Moses's behest. While Jericho was being circled, two Israelites carrying out this role were saved by the harlot Rahab.
ANSWER: **spies** within the Promised Land [or **spy**; or **scout**s]
[10] In Orthodox synagogues, this barrier separates the women in the congregation from the men during services.
ANSWER: **mechitza**h [the "ch" is a guttural ḥ sound as in "Chanukah"]

3. After cooperating in this battle to defeat the forces of Kitbuqa, Baibars assassinated Qutuz to become sultan. For 10 points each:
[10] Name this 1260 battle in which Mamluk forces defeated a seemingly unstoppable force from the east that was headed toward Cairo.
ANSWER: Battle of **Ain Jalut**
[10] This empire with a capital at Karakorum was defeated at Ain Jalut. This empire spawned the Golden Horde and was started by Genghis Khan.
ANSWER: **Mongol** Empire
[10] Hulagu Khan was on his way to Karakorum during the Battle of Ain Jalut because he had to take part in one of these councils following Mongke's death. This council was convened when a khan died to elect a new leader.
ANSWER: **kuriltai**

4. This man argued that experts fix the extension of natural kind terms such as 'tiger,' supporting his claim that "meanings just ain't in the head!" For 10 points each:
[10] Name this Harvard philosopher. In "The Meaning of 'Meaning'," this man posited a world where all water is replaced by the chemical XYZ, called Twin Earth.
ANSWER: Hilary **Putnam**
[10] Putnam and Quine used this adjective to describe the relationship of mathematics to scientific theories. If math has this property, Putnam thinks we should see mathematical objects as ontologically real.
ANSWER: mathematics is **indispensable** to the sciences [or Quine-Putnam **indispensability** thesis/argument]
[10] This German thinker tried to turn math into logic in his *Foundations of Arithmetic*. He examined the sentence 'Hesperus is Phosphorus,' in which both names refer to Venus, in "Sense and Reference."
ANSWER: Gottlob **Frege**

5. This poet asked "why was Burton built on Trent?" and wrote of a man who eats his "victuals fast enough." For 10 points each:
[10] Name this poet who wrote that "malt does more than Milton can to justify God's ways to man" in "Terence, This Is Stupid Stuff," part of the collection *A Shropshire Lad*.
ANSWER: Alfred Edward **Housman**
[10] This Housman poem tells its subject to raise the "still-defended challenge-cup." After this poem's title character is "chaired ... through the market-place," he dies and becomes a "townsman of a stiller town."
ANSWER: "**To An Athlete Dying Young**"

[10] In the second poem of *A Shropshire Lad*, Housman describes one of these objects standing "about the woodland ride wearing white for Eastertide," because it is "hung with snow."
ANSWER: a **cherry** tree [or ***Prunus*** *avium/cerasus*; prompt on "tree"]

6. Two proposed models for these events are the hotshot and the hotspot hypotheses. For 10 points each:
[10] Name these congregations of male animals during breeding season, when they compete publicly for small patches of area. Common among birds, this behavior is also expressed by hammerhead bats and kakapos.
ANSWER: **lek**s [or **lekking**]
[10] Lek mating is a class of this mating system, in which a male has exclusive mating rights with more than one female.
ANSWER: **polygyny** [prompt on "polygamy"]
[10] Mating behavior is often controlled by this form of selection, first postulated by Darwin in *The Descent of Man*. Peacock tails are an example of the "runaway" form of this phenomenon, formulated by RA Fisher.
ANSWER: **sexual** selection

7. There is a splash of white on the right side of the otherwise yellow dock in this painting. For 10 points each:
[10] Name this painting that depicts Donald Duck hooking a fishing rod onto his shirt while an onlooker snickers at him.
ANSWER: ***Look Mickey****!*
[10] This other painting omits the words "if I have a cramp" from a DC Comics panel. It depicts a woman with a thought bubble reading "I don't care!—I'd rather sink than call Brad for help!"
ANSWER: ***Drowning Girl***
[10] *Look Mickey!* and *Drowning Girl* were paintings by this pop artist of stuff like *As I Opened Fire* and *Whaam!*
ANSWER: Roy Fox **Lichtenstein**

8. For 10 points each, name these things related to public art.
[10] This Indian sculptor collaborated with Cecil Balmond on ArcelorMittal Orbit and sculpted Cloud Gate for Chicago's Millennium Park.
ANSWER: Anish **Kapoor**
[10] Claes Oldenburg's *Lipstick (Ascending) on Caterpillar Tracks* is on the campus of this university. This site of two Louis Kahn art galleries has a building which was flanked by massive stylized fake trees by Robert Venturi.
ANSWER: **Yale** University
[10] Graffiti artist Banksy painted "We're Bored of Fish" in the penguin enclosure of this city's zoo. Kapoor's ArcelorMittal Orbit was created for its 2012 Summer Olympics.
ANSWER: **London**

