

Western Invitational Tournament 2013

Editors 1 (Auroni Gupta, Jasper Lee, Jarret Greene, Tanay Kothari, Ankit Aggarwal, Sam Braunfeld)

Tossups

1. In one poem, this author wrote “My secrets cry aloud. I have no need for tongue,” comparing his heart to title structure. In another poem, this author spoke of “virtues only gods could speak/Or English poets who grew up on Greek” possessed by the title character, who “was the sickle” and “I, the rake,” lewdly noting “what prodigious mowing we did make.” This poet of “Open House” and “I (*) Knew a Woman” remembered that “every step you missed/my right ear scraped a buckle” and observed that “the whiskey on your breath/Could make a small boy dizzy” in another poem. His villanelle ends “I wake to sleep, and take my waking slow. I learn by going where I have to go.” For 10 points, name this Michigan poet of “My Papa’s Waltz” and “The Waking.”
ANSWER: Theodore Roethke

2. Bernie Sanders, Paul Krugman, Keith Ellison, and Van Jones participated in a 2012 Washington, D.C. conference to “take back” this entity. Jim Cullen traced this concept back to the communitarian aspirations in John Winthrop’s speech “A Model of Christian Charity.” Ronald Reagan defined it in terms of the Puritan precept of creating a “city upon a hill.” Because this concept was equated with home ownership by President Clinton, the subprime lender (*) Ameriquest billed itself this concept’s “proud sponsor” in the 1990s. James Truslow Adams first defined this concept as one of “a better, richer, and happier life for all our citizens of every rank.” For 10 points, identify this Yankee sentiment that upward mobility is achievable through hard work.
ANSWER: The American Dream [prompt on descriptions]

3. One side in this battle assembled at Erzerum and sent its Cuman heavy cavalry to pursue the enemy’s advance guard before being ambushed. One side sent half of its forces under Joseph Tarchaneiotes to besiege Khliat. The flanks of the losing side were enveloped by initially retreating horse archers. The primarily mercenary second line of this battle’s losers retreated back to camp upon hearing a false rumor from the traitor (*) Andronikos Doukas that the first line’s commander had been killed. This battle was followed by a Doukid coup and the ascension of the Comnenian Dynasty. For 10 points, name this 1071 battle where the Byzantine emperor Romanos IV Diogenes was defeated and captured by the Seljuk Turks under Alp Arslan.
ANSWER: Battle of Manzikert

4. This theorem can be proven by applying the Jordan-Holder theorem to \mathbb{Z} -sub- n . Domains where an analogue of this theorem holds for ideals are named for Dedekind. An example where an analogous theorem to this one fails to hold is \mathbb{Z} adjoined root -5 . It can be proven by noting that all PIDs are UFDs and the integers are a PID. This theorem guarantees the existence of (*) LCMs and GCDs and gives a simple way to find them. A proof of the existence claim in this theorem first writes n as a nontrivial product if n is not prime, and then inductively factors that. For 10 points, name this theorem stating that every integer greater than 1 has a unique factorization into primes.
ANSWER: fundamental theorem of arithmetic [prompt on any part of unique-prime factorization theorem; prompt on fundamental theorem]

5. A mutation in a gene that heavily expresses this protein in astrocytes is the cause of the second subtype of familial hemiplegic migraine. Most members of the FXYD protein family regulate the activity of this protein. Jens Christian Skou won the 1997 Nobel in Chemistry for his discovery of this protein. In a treatment of heart failure, its action is blocked with the plant toxins digitalis and ouabain, indirectly causing the buildup of (*) calcium, resulting in an increase in heart contraction force. One-fifth of a cell’s energy expenditure goes to this protein, which restores a neuron’s resting potential. This protein releases three ions out of the cell and brings two in. For 10 points, name this protein which exchanges two namesake cations via an active transport mechanism.
ANSWER: sodium-potassium pump [or Na/K pump; or Na⁺/K⁺ ATPase; or sodium-potassium adenosine triphosphatase; or sodium-potassium antiporter]

6. This play’s prologue describes a woman who “puts much salt and pepper in her prattle.” In one scene in this play, a character is told that the petticoat he spots behind a screen belongs to a French hatmaker. In its first act, Benjamin Backbite and Crabtree discuss the arrival of a man from the East Indies. In this play’s

third act, that man pretends to be a (*) moneylender named Mr. Premium who tries to buy paintings from his nephew in order to test his virtue. Joseph's relationship with Lady Teazle is revealed by Charles Surface at the climax of this play, after which Sir Oliver Surface gives his blessing to Charles and Maria. For 10 points, name this play about a group of gossipers led by Lady Sneerwell, written by Richard Sheridan.

