# PARFAIT III Round 12 

Berkeley<br>Juliana Froggatt, Andrew Lim, and Paul Lujan<br>November 17, 2007

## 1 Berkeley Tossups, Round 12

1. It was probably invented by Giacomo da Lentini, although it usually bears the name of another man. Sir Thomas Wyatt and Henry Howard were the first Englishmen to create their own. Milton's "On His Being Arrived to the Age of Twenty-three" and Wordsworth's "The World Is Too Much with Us" are two well-known British examples. These poems are marked by a turn, or "volta," in the ninth line and have an octave with the rhyme scheme abbaabba and a sestet with a variable rhyme scheme that never ends in a final couplet, unlike the Spenserian and Shakespearean forms. FTP, name this kind of sonnet, named for the fourteenth-century Italian poet who wrote about Laura.
Answer: Petrarchan sonnet (accept Italian sonnet before "Italian" is mentioned; prompt on "sonnet")
2. The three main experiments, the gas-exchange experiment, the labeled-release experiment, and the pyrolitic-release experiment each showed strong positive results, but the activity decreased with time, in contradiction to what would be expected from living organisms. This was also in contrast to the fact that the gas chromatograph and mass spectrometer showed no organic molecules in the soil down to the parts-per-billion level. This contradiction was eventually explained by the fact that the thinner atmosphere meant that more ultraviolet light reached the surface of Mars, causing the results seen by, for ten points, what pair of 1975 missions to seek life on Mars?
Answer: Viking (accept Viking 1 or Viking 2 before "pair" - they were pretty much identical except for landing point)
3. Her epithets include Atrytone, "the unwearying," Promachos, "the prefighter," and Tritogeneia, which appears in Hesiod's Theogony. Her most common Homeric epithet is Glaukopis, which refers to the quality and color of her eyes-gleaming and gray-and shares a root with the Greek for the animal with which she is most commonly associated. She was credited with inventing the chariot and was the judge at Orestes' trial for the murder of Clytemnestra. She holds the gorgoneion and is often portrayed with an owl. For ten points, name this Greek equivalent of Minerva, who sprang fully grown from her father Zeus's head.

## Answer: Athena

4. Frank Galati adapted "Honey Pie" and "Super Frog Saves Tokyo," two of this author's short stories from a 2000 collection, into a play with the same title, after the quake. His first book, 1979's Hear the Wind Sing, was inspired by a Yakult Swallows-Hiroshima Cacrp baseball game; it, Pinball, 1973, and A Wild Sheep Chase constitute his Trilogy of the Rat. His other works include the short stories "A Perfect Year for Kangaroos," "The Year of Spaghetti," and "Tony Takitani" and the novels South of the Border, West of the Sun, Sputnik Sweetheart, and Hard-Boiled Wonderland and the End of the World. For ten points, name this Japanese author of The Wind-up Bird Chronicle and Kafka on the Beach.
Answer: Haruki Murakami (or Murakami Haruki)
5. The Goldman-Hodgkin-Katz equation, or Goldman equation, can be considered a generalization of this equation to multiple species. It is completely correct only when the net current flow is zero; the Tafel equation can be used to calculate the overpotential in the case of current flow. It can be derived by using the fact that the change in Gibbs free energy is equal to Faraday's constant times the number of electrons transferred times the cell potential. Winning its creator the 1920 Nobel Prize, for ten points, what is this equation which gives the potential of an electrochemical cell?

## Answer: Nernst equation

6. Larry Cook is this character's equivalent in a book about incest and abuse narrated by Genny that won the 1992 Pulitzer. Even after semi-retiring, he "still would manage those authorities / That he hath given away," making one of the people to whom he has passed his responsibilities complain that "by day and night he wrongs me...I'll not endure it." Toward the end of the play, he cries, "And my poor fool is hang'd!" suggesting that his youngest daughter has followed him into exile, like the disguised Kent. For ten points, name this title character of a Shakespeare play who divides his kingdom between Regan and Goneril but not Cordelia.

