

PARFAIT Round 11

Princeton
Lenny, Jordan, and Clay

December 5, 2005

1 Princeton Tossups, Round 11

1. He ordered Antonio Pérez to have Juan de Escobedo, the retainer of Mendoza, killed. Juan was the emissary of this man's half brother and governor-general of the Netherlands, John of Austria, who asked for help with the rebellion. Because his mother was Portugese, upon the death of Sebastian at Alcazarquivir in 1580, he became king of Portugal. Major setbacks during his reign were the Peace of Vervins, recognizing Henry IV, and the 1588 destruction of the Spanish armada. For ten points, name this king of Spain, the son of Charles V.

Answer: Philip II or Felipe II de Habsburg

2. He became an advocate for judicial reform after being forced into a three-year exile by a *lettre de cachet* issued at the behest of a young nobleman whom he had challenged to a duel. Soon after returning to Paris, he was again forced to flee to the Chateau Cirey in Lorraine after his *English Letters*, praising religious and political freedom, were publicly condemned. In the 1740s, he gained fame for his plays *Merope* and *Mahomet*, and befriended Madame de Pompadour who introduced him to the French court. His *Dictionnaire Philosophique* attacked the religious establishment and championed Deism, but, for ten points, what French Enlightenment philosopher is most famous for his satire of Leibnitz as Dr. Pangloss in *Candide*?

Answer: Voltaire or Francois-Marie Arouet

3. Sir Francis Drake named this island group when he landed there in 1586, and it officially became a British territory under the 1670 Treaty of Madrid. A pineapple on its coat of arms represents its historical connection with Jamaica, but it decided to remain a territory when Jamaica declared independence from the UK in 1962. Except for the "Bluff" which rises to 140 feet on the Brac Island, all three islands are flat and most of the population resides on the Grand Island which is also the site of the capital, George Town. With the highest standard of living in the Caribbean, this is, for ten points, what island group, best-known as a tax haven and offshore banking hub?

Answer: Cayman Islands or Caymans

4. George Wallace once claimed that this judge "doesn't have enough brains to try a chicken thief in my home county." He wrote that "legislators represent people, not trees or acres" in his opinion in *Reynolds v. Sims*, and it was rumored that he was given his position in exchange for supporting Eisenhower in 1952. Ike later said it was "the biggest damn fool mistake I've ever made in my life" to nominate this California governor to the Supreme Court. Signs and bumper stickers throughout the South urged the impeachment of, for ten points, what Chief Justice who wrote the decision in *Brown v. Board of Education*?

Answer: Earl Warren

5. The composer arranged three orchestral suites from this work, of which the five-movement 1919 version is the most frequently played. In the second movement of the 1919 suite, the hero witnesses a *Khorovod* or "round dance" of 13 women with whom he falls in love. Their evil master, Kaschei the Immortal, refuses to let the hero marry one of them, so Prince Ivan uses a feather to summon a magical creature he had captured in Kaschei's

palace garden during the first movement. This titular creature bewitches Katschei and his servants into doing the *Infernal Dance*. Ivan proceeds to kill them and free the princesses in, for ten points, what Igor Stravinsky ballet?

Answer: The Firebird or L'Oiseau de feu or Zhar-Ptitsa

6. He ruled over the age when men were turned into dogs, turkeys, and butterflies called the Naui quiahuitl. One of his minions is a dog with a monkey's paw attached at the end of its tail, Ahuizotl [ah-HWEE-zoht-l], who cries like an infant to lure fishermen and washing women to the banks of a river and then grabs them. The analog of Cocijo and Chac of the Zapotec and Mayan mythologies, respectively, his consort is Chalchiuhtlicue, the goddess of marriage and standing water, and his kingdom receives those killed by dropsy, thunderbolts, and drowning. For ten points, name this Aztec god of rain.