ANSWER: The School for Scandal

7. One of these creatures performed the “masking task” after learning how to match Arabic numerals to objects bearing the corresponding numbers. These creatures formed male-only “border patrols” to kill individuals who wandered off from the main group. Some of these creatures stacked boxes to reach food in an experiment designed by (*) Wolfgang Kohler. At Columbia University, Herbert Terrace taught American Sign Language to one of these creatures, who was given a name punning on “Noam Chomsky.” Another scientist observed them using stalks of grass to dislodge termites from mounds, disproving the notion that only humans could use tools. For 10 points, name these primates studied extensively by Jane Goodall.

ANSWER: common chimpanzees [or Pan troglodytes; prompt on primates until mentioned; prompt on monkeys; prompt on apes; in case anyone's curious, the chimp's name was “Nim Chimpsky”]

8. The basis for most modern approaches to this problem is the DPLL algorithm. A nearly identically-posed PSPACE-complete problem is TQBF. By considering a tableau of sequential Turing-machine configurations, the Cook-Levin theorem can be proven, making this the first problem to be demonstrated (*) NP-complete. The special case of this problem for Horn clauses is P-complete and can be solved by using constraint propagation after having all assignments start as false. A variant of this problem with the input in conjunctive-normal-form and three variables per clause is also NP-complete. For 10 points, name this problem of assigning truth-values to variables in a propositional formula such that the formula evaluates to true.

ANSWER: Boolean satisfiability [or 3-sat; or k-sat]

9. This man used the Book of Revelation for all but one movement of an orchestral work which describes celestial objects in movements such as “The Constellation of Sagittarius.” This composer of *Illuminations of the Beyond* wrote the “Tristan” trilogy, whose second part is a symphony in which the statue, flower, and love themes recur in its ten movements. This composer also based many works off of his love of (*) ornithology, including his *Catalogue of Birds*. This composer is best-known for a work that he wrote for violin, cello, clarinet, and piano during his imprisonment by German soldiers during WWII. For 10 points, name this French composer of the *Turangalila Symphony* and *Quartet for the End of Time*.

ANSWER: Olivier Messiaen

10. This thinker defined a rationalist as one who would “rather be unsuccessful in convincing another man by argument than successful in crushing him by force” in his address “Utopia and Violence.” Another book by this thinker ridicules the philosopher king as a “monument of human smallness” and lends its name to an institute founded by George Soros. In another book, this thinker pointed out that even if you count a ton of white (*) swans, that doesn't mean all swans are white, in demonstrating the limits to induction and instead championing the criteria of falsifiability. His masterwork was written in two volumes, the first being “The Spell of Plato.” For 10 points, name this Austrian philosopher of *The Logic of Scientific Discovery* and *The Open Society and Its Enemies*.

ANSWER: Sir Karl Raimund Popper

11. This complex was renovated through the Galiara Project. This building contains the severed head of a military leader who is said to have reattached it in the middle of a battle against Afghan soldiers. A political body called the Akal Takhat meets in one section of this structure, which is surrounded by a sarovar that is used for ritual ablution, known as the (*) Pool of Nectar. Over five hundred devotees were massacred in this building during Operation Blue Star, resulting in the 1984 assassination of Indira Gandhi by her bodyguards. For 10 points, name this temple in Amritsar, India, the holiest site of worship for Sikhs.