## Answer: King Lear

7. Originating in a speech given by John Foster Dulles to the Council on Foreign Relations on January 12, 1954, it differed from the strategically symmetric policies embodied in NSC-68. Rather, it was was strategically asymmetric, and aimed to reconcile "strategic initiative...with budgetary restraint." Where the previous administration had tried to meet Communist expansion wherever it occurred, this policy attempted to exploit American strengths while limiting costs by means of a heavy reliance on nuclear weapons. For ten points, name this central tenet of the Eisenhower-Dulles "New Look," a phrase never actually used in Dulles's speech, which called for large-scale reprisal in response to any Soviet provocation.

## Answer: Massive retaliation

8. A scene from this poem cycle was reenacted in L.M. Montgomery's Anne of Green Gables, and a plaque at the Hanbury Arms in Caerleon, Wales, commemorates the fact that part of it was written there. In form, the first eleven are written in blank verse, while the last is an alexandrine; in spirit, they derive from the works of the same name by Theocritus. The series was written between 1842 and 1888 and dedicated to the late Prince Albert; a volume of this name was published in 1859 and included four of its books: "Enid," "Elaine," "Vivien," and "Guinevere." For ten points, name this Tennyson cycle that also follows the quest for the Holy Grail, based largely on Malory's Le Morte D'Arthur.

## Answer: The Idylls of the King

9. Vladimir Atlasov was the first Russian to explore this region, and established Cossack rule over the native Itelmen. In 1941, Tatiana Ustinova discovered its "Valley of Geysers", believed to be the only active geyser field in Eurasia. It was explored at the beginning of a 1733-1743 expedition by Vitus Bering, and two of his ships, the St. Peter and St. Paul, lent their name to the capital which he founded in 1740, Petropavlosk. The Kuril Islands run from its tip to Hokkaido, and it is separated from the mainland by the Sea of Okhotsk. For ten points, what is this name shared by a Russian territory and the
peninsula in the Russian Far East which it occupies?
Answer: Kamchatka
10. The Decree of Union at Florence in 1439 declared that Latins should continue to use azyma for this, while the Greeks would employ fermentum. One of its elements is vinum de vite, and because they used water, the ancient Hydroparastatæ, or Aquarians, were condemned as heretics. The "Missale Romanum: De defectibus" says that without panis triticeus, the "confection of the Sacrament does not take place"; this accords with the fact that it first appeared during Passover. Adolf Harnack argued that the ancient Church was more interested in the action of eating and drinking than in what was consumed, but, for ten points, the modern Church demands that what sacrament, the spiritual repast of the soul, be consecrated bread and wine?

## Answer: Eucharist (accept Holy Communion)

11. With Leo Szilard, he invented an eponymous refrigerator with no moving parts. He did not take interaction with neighbors into account when formulating his theory of heat capacity, so Debye fixed it to correctly agree with experiments at low temperatures. His summation convention automatically sums repeated indices in tensor products. His name is attached to the A and B coefficients for spontaneous and stimulated emission. He further developed the model of statistics sent to him by Bose to describe particles with integer spin. For ten points, who is this physicist best known for formulating the special and general theories of relativity?

## Answer: Albert Einstein

12. He first garnered international notice playing in the Swedish Elitserien for his hometown Vasteras, scoring 46 points in 101 games. In 1991, the year of his first NHL game, he helped Tre Kronor win the Ice Hockey World Championship, which, combined with eventual Olympic and Stanley Cup victories, entered him into the elite Triple Gold Club. Though his All-Star credentials were questioned in a 2006 attack ad made by supporters of Vancouver's Rory Fitzpatrick, he has amassed 1,004 NHL points, including a memorable 2002 playoff goal from center ice against a hapless Dan Cloutier. For ten points, name this defenseman, winner of five Norris Trophies and Steve Yzerman's successor as captain of the Detroit Red Wings.

## Answer: Nicklas Lidstrom

13. These were created after an assembly was sent to study the Solonian Constitution, and they were published on ivory or brass. The tenth deals with funeral regulations and states that no gold may be added to pyres, although the gold teeth of dead people may be burned with them. The fourth says that a son shall be free if his father sells him into slavery three times, and that clearly deformed children must be killed. A second decemvirate completed the last two in 449 BCE , one year after the first ten were drawn up in response to a proposal by Terentilius that plebeians should have access to the laws used against them by the patricians. For ten points, name this early Roman legal code of a dozen parts.