9. One classic test of this theory is its prediction of the shift in the periapsis of Mercury's orbit. For 10 points each:
[10] Name this theory that describes gravitation as a deformation of spacetime. A 10-component tensor equation gives rise to this theory's "field equations".
ANSWER: **general relativity** [or **GR**; prompt on "relativity"]
[10] When using the Einstein summation convention, this operation is denoted "A subscript mu, B superscript mu," where A and B are tensors. Indices can be raised and lowered when one of the tensors involved in this operation is the metric tensor.
ANSWER: tensor **contraction** [or word forms; prompt on "summation" or obvious equivalents]
[10] Tensor contraction is a generalization of this operation, which is denoted "A superscript mu subscript mu" for a rank-2 tensor A, and which equals the sum of the eigenvalues for a matrix.
ANSWER: **trace**

10. Vladimir Potinin and Anatoly Chubais designed the "loans-for-shares" program that served these men. For 10 points each:
[10] Name these businessmen such as Boris Berezovsky and Roman Abramovich who came to control many Russian industries following privatization during the 1990s.
ANSWER: **oligarch**s
[10] The oligarchs gained their power during the presidency of this man, the first Russian president to be elected by a popular vote.

ANSWER: Boris Nikolayevich **Yeltsin**
[10] This oligarch who owned the oil company Yukos was imprisoned in 2003, likely because of his disagreements with Vladimir Putin more than for the charges of tax evasion and fraud. He was released in December 2013.
ANSWER: Mikhail **Khodorkovsky**

11. This play coined the "Swabian salute" by way of the title character telling the messenger of a besieging army that "he can lick me in the arse." For 10 points each:
[10] Name this play about an iron-armed soldier whose nemesis Weislingen has him arrested. Weislingen is eventually poisoned on the orders of the beautiful Adelheid.
ANSWER: *Götz von Berlichingen*
[10] This more famous two-part play by the author of *Götz von Berlichingen* is partially based on Jacob Bidermann's play about the Doctor of Paris, *Cenodoxus*. Its title character is brought to Classical Walpurgisnacht by a homunculus.
ANSWER: *Faust*
[10] *Götz von Berlichingen* and *Faust* were written by this German author.
ANSWER: Johann Wolfgang von **Goethe**

12. The surface energy between liquid and gas is multiplied by the cosine of this quantity in Young's equation. For 10 points each:
[10] Name this measure of the hydrophobicity of a surface. It's high for substances exhibiting the lotus effect.
ANSWER: **contact angle**
[10] When they encounter a hydrophobic surface, water molecules show this phenomenon, in which they stick to each other, not to the other molecules. Mercury strongly exhibits this property, which is why mercury thermometers have convex menisci.
ANSWER: **cohesion** [or word forms; don't accept "adhesion"]
[10] Another measure of hydrophobicity is the partition coefficient or log P. That quantity is usually measured as the logarithm of the ratio of the concentration of the solute in water to its concentration in this alcohol.
ANSWER: **octanol** [or **1-octanol**; or **octan-1-ol**; or **octyl alcohol**]

13. This story is narrated by a man who lives with his spinster sister Irene. For 10 points each:
[10] Name this short story in which mysterious noises force a brother and sister to retreat to smaller and smaller areas of their home.
ANSWER: "**House Taken Over**" [or "**Casa tomada**"]
[10] This novel by the author of "House Taken Over" can be read in order, or out of order according to the "Table of Instructions." This novel features the breakdown of Talita and Traveler's marriage, and Horacio's love for La Maga.
ANSWER: *Hopscotch* [or *Rayuela*]
[10] Julio Cortazar, the author of *Hopscotch* and "House Taken Over," hails from this South American country which is also home to Jorge Luis Borges and Manuel Puig.
ANSWER: **Argentina**

14. Its *Agnus Dei* features interspersed lines from the poem "At a Calvary near Ancre." For 10 points each:
[10] Name this mass created for a festival celebrating the consecration of the Coventry Cathedral, which was rebuilt after being destroyed in World War II. It borrows lines from several poems by Wilfred Owen.
ANSWER: *War Requiem*
[10] The *War Requiem* was created by this British composer of *The Young Person's Guide to the Orchestra*.
ANSWER: (Edward) Benjamin **Britten**
[10] This other British composer created the opera *King Priam* for the Coventry festival. He also wrote an oratorio inspired by Kristallnacht.
ANSWER: Sir Michael Kemp **Tippett**