ANSWER: Golden Temple [or Harmandir Sahib; or Darbar Sahib]

12. One character in this opera imagines a marriage ceremony in an aria that is often transposed in performances from F major to E flat major. In one scene, Elisa is told of a ghost maiden that haunts a fountain and warns the title character of upcoming tragedy. Conflicts among the main characters in this

opera are heightened in the sextet “Chi mi frena,” after which the lead tenor takes the ring off of a woman who had recently signed a (*) marriage contract. This opera ends with the suicide of Edgardo, who was challenged to a duel at Wolf’s Crag castle by Enrico. Arturo is murdered by the title character of this opera, who sings “Il dolce suono” in its “mad scene.” For 10 points, name this Donizetti opera that takes its plot from a Sir Walter Scott novel.
ANSWER: Lucia di Lammermoor

13. The first history of this country was written by Dimitrie Cantemir, who reigned as ruler of one of this country’s predecessors. This country was briefly united by a man who triumphed over Ieremia Movila and Andrew Bathory before being assassinated by Giorgio Basta. This country’s foreign minister Ana Pauker opposed the construction of the “Death Canal” and was in turn opposed by the leader of the “prison faction,” who had helped oust its last king, (*) Michael I. Another leader of this country outlawed abortion and laid out his communist precepts in the July Theses before protests in Timisoara led to his televised trial and execution alongside his wife Elena on Christmas, 1989. For 10 points, name this European country once ruled by Nicolae Ceausescu.
ANSWER: Romania [or Rumania; prompt on “Moldavia” before the word “briefly”]

14. Some source material for this work is now unverifiable because of a manuscript that was lost in Calcutta. The narrator of this work is visited by “an angel shape/bearing a vessel on his shoulder.” In one section, this work criticizes religious thought by noting that the “revelations of devout” are “all but stories.” Readers of this work are exhorted to “take the cash, and let the credit go” and are informed that humans are “no other than a moving row/of (*) magic shadow-shapes that come and go.” This work’s praise of alcohol begins in its twelfth section, which in this work’s translation by Edward Fitzgerald requests “a jug of wine, a loaf of bread--and thou.” For 10 points, identify this collection of quatrains by Omar Khayyam.
ANSWER: Rubaiyat of Omar Khayyam

15. In one poem written in this language, the Greek gods escape to observe contemporary times, but go unnoticed. Another poet using this language described a “bursting forth/sign of glad departure” in his poem “Longing for Death,” which closes a set of six Romantic works. “Bread and Wine” and (*) *Hymns to the Night* were written in this language, as was a “thing-poem” describing “a thousand bars; and beyond the bars, no world” binding a panther. A legend inspired another poem written in this language, whose title character “combs her golden hair” and sings, leading an entranced boatsman to crash to his death. While a guest at a castle in Trieste, another poet using it began writing the *Duino Elegies*. For 10 points, name this language used by Rainer Maria Rilke.
ANSWER: German language

16. In this comic, a maid falls in love with a neighbor of the central family, only to have her heart broken once the man finds out her profession. At the beginning of this book, the protagonist reads Dialectic Materialism comics and has conversations with God at night. Siamak and Mohsen visit the protagonist’s house after being released from prison in this comic. At her school, the protagonist is forced to beat her chest in order to mourn her country’s (*) martyrs. In this comic, an Iron Maiden poster is smuggled in the shoulder of a coat and SCUD missile strikes on a home in the protagonist’s neighborhood force Marji’s parents to send her to Vienna at the end. For 10 points, name this comic book chronicling author Marjane Satrapi’s experience in the Iranian revolution.
ANSWER: Persepolis, Volume 1 [do not accept “Persepolis 2” or “Persepolis, Volume 2”]

17. A later inquiry proved that this experiment did not cause the lung cancer Jaegsiekte. This experiment was successful due to the quiescence brought about by nutrient deprivation. The same year that this experiment occurred, the scientific team behind it induced human factor IX expression in a major triumph for “pharming.” In true biological fashion, this experiment was named after a (*) busty celebrity because it involved a mammary gland cell undergoing somatic cell nuclear transfer by being shocked to stimulate division and then implanted in a surrogate mother. This experiment was carried out at the Roslin Institute by Keith Campbell and Ian Wilmut. For 10 points, name this 1997 experiment in which a domestic sheep was cloned from an adult cell.
ANSWER: the cloning of Dolly [accept anything along the lines of “Wilmut and Campbell’s Dolly experiment at the Roslin Institute”; prompt on Ian Wilmut; prompt on Keith Campbell; prompt on Roslin Institute; accept 6LL3]