Answer: Tláloc

7. He has written books for children, such as "The Bomb and the General" and "The Three Astronauts," while his philosophical works include "Six Walks in the Fictional Woods" and "The Middle Ages of James Joyce." His birth in the Piedmont region of Italy is shared by his character Jacopo Belbo, while Sean Connery played William of Baskerville, the protagonist of his best-known novel, in a movie adaption. For ten points, who is this professor of semiotics whose more recent novels *Baudolino* and *The Island of the Day Before* have not received as much acclaim as *Foucault's Pendulum* and *The Name of the Rose*?

Answer: Umberto Eco

8. The availability of Rap1p binding sites negatively regulates the growth of it via a carboxyl terminus, while Takyrase adds poly ADP-ribose to its repeat factor 1, perhaps signaling that these structures must grow. In humans, they are composed of repeats of TTAGGG segments of between three and twenty kilobases, and decreased via erosion by 25-200 base pairs with each cell division until extended in germ and cancer cells. When they become too short in somatic cells, the cell dies. For ten points, name this extra genetic information at the end of chromosomes that is extended, when needed, by telomerase.

Answer: telomeres

9. Her characters include a woman born in the slit-open carcass of a caribou who must choose between Bayard and Ross in a novel written as propaganda to ensure Alaska became a state, *Ice Palace*. Another of her books romanticizes Oklahoma, the new home of Yancey and Sabra Cravat, and RKO paid a record \$125,000 for the movie rights to *Cimarron*, which later won the best picture award. She also wrote the novel featuring romance on the *Cotton Blossom* between Magnolia and Gayloard, which Hammerstein and Kern made into a musical also called *Showboat*. For ten points, name this author whose story of a female truck gardener, *So Big*, won the Pulitzer Prize.

Answer: Edna Ferber

10. 2003 results from the WMAP study of the cosmic microwave background constrain its equation of state parameter w to be less than -0.78. In the quintessence theory, it is postulated to be a scalar field, and both its density and w , the ratio of pressure to density, can vary in space and time. A major question in modern cosmology is why we

live in the epoch where its relative energy density, denoted ω_λ , is of the same order as that of matter. For ten points, what is this component of the universe, which reduces when $w = -1$ to Einstein's cosmological constant, that causes an acceleration of the universe's expansion due to its negative pressure?

Answer: Dark Energy (do not accept or prompt on "cosmological constant")

11. She gets a call from a roadie with the bad Hot Tears, whose lead singer, Luther, is played by Mark Kozelek, who was also a part of the fictional band *Stillwater* in *Almost Famous*. That call is to apologize for objectifying her, but she doesn't seem to have a problem with a symbolic logician buying her off with an Armani dress, a trip to New York, paying off \$39,000 in student loans, or \$500 gloves from her counter at Sak's Fifth Avenue. Steve Martin wrote the book and plays Ray Porter, the older love interest of the title character, played by Claire Danes, in for ten points, what 2005 movie that takes its title from Mirabelle's position in a department store?

Answer: Shopgirl or early Mirabelle Butterfield

12. Secret communication codes of this character include coughing a single "grain of cough" and pinning a rose to her head-dress. When her husband tries to put in a good word for her intended victims, she responds "Tell the Wind and the Fire where to stop; not me!" She describes her main pastime as a hobby to the Englishman spy John Barsad, but foreshadows its more sinister nature with her talk of shrouds. Called "the wife of Lucifer" by Miss Pross who kills her at the end of the novel, she vows vengeance for the carnage inflicted on her family by the Marquis St. Evremonde. For ten points, what ruthless wife of a Paris wine-shop keeper in Dickens *A Tale of Two Cities* keeps the registry of traitors in her knittings?

Answer: Madame Therese Defarge

13. Reubens's depiction of him has three stars in the dusky background and him holding a scythe in one arm as he balances something in his other arm. In both this depiction and the better known one he is nude, although Ruebens places a blue cloth beneath his meal. He is on his knees, with wild eyes toward the viewer and an arm in his mouth in the Goya version, while he is merely nibbling at the chest in the Reubens version. For ten points, both Reubens and Goya depicted what God devouring his children?