## Answer: The Law of the Twelve Tables or Twelve Tablets

## or Lex Duodecim Tabularum

14. He acceded to the throne under difficult circumstances, finding his country at war with Denmark, Poland, and Russia and facing a hostile aristocracy and a bankrupt treasury at home. He ended the Danish war by signing the unfavorable Treaty of Knared and suspended the Polish war with a series of truces, allowing him to prosecute the war against Russia to a successful conclusion with the Treaty of Stolbova. Domestically, he improved crown finances by attracting foreign investors like Louis de Geer and stabilized his grip on power by co-opting leading aristocrats like Axel Oxenstierna. For ten points, name this "Lion of the North," best known as a master strategist and tactician, the victor over Tilly at Breitenfeld who led Sweden into the Thirty Years' War.
Answer: Gustavus Adolphus [Adolf]
(Gustavus II of Sweden or Gusavus Adolphus [Adolf] the Great)
15. A 2004 Tor Ramsey-directed short is named for a conversation of this type. MerriamWebster's says this word is probably of Scandinavian origin and is possibly related to a similar word in Danish. In espionage, it refers to someone who offers to become a double agent to convince an agency, government, or other entity that he or she is willing to turn. In ice hockey, it's an alternative name for deke, a technique used to get past an opponent. In English, it is commonly used to descibe the first part of a sentence such as "Driving down the road, the radio was on." For ten points, name this word that describes a sentence part without a "normally expected syntactic relation to the rest of the sentence," usually a participle or a modifier.
Answer: dangling (accept dangle or other reasonable equivalent)
16. This painting faces one of a girl who died at twelve and was the aunt of Elizabeth Barrett Browning. This painting was said to be a response to an assertion by Joshua Reynolds, but it was completed eight years before the publication of the book in which Reynolds claimed that a "cold" color could not serve as the central mass in a good picture. Purchased for $\$ 750,000$ by the Huntington Collection and hung opposite Thomas Lawrence's Pinkie, this is, for ten points, what painting of Jonathan Buttall wearing clothes of a certain color, by Thomas Gainsborough?
Answer: The Blue Boy (accept Jonathan Buttall: The Blue Boy before he's mentioned)
17. The New Yorker's review said of this book that "even by [its author's] standards, the horrors here-an infant 'headless and gutted and blackening on the spit'-are extreme." A shopping cart with a motorcycle mirror is the protagonists' primary means of moving down the highway, while their essentials, like a gun with two bullets, meant for their suicides, are on their backs. In his review of this novel, Michael Chabon claimed that the author's earlier book "about a ruthless band of bounty hunters looking for Indian scalps in Texas in the 1850s can be read at least in part as a bloody pasquinade on the heroic literature of westward expansion." Blood Meridian appeared twenty-two years before, for ten points, what Pulitzer Prize winner and Oprah's Book Club choice about a father and son traveling south across a postapocalyptic United States, the latest by Cormac McCarthy?
Answer: The Road
18. In 1813, he issued the Decree of War to the Death, a response to the massacre of thousands of Republicans by the Spanish and an attempt to change the perception of the fight in which he was engaged from that of a civil war to that of a war between two countries. He called the constitutional convention of Ocaña in 1828 to save Gran Colombia, but his plan for centralization met with strong opposition, and his delegates left. When the convention failed, he issued the Organic Decree of Dictatorship; on September 25, 1828, he was the victim of an unsuccessful assassination attempt. For ten points, name this man who led the fight for independence in Latin America, including the country named after this libertador.