18. In one painting by this artist, a nude woman puts on green stockings while part of one of his more famous paintings can be seen on the pink and blue wall. This artist painted a woman suspended from wires leaping besides a galloping white horse in another painting. This artist of *The Models* and *The (*) Circus* showed a boy

in a red cap waist-deep in water and a man wearing a bowler hat reclining behind a brown dog in another painting. This artist, who referred to his painting style as divisionism, painted a black dog looking at the ground to the left of a parasol-carrying woman holding a monkey on a leash in his most famous work. For 10 points, name the painter of *Bathers at Asnières* and *Sunday Afternoon on the Island of La Grande Jatte*, best known for developing pointillism.
ANSWER: Georges Pierre Seurat

19. This man published the "vote Tory" manifesto before retracting it when the Tories refused to cooperate. He distanced himself from the Plan of Campaign to head off any perceived association with the radical Michael Davitt. This man advocated the "New Departure" policy as a national movement. The shortcomings of the Land Act of (*) 1881 prompted him to join the opposition to William Gladstone, with whom he had negotiated the Kilmainham Agreement a year later. This man's reputation was tarnished by a forged letter in which he appeared to condone the Phoenix Park Murders and by the public outing of his affair with Kitty O'Shea. For 10 points, name this first president of the National Land League, an Irish nationalist who agitated for Home Rule.
ANSWER: Charles Stewart Parnell

20. One side in this war used its outbreak as an excuse to execute political prisoners in the Bodo League Massacre. An army in this war launched the Second Phase Offensive, resulting in the longest retreat in US military history, made possible due to the heroics of the Turkish Brigade. A long stalemate during this war included the bloody battles of Heartbreak Ridge and (*) Pork Chop Hill. Another theater of this war pitted the F-86 Sabre against the MiG-15 in airspace above the Yalu River. Peng Duhai led Chinese forces in this war, in which Douglas MacArthur ordered the landing at Inchon before being replaced by Matthew Ridgway. For 10 points, name this war fought between US-led UN forces against the northern part of a divided Asian peninsula.
ANSWER: Korean War

Tiebreakers

21. One character with this name was said to reside halfway up a seemingly endless cliff where a dark cloud always hovers. Another woman with this name was the daughter of Abrote, who fell in love with Minos and gave him the purple lock of hair belonging to her father Nisus. Heracles killed the former character before she was restored to life by her father. This character was once a (*) beautiful maiden who was loved by Glaucus, but a jealous Circe transformed her into her best-known form. This daughter of Phorcys was said to make the sound of barking dogs. This monster killed six of Odysseus' men when he sailed near the rocks where she lived. For 10 points, name this monster that resided in a body of water on the opposite side of Charybdis.
ANSWER: Scylla

22. This man's namesake commission issued a report that proposed limiting participation in some municipal elections on the basis of property ownership. John Bigelow wrote a biography of this man after managing his best-known political campaign. This man denied having sent the Cipher Dispatches and bequeathed four million dollars to a trust that helped establish the original New York City Public Library. This man ordered the indictment of the leaders of the (*) Canal Ring as Governor of New York and, on the behalf of the Committee of Seventy, busted Boss Tweed. For 10 points, name this man who won the popular vote in the 1876 presidential election, but was denied the presidency by an eight-to-seven vote of the Electoral Commission.
ANSWER: Samuel Jones Tilden

Bonuses

1. Answer the following about tin, for 10 points each.

[10] Though it is chemically very different, tin belongs to the group headed by this four-valence element, the basis of organic chemistry.

ANSWER: **carbon** [or **C**]

[10] In the Stille reaction, an organotin compound is coupled to an sp² hybridized compound bearing this functional group, whose acyl variety is particularly reactive. The alkyl variety can be formed from a free radical reaction.