Answer: Saturn, grudgingly accept, with gnashing of teeth, Kronos

14. It and a woman's breast come and go in the mind of the narrator, overcoming him with an impotent sense of joy; he is thinking about it so much that he refuses the breast of a flower arranger who was having an affair with Kashiwagi. The character based on Hayashi Yoken once saw a soldier drink from a woman's breast and felt himself transform into a small tiny insect when he masturbated and visualized Ukio's breast. A fly happens to settle on Mariko's breast, and the narrator realizes that they are human and impure, and will never transform into the structure whose beauty seeps "into the woden doors, under the roof with its peeling gold foil." Yet because he hates what is beautiful, Mizoguchi must destroy, for ten points, what structure in a work by Yukio Mishima?

Answer: The Temple of the Golden Pavillion or Kinkakuji

15. Ma Yüan-i was tied to two carts and dismembered for his role in it, and Liu Tao and Yang Zu advised Ling₂ Di₄ to issue an order requiring all vagrants to return home, made difficult by the floods of the previous year. It was led by Zhang₁ Jiao₃ in the east, who believed that their ideology would replace the Han, symbolized by the “earth” and the color red. Advocating an extreme Taoist philosophy of egalitarianism and bringing over 300,000 fighters against the government and wealthy landlords until suppressed by Cao₂ Cao₁ [tsow tsow], it is the opening event in “The Romance of the Three Kingdoms.” For ten points, give this rebellion against the Han dynasty, named for the rebels’ headgear.

Answer: Yellow Turban rebellion (or Yellow Scarves rebellion)

or Huang₂ Jin₁ Zhi₁ Luan₄

16. *Studiengesellschaft Kohle mbH v. Eastman Kodak* hinged on the use of different salts of this element, whose trichloride is still used as a catalyst for the production of isotactic polypropylene. After being exposed to chlorine, coke, extreme heat, and sodium as a reducing agent, the Hunter process produces it from its ore, rutile. A more cost-effective method, the Kroll process, uses magnesium to create pigments, machine parts, and sky-writing material. For ten points, name this Group IVb element named by Klaproth after the children of Uranus and Gaia.

Answer: Titanium

17. If given a set of n possible events, it’s formulator conceived four constraints for its definition: it should be continuous in the probabilities, that is, if all the probabilities are equal then it should be an increasing function of n , and if broken down into two successive choices, it should be the weighted sum of the individual values. The only satisfying definition is the negative sum of the individual probabilities times the logarithm of the probability, which its formulator, Claude Shannon, noticed was equivalent to Boltzmann’s definition of the concept in statistical mechanics. For ten points, name this measure of the complexity of a communication channel symbolized by a capital H proposed in 1948’s *A Mathematical Theory of Communication*.

Answer: informational entropy

18. *Castle Rock v. Carol Publishing* determined that the SAT did not qualify as this. *Dr. Seuss v. Penguin Books* determined that *The Cat is NOT in the Hat* is not, because like the sculpture at the heart of *Rogers v. Koons*, the final product is a copy and does not make a connection at the level of “substance and content” present in *Leibovitz v. Paramount’s* decision to allow a picture of a Leslie Nielsen in an ad for *Naken Gun 33 1/3*. The *Acuff-Rose* decision is the canonical case for placing works like 2-Live-Crew’s song *Pretty Woman* with a “joinder of reference and ridicule” in fair use for transformative works. For ten points, name this term for a work that makes fun of another work to make a philosophical point.

Answer: parody (prompt on “satire”)

19. The head of this faith’s 3,000 practitioners in Iraq is Sleiman. Among the adherents of this religion was Omura Sumitada, who lost Nagasaki to the Shimazu clan, and King Dharmapāla, who was the first Sinhalese ruler to adhere to this religion. Literary figures of this religion include Shusaku Endo, who converted after visiting a museum dedicated to the Kokura, Alice Thomas Ellis, who was refused reentry into a religious order after

receiving treatment for a slipped disc, and the author of *Essay on the Development of Christian Doctrine*, John Henry Newman, whose name is often attached to college organizations of adherents. For ten points, name this religion of Al Smith, John F. Kennedy, and Benedict XVI.