15. On her deathbed, this character tells her son Dallas that he can trust his father. For 10 points each:
[10] Name this woman who marries the protagonist of the novel in which she appears, even though he is in love with her cousin. She is a granddaughter of Mrs. Manson Mingott.
ANSWER: **May** Welland [or **M**ay **Welland**]
[10] In *The Age of Innocence*, May Welland marries Newland Archer despite his love for this woman.

ANSWER: Countess **Ellen** **Olenska** [accept either name]
[10] *The Age of Innocence* is a novel by this New Yorker, who created the town of Starkfield as the setting for her novel *Ethan Frome*.
ANSWER: Edith **Wharton** [or Edith Newbold **Jones**]

16. The fight that preceded this battle occurred when Half King mentioned the presence of a French encampment in Jumonville Glen. For 10 points each:
[10] Name this battle in the Great Meadows where British troops were forced to surrender after building a makeshift defense. Joshua Fry's death a few months earlier led to George Washington being in command during this battle.
ANSWER: Battle of **Fort Necessity**
[10] The Battle of Fort Necessity occurred in 1754 at the start of this war, the North American theater of the larger Seven Years' War. The massacre at Fort William Henry occurred during this war.
ANSWER: **French and Indian** War
[10] Following the massacre at Fort William Henry, this man led a massacre of the Abenaki that led to his nickname "White Devil." He led a special company in the British army known as his namesake "Rangers."
ANSWER: Robert **Rogers**

17. Answer these questions about springs in Greek mythology, for 10 points each.
[10] The Hippocrene spring was sacred to these nine goddesses, though later people conflated the Hippocrene with the Pierian spring. They include Clio and Calliope, and inspired Homer and stuff.
ANSWER: the **Muse**s [or **Mousa**i]
[10] The Castalian Spring flows by this sacred site where a stone called the *omphalos* marks the "navel of the world." The monstrous Python was slain on this cult site.
ANSWER: **Delphi**
[10] This wood nymph was turned by Artemis into a fountain whose waters flowed from Greece to the island of Ortygia off the coast of Syracuse. Her waters melded with a pursuing river god.
ANSWER: **Arethusa**

18. This chess player is known for his endgame skills and for using a wide variety of openings to make it difficult for opponents to prepare for him. For 10 points each:
[10] Name this young Norwegian grandmaster who became World Champion after defeating Viswanathan Anand in 2013.
ANSWER: Magnus **Carlsen**
[10] Carlsen also became the youngest ever World Champion, a title once held by this Russian who lost a famous match to Deep Blue and who is now involved in Russian politics.
ANSWER: Gary **Kasparov**
[10] Carlsen also became the youngest person to have a 2600 rating under this system, which was created for chess by its namesake Hungarian-American physics professor but has gained much wider use since.
ANSWER: **Elo** rating system

19. The lowest group of the sottoposti who worked with this substance revolted in 1378, leading to three new guilds being formed. For 10 points each:
[10] Name this substance that was one of the sources for the cloth made by the Arte di Calimala, and which was worked on by the Ciompi.
ANSWER: **wool**
[10] This wool carder was a leader of the revolt of the Ciompi, and he was chosen to serve as the gonfaloniere of justice during the revolt.
ANSWER: Michele di **Lando**
[10] The revolt of the Ciompi took place in this Italian city. In the fifteenth century, Cosimo and Lorenzo the Magnificent were both rulers of this city from the Medici family.
ANSWER: **Florence** [or **Firenze**]

20. Languages of this type, like Haskell, are generally state-free, unlike imperative languages. For 10 points each:
[10] Name this type of language. These languages make extensive use of "higher-order" forms of their namesake constructs.

ANSWER: **functional** programming languages
[10] This ubiquitous higher-order function repeatedly applies a function to successive elements of a recursive data structure and accumulates the results. As every category theoretician knows, this function is a catamorphism.
ANSWER: **fold** [or **reduce**; or **foldr**; or **foldl**]
[10] Since pure functions cannot cause any side effects, this task is difficult in purely functional languages, and requires eldritch things like monads and continuations. In C, this task is accomplished with functions like putchar and getchar.
ANSWER: **input** and **output** [accept either underlined part; or **I/O**; or **reading and writing** data; or obvious equivalents]