ANSWER: **halide** [accept specific types like **chloride**, **bromide**, **iodide**; but do not accept or prompt on “halogen” or “chlorine” or “bromine” or “iodine”]

[10] Tin prefers to form the +2 ion because of this effect, in which post-transition metals do not share or yield their outer s block electrons.

ANSWER: **inert pair** effect

2. This album’s cover features the band gleefully feeding goats, which this question writer can assure you isn’t actually that fun. For 10 points each:

[10] Name this 1966 album whose tracks include “You Still Believe in Me” as well as a song in which the singer wishes “that every kiss was never ending,” titled “Wouldn’t It Be Nice.”

ANSWER: **Pet Sounds**

[10] *Pet Sounds* is an album by this American surf rock band headed by Brian Wilson, who wrote and produced most of their songs. They worked a Charles Manson song into their track “Never Learn Not to Love.”

ANSWER: The **Beach Boys**

[10] Around the same time as they released *Pet Sounds*, the Beach Boys released this single in which a woman gives the singer “the excitations.” This song refrains “you gotta keep lovin” the title pleasant aural phenomenon.

ANSWER: “**Good Vibrations**”

3. This thinker attempted to discourage his own society from imitating the title one in his *Considerations on the Causes of the Greatness of the Romans and of their Decline*. For 10 points each:

[10] Name this French philosopher and political theorist who called for the toleration of all religions whose adherents did not “embroil the state” or “raise disturbances among themselves” in his work *The Spirit of the Laws*.

ANSWER: Charles-Louis de Secondat, Baron de **Montesquieu**

[10] This English philosopher and author of *Two Treatises on Government* and *An Essay Concerning Human Understanding* had called for the toleration of all Protestant sects in his *Letters Concerning Toleration*.

ANSWER: John **Locke**

[10] The *Historical and Critical Dictionary* of this French Huguenot contemporary of Locke’s had been among the first works of the European Enlightenment to call for the toleration of atheists.

ANSWER: Pierre **Bayle**

4. Answer the following about literary works set in British schools, for 10 points each.

[10] This private school teacher works for Miss Mackay and falls in love with fellow teachers Hugh Carruthers and Teddy Lloyd. She loses her job when Sandy finds out that she is a fascist in her namesake novel.

ANSWER: Miss **Jean Brodie** [accept either underlined part; accept *The Prime of Miss Jean Brodie*]

[10] Thomas Gradgrind runs a school at Coketown that places a lot of emphasis on “the facts” in this shortest novel by Charles Dickens.

ANSWER: **Hard Times** – *For These Times*

[10] This Japanese-born British author described the budding romance between Tommy and Kathy in the Hailsham school for clones in *Never Let Me Go* and wrote about the butler Stevens in *The Remains of the Day*.

ANSWER: Kazuo **Ishiguro**

5. This thesis asserts that the U.S. Census of 1890 marked the disappearance of its central idea, which had been the wellspring of American freedom, idealism, and innovation. For 10 points each:

[10] Name this thesis whose formulator, Frederick Jackson Turner, originally put forth the idea in a paper titled after its significance in American history.

ANSWER: the **frontier** thesis

[10] K.A.R. Kennedy and G.F. Dales challenged this other thesis, which supposes that a group from Europe violently supplanted the pre-Vedic Dravidian civilizations in the Indus River Valley and drove them south.

ANSWER: **Arvan invasion** thesis [or **AIT**; prompt on partial answer; accept synonyms for "invasion"]

[10] This Marxist thesis, adapted from Hegel, presents history as a series of struggles between classes for control over the means of production, leading up to the dictatorship of the proletariat and the dissolution of the state.

ANSWER: **historical materialism** [or **dialectical materialism**; prompt on just "materialism"]

6. In this country, the preacher Antonio Conselheiro united thousands of downtrodden peasants in open revolt. For 10 points each:

[10] Name this country, whose "backlands" were the setting of the Canudos revolt, fictionalized in *The War at the End of the World*.