Answer: Roman/Latin Catholic Church (prompt on “christian”)

20. Although a treaty brought hostilities in this conflict to a close, it wasn't until ten years later that a large force led by William Bainbridge allowed the United States to sign a treaty eliminating the root cause of this war “in perpetuity.” Its heroes were U.S. consul William Eaton and “Preble's boys” whose exploits included the burning of the captured *USS Philadelphia* and the battle of Derna memorialized in the Marine Corps Hymn. Showing that the U.S. could competently execute a war away from home, this was, for ten points, what 1801 to 1805 conflict mainly consisting of a series of skirmishes in the Mediterranean Sea over tribute to North African corsairs?

Answer: First Barbary War or Tripolitan War

2 Princeton Bonuses, Round 11

1. He can't help but bring up how Lady Astor complimented Darlington's silver. For ten points each. . .

10 Who is this is this English butler?

Answer: Stevens

10 Stevens is the central character in what Kazuo Ishiguro novel?

Answer: The Remains of the Day

10 Stevens can't help but believe that "the state of the silver made a small, but significant contribution towards the easing of relations between Lord Halifax" and what houseguest?

Answer: Joachim von Ribbentrop

2. In Soviet Russia, Simpsons watches you! Answer the following about the Simpsons and Russia for ten points each.

10 Bart opens an essay claiming that this work is about a Russian farmer and his tool.

Answer: Ivanhoe

10 Moe bars Homer from driving when he scores this on the breathalyzer, right after Stinkin', Soused, and Topsy.

Answer: Boris Yeltsin (accept either name)

10 A sturgeon from it destroys Our Favorite Family's car, and Homer backs into it while piloting the *CORVAIR*.

Answer: MIR

3. Answer the following about the lack of hair for ten points each.

10 From the Greek for fox, this is a disorder where an individual has no hair whatsoever.

Answer: alopecia

10 A connection has been made between benign prostatic hyperplasia and male pattern baldness, which both have a large number of CAG repeats in the receptor for this hormone.

Answer: testosterone or androgen

10 When the number of CAG repeats become obscene, it can cause this degeneration of the basal ganglia.

Answer: Huntington's chorea

4. Given a work that features a translator, give the author for the stated number of points.

5 Don Quixote, hosted by Don Antonio in Barcelona, asks the translator of *La Bagatelle* about the book publishing business.

Answer: Miguel Cervantes

10 The narrator of the story *The Greek Interpreter* meets his friend's brother, Mycroft, who enlists Inspector Gregson in tracking Harold Latimer, who had abducted a wealthy Greek woman.

Answer: Arthur Conan Doyle

15 In the title short story of the collection *The Interpreter of Maladies*, Mrs. Das confesses about the birth of her second son to Mr. Kapasi.

Answer: Jhumpa Lahiri

5. Boy, Wikipedia sure makes it easy to write same-day bonuses, doesn't it? Answer the following about the military history of April 7, ten points each:

10 April 7, 1862 was the second and final day of this battle, in which Ulysses Grant, despite having been caught unawares the day before, defeated Albert Sidney Johnston thanks to the timely reinforcements of Buell's Army of the Ohio; the battle also saw Johnston's death.

Answer: Battle of Shiloh

10 April 7, 1945 saw the sinking of this Japanese battleship, sister ship of the Musashi, while en route to Okinawa.

Answer: Yamato

10 On April 7, 1967, Israeli fighter planes defending some tractors shot down six Syrian MiGs and overflew Damascus as part of the lead-up to this war.