## Answer: Simón Bolívar

19. American forces consisting primarily of poorly disciplined militia confronted a formidable breastwork and earthwork defense at this battle, against which artillery proved thoroughly ineffective, but the tide turned when the appropriately named Whale, leading the Americans' Native allies, began canoeing across the river and circumventing the defenses. Soon the village of Tohopeka was aflame, American forces stormed the breastwork, and the Red Sticks were fleeing; "It was dark before we finished killing them," wrote the victorious Andrew Jackson. For ten points, name this battle, so called for the wide turn on the Tallapoosa River where it took place.
Answer: Battle of Horseshoe Bend
20. Their composer never called these pieces the name that they are given today, rather titling them by their dominating opening movements. Among the last works of an ancient genre deriving from courtly ceremonial music, they were inspired by a Lullyist form; Bach's innovation in these pieces was the extension of the opening movement from one dance among others into the Overture by which these pieces are also known. For ten points, give the collective name for these four works of Johann Sebastian Bach in the French baroque style, the second of which contains the flute showpiece Badinerie, and the third of which contains a famous Air.
Answer: Orchestral Suites (or BWV 1066-1069; prompt on "Overtures" before it is said. Note: Bach's Air is not the "Air on the G String," which properly titles a later adaptation.)
21. The Bertrand equilibrium is the only Nash equilibrium in this case for a constant marginal cost situation. In the Stackelberg model, the first mover has an advantage but the resulting equilibrium is not stable, whereas the namesake of its most common model first considered the problem as applied to two natural springs. In that model, the Cournot model, each firm acts as if the other's output is fixed in determining its output level. For ten points, what is this market situation where only two suppliers exist in a market?
Answer: duopoly

## 2 Berkeley Bonuses, Round 12

1. Answer these questions about love, for ten points each.

10 This Greek term, translated in Latin as caritas, originally referred to the love feast intended to promote Christian fellowship, and has come to mean brotherly or selfless love.
Answer: Agape
10 Affection, friendship, and eros joined agape to form the title quartet of The Four Loves, written by this author of The Screwtape Letters.
Answer: Clive Staples Lewis
10 This philosopher defined love as a struggle for power-"in its means, war; at bottom, the deadly hatred of the sexes"-in the chapter "Why I Write Such Good Books" in his Ecce Homo.

## Answer: Friedrich Wilhelm Nietzsche

2. While the Oakland Raiders continue trading away marquee players and begging their draft picks to play for them, answer these questions about the Denver Broncos' 2007 off-season acquisitions, for ten points each.

10 This Tennessee product, who spent the last six years with the Bills and Titans, is expected to become the Broncos' latest starting running back. His nickname is Cheese.

## Answer: Travis Henry

10 Considered an elite blocker, this former Patriots tight end is coming home, having grown up in Denver and attended the University of Colorado. He won the 2001 John Mackey award after his senior season in Boulder.

## Answer: Daniel Graham

10 This 2007 fourth-round draft pick played defensive tackle for the University of Florida until he was kicked off the team for violating the terms of his reinstatement following a drug suspension. Still, you don't meet many 300 -pound men who can do a standing backflip.
Answer: Marcus Thomas
3. Given a functional group, give the name of the benzene derivative that results from substituting one of that group onto a benzene ring for ten points each.

10 Methyl
Answer: toluene (prompt on "methylbenzene")
10 Hydroxyl
Answer: phenol (prompt on "phenyl alcohol")

10 Vinyl
Answer: styrene
(forget prompting; just slap upside the head anyone who says "vinyl benzene", "ethenylbenzene", "phenethylene", or "phenylethene")
4. Answer the following questions about the Calvin cycle for ten points each.

10 This large, complex molecule, believed to be the most abundant protein on earth, catalyzes the first step of carbon fixation.
Answer: Rubisco
(or "ribulose-1,5-bisphosphate carboxylase/oxygenase")
10 At high temperatures, Rubisco will react with oxygen instead of carbon dioxide, producing this wasteful process.
Answer: photorespiration
10 C 4 plants, such as sugarcane and maize, minimize photorespiration by first fixing CO2 using this enzyme and then carrying it to the bundle sheath cells where CO2 concentrations are low.