ANSWER: Federative Republic of **Brazil** [or Republica Federativa do **Brasil**]

[10] This Peruvian Nobel Laureate wrote *Aunt Julia and the Scriptwriter* and *The Feast of the Goat* besides penning *The War at the End of the World*.

ANSWER: Mario **Vargas** Llosa

[10] The journalist in the *The War at the End of the World* was based on this Brazilian reporter whose own account of the revolt at Canudos, *Rebellion in the Backlands*, was first published in 1902.

ANSWER: Euclides da **Cunha**

7. This novel's title refers to a film created by the protagonist's father, which is the targeted by Quebecois terrorists who hope to use it to prevent the annexation of a polluted New England into Canada. For 10 points:

[10] Name this novel ending in the "Year of Glad," whose protagonist, Hal Incandenza attends the Enfield Tennis Academy. Other settings in this novel include the Ennet House Drug and Alcohol Recovery House.

ANSWER: **Infinite Jest**

[10] *Infinite Jest* is the masterpiece of this late postmodern American author whose other works include the posthumously published *The Pale King* and the article "Federer as Religious Experience."

ANSWER: David Foster **Wallace**

[10] In this essay that Wallace first published in *Gourmet* magazine, the neurobiology of the title creature is detailed to highlight the fact it can feel pain, a subject that garnered controversy when it was published.

ANSWER: "**Consider the Lobster**"

8. This quantity is the difference in the electric potential between two points. For 10 points each:

[10] Name this quantity given by the product of current and resistance in Ohm's law.

ANSWER: **voltage** [or **electric tension**; or **electromotive force**; or **emf**; prompt on **electric potential difference**; prompt on **V**]

[10] By Gauss's law, the electric potential must satisfy this differential equation in electrostatics. It sets the Laplacian of the desired function equal to another function.

ANSWER: **Poisson**'s equation

[10] This technique can be used because of the uniqueness theorem for Poisson's equation. In it, charges are added to an electrostatics problem to enforce boundary conditions, usually taking advantage of symmetry.

ANSWER: method of **image charges** [or method of **images**]

9. Many of Rome's great sculptural works are the subject of superstition. For 10 points each:

[10] Multiple figures in this sculptor's *Fountain of the Four Rivers* purportedly react in disgust to a work across the street created by this sculptor's rival Borromini. This sculptor also designed *The Ecstasy of St. Teresa*.

ANSWER: Gian Lorenzo **Bernini**

[10] Superstition holds that visitors to Rome are guaranteed to return if they toss a coin into this fountain designed by Nicola Salvi. Anita Ekberg dances in this fountain in Federico Fellini's *La Dolce Vita*.

ANSWER: **Trevi** Fountain

[10] The set of stairs on which Christ stood before his crucifixion have been moved to this oldest Roman basilica.

Pilgrims are granted plenary indulgences for climbing those stairs on their knees.

ANSWER: Papal Archbasilica of St. John Lateran [or Lateran Church, or St. John Lateran's Archbasilica]

10. The top left inside wall of this building contains a series of frescos depicting the life of Joachim and Anna, opposite to a series showing the life of Mary. For 10 points each:

[10] Name this Paduan building which contains statues depicting the virtues and vices on opposite sides. Its many frescos depict the life of Jesus Christ, including the famous Kiss of Judas.

ANSWER: Scrovegni Chapel [or Arena Chapel]

[10] The Scrovegni Chapel was designed and painted by this early Renaissance artist, whose other works include the *Ognissanti Madonna*.

ANSWER: Giotto di Bondone

[10] The largest and last fresco in the Scrovegni Chapel is an illustration of this Biblical scene, in which souls are sent into heaven or hell. Another famous fresco of this scene was created by Michelangelo for the Sistine Chapel.

ANSWER: *The* Last Judgment [or *The* Final Judgment; be lenient with synonyms]

11. Answer some questions related to one of Europe's finest traditions, tribal migration, for 10 points each.

[10] The Anglo-Saxon migration and invasion of Britain was legendarily begun by two brothers belonging to the Jute tribe of Northern Europe. Name either.

ANSWER: Hengist or Horsa

[10] Another migration from the East that brought terror to Europe is that of the Magyars, whose expansion westward was finally halted by Otto the Great at this 955 battle.