## Answer: PEP carboxylase (or phosphoenolpyruvate carboxylase)

5. Name the following Supreme Court cases given descriptions, for ten points each.

10 This 1819 case dealt with the application of the contract clause of the constitution to an ivy-league school.
Answer: Dartmouth v. Woodward
10 Best known for Douglas's majority opinion stating that the right to privacy was to be found in the "penumbras and emanations" of other Constitutional protections, this 1965 ruling struck down a state law prohibiting the use of contraceptives.
Answer: Griswold v. Connecticut
10 Following its decision in Baker v. Carr that questions of redistricting were justiciable, this 1964 case found that state legislative districting had to follow the principle of "one man, one vote."
Answer: Reynolds v. Sims
6. Given some artists, name the school or movement with which they are associated, for ten points each.

10 Benvenuto Cellini, Jacopo da Pontormo, Angelo Bronzino, Parmagianino
Answer: Mannerism (accept mannerist)
10 Alice Bailly, Maurice de Vlaminck, Raoul Dufy, Henri Matisse
Answer: Fauvism (accept Les Fauves or Fauvist or the Wild Beasts)
10 Hishikawa Moronobu, Yoshitoshi, Hiroshige, Hokusai
Answer: Ukiyo-e (accept pictures of the floating world)
7. Identify these digital circuit elements for ten points each.

10 This gate will output 1 if one and only one of its inputs has a value of 1 .
Answer: XOR or exclusive OR (do not accept or prompt on simply "or")

10 This handy device, in its most commonly used form, D, will take in input at every rising clock edge and hold it on the output until the next rising clock edge.
Answer: flip-flop
10 This structure can be made from a series of D-type flip-flops connected together. Every time a clock signal arrives, the data moves one unit down the chain, hence the name.
Answer: shift register
8. Given a war and its final year, name the treaty that ended it, for ten points each.

10 Sino-Japanese War, 1895
Answer: Treaty of Shimonoseki (accept Treaty of Maguan)
10 War of 1812
Answer: Treaty of Ghent
10 Russo-Turkish War, 1829
Answer: Peace Treaty of Adrianople (accept Treaty of Edirne)
9. Given the date on which a holiday falls, name it, for ten points each.

10 First of Tishri
Answer: Rosh Hashanah
10 Amavasya of Kartik
Answer: Dewali (or Divali or Diwali)
10 Tenth of Muharram
Answer: Ashura
10. In A Dance to the Music of Time, Moreland says, "I was thinking the other day one might make an anthology of the banker poets." Given some of their works, name the ones he mentions, for ten points each.

10"The Cremation of Sam McGee,""The Shooting of Dan McGrew"
Answer: Robert William Service
10 Alcools, Calligrammes, The Breasts of Tiresias
Answer: Guillaume Apollinaire (or Guillelmus [Wilhelm] Apollinaris de Kostrowitzky)
10 Old Possum's Book of Practical Cats, The Four Quartets, "The Love Song of J. Alfred Prufrock"
Answer: Thomas Stearns Eliot
11. Name these pieces by Jean Sibelius, for ten points each.

10 This symphonic poem, perhaps Sibelius's best-known work, was a rallying cry for Finnish independence and often subject to censorship by Russian authorities. Answer: Finlandia

10 It was going to bhe the prelude to The Building of the Boat, but stands alone as a tone poem about the titular beast circling the isle of the dead.
Answer: Swan of Tuonela or Tuonelan joutsen
10 Among Sibelius's last major works is this implacably modern tone poem, a musical characterization of the ominous Finnish forest god.

## Answer: Tapiola

12. Name the hero from information about his parents, for ten points each.

10 This hero's father, Anchises, was made lame for bragging about his tryst with Aphrodite, so his son later had to carry him out of Troy.
Answer: Aeneas
10 This hero's mother, Deichtine, was impregnated by the god Lugh and gave birth to a hero who took his name after filling in for a guard dog he had killed.

## Answer: Cúchulainn <br> (or Hound of Culann or Cú Chulaind; accept Setanta)

10 This hero was the son of King Dasaratha and his wife Kousalya.
Answer: Rama (or Ramachandra; accept Maryada Purushottama or the Perfect Man)
13. Name these events from the reign of Louis XIV, for ten points each.

10 These rebellions of the nobility against Louis while he was in his minority stretched from the end of the Thirty Years' War until 1653.