ANSWER: Battle of Lechfeld [or Battle of Augsburg]

[10] Probably the most famous leader of a nomadic tribe that invaded Europe was this "Scourge of God" who demanded the Western Roman Empire as a dowry and was defeated at Chalons before dying from a bloody nose.

ANSWER: Attila the Hun

12. This novel's protagonist agrees to search for the engine of a shipping vessel in exchange for the right to marry Lethierry's niece, Deruchette. For 10 points each:

[10] Name this novel, in which Gilliatt fights an octopus and finds the engine, but later kills himself after helping Deruchette marry another man.

ANSWER: *The* Toilers of the Sea [or *Les* Travailleurs sur la mer]

[10] This author wrote about a slave who becomes prime minister through the failed machinations of Don Salluste in *Ruy Blas*. This author of *Toilers of the Sea* is better known for writing *The Hunchback of Notre Dame*.

ANSWER: Victor-Marie Hugo

[10] Hugo spent two decades working on his poetry collection *The Legend of the Ages*, which was hailed by this poet of "Invitation to a Voyage" and "The Albatross".

ANSWER: Charles Pierre Baudelaire

13. The second movement of this piece opens with a repeated eighth-eighth-dotted sixteenth-thirty second note motif, which is first played by the horns. For 10 points each:

[10] Name this symphony, which begins with descending major thirds and ascending minor sixths in the violins. Its fourth movement takes the form of a passacaglia whose theme is similar to that of Bach's *Cantata No. 150*.

ANSWER: Symphony No. 4 in *E minor*, *Op. 98* by Johannes Brahms [or Brahms's Fourth Symphony; prompt on Fourth Symphony]

[10] This other composition by Brahms was withheld from publishing for over 12 years, but gained its nickname of "Beethoven's Tenth" upon its premiere.

ANSWER: Symphony No. 1 in *C minor*, *Op. 68*

[10] Brahms wrote a famous type of this piece, which is often sung to children to help them fall asleep. *Berceuse* is a French term for this type of composition.

ANSWER: lullaby [or cradle song; or Wiegenlied: *Guten Abend, gute Nacht, Op. 49, No. 4*]

14. Name these personages from the American Revolution who fought in South Carolina, for 10 points each.

[10] This Scottish major and sniper did not shoot George Washington just before the Battle of Brandywine because he had his back turned. He later wrangled Loyalist forces in South Carolina and died at Kings Mountain.

ANSWER: Patrick Ferguson

[10] This winner of the Battle of Saratoga idiotically squandered his new command position in 1780 by ordering a frontal assault on a British fortification at Camden, matching an inexperienced militia against British Regulars.

ANSWER: Horatio Lloyd **Gates**

[10] This Patriot, known as the "Swamp Fox," became the adversary of the ruthless Banastre Tarleton. He specialized in guerrilla warfare and commanded Nathanael Greene's right wing at the Battle of Eutaw Springs.

ANSWER: Francis **Marion**

15. This book argues that "basic-level categories," such as hunger or houses, and "image schemas," like center-periphery and container, make up "preconceptual structures," which in turn mediate experiences. For 10 points each: [10] Name this George Lakoff book which argues that metaphor accounts for experiences not covered by preconceptual structures. It takes its title from three elements in the feminine noun class in the Dyirbal language.

ANSWER: ***Women, Fire, and Dangerous Things***

[10] In a review of Lakoff's book *Whose Freedom?*, this thinker took issue with Lakoff's metaphor-based model of cognition. This Harvard linguist himself wrote *Language and Instinct* and *The Blank Slate*.

ANSWER: Steven Arthur **Pinker**

[10] In a 1991 paper, Lakoff analyzed the metaphor-laden discourse of a policy decision to pursue this action, which Clausewitz called "the continuation of politics by other means." Sun Tzu wrote a treatise on the "art of" this subject.

ANSWER: **war**

16. The severity of this disease and the response to its treatment is evaluated with the DAS28 score. For 10 points each:

[10] Name this inflammatory disease, named for its similarity to a "fever" caused by *Streptococcus pyogenes* infection. Like the similar "reactive" and "psoriatic" maladies, it involves the buildup of synovial fluid in joints.

ANSWER: **rheumatoid arthritis** [or **RA**; prompt on **arthritis**]

[10] Rheumatoid arthritis is this kind of disease in which part of a body is mistaken for a foreign pathogen and attacked.

ANSWER: **autoimmune**

[10] Another approach to treating RA is to inhibit this cytokine, which promotes inflammation in such diseases as asthma, irritable bowel syndrome, or rheumatoid arthritis.

ANSWER: **TNF-alpha** [or **tumor necrosis factor-alpha**]

17. Eusebius claims that this figure tore down Diocletian's edict ordering the arrest of all Christian members of the Roman army. For 10 points each:

[10] Name this patron saint of England who converted a town of pagans after saving its king's daughter from a dragon.

ANSWER: St. **George** of Lydda

[10] In service of Pope Gregory I, this man converted Aethelbert of Kent to Christianity. This man conducted a massive Christmas Day conversion as the first Archbishop of Canterbury.

ANSWER: St. **Augustine** of Canterbury

[10] This saint appeared to Alfred the Great in a dream prior to his victory over the Danes. The Lindisfarne Gospels were produced to honor this patron saint of northern England.

ANSWER: St. **Cuthbert** of Durham

18. The battles of Winchester and Lincoln occurred during this period, which saw one party land at Arundel with a company of knights. For 10 points each:

[10] Name this period of strife following the death of William Adelin. It ended with the Treaty of Wallingford, which stipulated the accession of Stephen of Blois to the throne over the other major claimant, Empress Matilda.

ANSWER: The **Anarchy** [or **Nineteen Year Winter**]

[10] During the Anarchy, Matilda's husband Geoffrey V of this house subdued Normandy. This house became the namesake of an empire that encompassed large parts of Britain and France.

ANSWER: House of **Anjou** [or **Angevins**]

[10] The Treaty of Wallingford also provided for the eventual accession of Henry II of the Plantagenet line, which itself split into the feuding York and Lancaster factions during this 15th century war.

ANSWER: Wars of the **Roses**

19. This technique is particularly useful for dating igneous rocks, since the daughter nuclide largely escapes before the lava cools. For 10 points each:

[10] Name this form of radiometric dating that takes advantage of the inverse beta decay to the namesake noble gas.

ANSWER: potassium-argon dating [or K-Ar dating]

[10] Potassium-argon dating provided the first accurate dating of the reversals of this entity. The record of its reversals was used by Matthews and Vine as evidence for seafloor spreading.

ANSWER: the earth's magnetic field [or geomagnetic field; accept equivalents]

[10] This isotope of carbon used in radiocarbon dating is produced in the atmosphere by the bombardment of nitrogen by cosmic rays and has a half-life of 5,730 years.

ANSWER: carbon-14 [or C-14]

20. The Nile River features prominently in Ancient Egyptian myth. For 10 points each:

[10] This son of Geb and Nut was placed into a chest designed by Set that fit only him perfectly. He was then killed by Set, and the chest was sent floating down the Nile.

ANSWER: Osiris [there's way too many transliterations of his names to list, just accept any permutations of vowels as long as the consonants are in place]

[10] The god Hapi was said to represent the Nile, especially during its annual flooding. He also shares his name with one of four sons of Horus, who guarded these objects used in the mummification process.

ANSWER: canopic jars

[10] The Nile originated from this personification of watery, primeval chaos. The creator god Amun-Ra originated from here.

ANSWER: Nun [or Naunet]

21. This is the only island in the Sunda Island group with an existing native tiger population. For 10 points each:

[10] Name this island that is home to the rarest remaining species of rhinoceros, which are hairy and reddish-brown.

ANSWER: Sumatra

[10] Substantial deforestation on this island has affected its orangutan population, the largest in the world.

ANSWER: Borneo [or Kalimantan]

[10] This island's namesake "dragon", which uses its forked tongue to affect victims with poisonous saliva, is the largest lizard in the world.

ANSWER: Komodo