## Answer: The Frondes

10 Begun in 1667 over the succession to the rulership of the Spanish Netherlands, this war ended the next year with the Treaty of Aix-la-Chappelle after English and Swedish forces came to the aid of the Dutch provinces.
Answer: War of Devolution
10 Louis revoked the Edict of Nantes in 1685, prompting a Huguenot exodus. Name the edict that he issued in its place.
Answer: Edict of Fontainebleu
14. Answer these questions about a 1937 American novella, for ten points each.

10 This book's author was going to call it "Something That Happened" before he read the Robert Burns poem that notes how "the best-laid schemes...gang aft agley." Answer: Of Mice and Men

10 This large man looks forward to the day when he can tend rabbits on a farm with George, but it's likely he would have accidentally done them great harm, as he did to Curley's wife.

## Answer: Lennie Small (accept either name)

10 Name either the man who lost a hand in an accident and who owns an old, smelly dog or the jerk line skinner and center of moral authority in the book who decides on the dog's mercy killing and later consoles George after Lennie's death.
Answer: Candy or Slim
15. Answer the following potpourri about electrostatics for ten points each.

10 For a dipole, the electric field falls off with the distance from the dipole to this power.
Answer: cube or third power or just $\underline{3}$ (it's okay if they say "inverse" or -3)

10 In contrast, for two point charges, this law says that the force falls off as a inverse square proportional to the charges.

## Answer: Coulomb's law

10 This is a material with a permanent electric field. It is the electrical analogue of a permanent magnet.
Answer: electret
16. Given a title character and the person who created them, name the book in which they appear and whose title describes them, for ten points each.

10 John Harmon, Charles Dickens
Answer: Our Mutual Friend
10 Henry Morton, Walter Scott
Answer: Old Mortality
10 Anne Catherick, Wilkie Collins
Answer: The Woman in White
17. Given a fleet commander and battle, name his flagship, none of which are The Executor or Home One. for ten points each.

10 Admiral Horatio Lord Nelson, Trafalgar
Answer: HMS Victory
10 Admiral Reinhard Scheer, Jutland
Answer: SMS Friedrich der Grosse (SMS Frederick the Great)
10 Admiral Frank Fletcher, Midway
Answer: USS Yorktown
18. Name these works of Frank Lloyd Wright, for ten points each.

10 The facade of this hotel now resides in a museum near Nagoya, the rest of it having been demolished in 1976. It is perhaps most famous for surviving a 1923 earthquake that leveled much of the rest of the Tokyo.
Answer: Imperial Hotel
10 This office building in Buffalo was notably modern at the time of its construction in 1904, and its iconic, skylit atrium is an architectural landmark, but it was demolished in 1950.

## Answer: Larkin Administration Building

10 This Racine, Wisconsin, building still stands, and it is best known for its Great Workroom, with its downward-tapering columns extending up toward "lily pads" joined to the ceiling.

## Answer: Johnson Wax Building

19. Given some plays, name their author, for ten points each.

10 Boseman and Lena, The Road to Mecca, The Blood Knot
Answer: (Harold) Athol (Lannigan) Fugard
10 Yotsugi Soga, The Battles of Coxinga, The Love Suicides at Amijima
Answer: Chikamatsu Monzaemon (accept Sugimori Nobumori, his original name)

10 Pygmalion, Major Barbara, St. Joan
Answer: George Bernard Shaw
20. Name these international-relations theorists, for ten points each.

10 A professor of political science at the University of Chicago known as an offensive realist, he gave the term new meaning when he coauthored a controversial paper with Harvard professor Stephen Walt decrying the influence of the so-called Israel lobby on US foreign policy.
Answer: John J. Mearsheimer
10 This Harvard professor, a leading liberal theorist, is best known for his emphasis on soft power as "the means to success in world politics," as he writes in his book Soft Power: The Means to Success in World Politics.
Answer: Joseph S. Nye Jr.
10 Currently at Columbia, this father of structural realism was a Berkeley professor when he wrote his seminal works, Man, the State, and War and Theory of International Politics. More recently, he has argued in favor of nuclear proliferation, believing that the deterrent effect of nuclear weapons will promote peace.
Answer: Kenneth N. Waltz

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