Answer: Six-Day War (or Six Days' War, 1967 Arab-Israeli War, or June War)

6. Even in Physics, good things come in three. Answer the following about famous physics papers with three authors:

15 First, give the three authors of the "alphabetical" 1948 paper positing that helium and all heavier elements were created by neutron capture at the time of the Big Bang, five points each:

Answer: Ralph Alpher, Hans Bethe, George Gamow

15 Second, for five points each give the three authors of the 1935 paper which tried to show that quantum mechanics could not be a complete description of physical reality, and proposed a theory of "hidden variables" to complete it.

Answer: Albert Einstein, Boris Podolsky, Nathan Rosen

7. For ten points each, answer some questions about a certain type of financial derivative.

10 Used primarily to hedge against market declines, these options pay off when the price of the underlying stock is lower than the option's strike price.

Answer: put options or puts

10 The value of put options can be determined by using put-call parity and this valuation formula named after two economists.

Answer: Black-Scholes formula

- 10 The Black-Scholes derivation uses this lemma to calculate derivatives via a chain rule for stochastic functions.

Answer: Ito's Lemma

8. For ten points each, identify these ancient historians.

- 10 Cicero called this man from Halicarnassus the "Father of History" for his writings about the Greco-Persian Wars.

Answer: Herodotus

- 10 This Ptolemaic historian's *A History of Egypt* was the first account to classify pharaohs into dynasties.

Answer: Manetho

- 10 He was captured by Vespasian and accompanied Titus to Jerusalem in 70 AD where he witnessed the fall of the Second Temple. He later wrote about this in his *Bellum Judaicum*, and also wrote the twenty-one volume *Antiquities of the Jews*.

Answer: Josephus Flavius

9. For ten points each, identify some Revolutionary War battles in which George Washington was able to snatch victory from the jaws of defeat.

- 10 One week after winning at Trenton, Washington surprised and defeated 1400 British troops under the command of Lieutenant Colonel Charles Mawhood at this battle, where the British allegedly surrendered after a cannon decapitated a portrait of George III.

Answer: Battle of Princeton

- 10 After General Charles Lee ordered a retreat, Washington rallied his troops and was able to achieve a stalemate at this 1778 battle, also known for the legend of Molly Pitcher.

Answer: Battle of Monmouth

- 10 Washington's most famous victory came after he surrounded Cornwallis in 1781 at this Virginia site.

Answer: Yorktown

10. Identify these things related to that drugged-out 60s group, the Merry Pranksters, ten points each:

- 10 The Pranksters were led by this novelist of "Demon Box" and "Sometimes a Great Notion."

Answer: Ken Kesey

- 10 The Pranksters gave this name to their parties, which would typically include hallucinogenic substances and music by the Grateful Dead; Tom Wolfe later wrote a book about them.

Answer: acid tests (accept The Electric Kool-Aid Acid Test prompt on "happenings")

- 10 This was the name of the Pranksters' bus, which did indeed get them as "far" as Woodstock and Mexico.
Answer: Furthur
11. For the stated number of points, answer some questions about the 1966 "non-fiction novel," *In Cold Blood*.
- 5,5 For five points each, the Clutter family were murdered during a robbery in what town and in what U.S. state?
Answer: Holcomb, Kansas
- 5 or 15 Five for one or fifteen for both, name the two ex-cons who committed the crimes recounted in the book.
Answer: Richard Hickock and Perry Smith
- 5 For five points, what author of *Breakfast at Tiffany's* also wrote *In Cold Blood*?
Answer: Truman Capote (or Truman Streckfus Persons)
12. Her father, Orazio, brought a suit against her teacher, Tassi, who stood accused of raping her. For ten points each...
- 10 First, name this renaissance painter of *Self Portrait as the Allegory of Painting*.
Answer: Artemisia Gentileschi
- 10 That trial was just before she painted her best known work of this female decapitator from Bethulia, inspired by a more timid version by Caravaggio.
Answer: Judith beheading Holofernes or Giuditta e Oloferne
- 10 Appropriately enough, Artemisia was court painter to this king who also ended up losing his head.
Answer: Charles I Stuart
13. It has been called Afars and the Issas and French Somaliland before getting its current name. For ten points each...
- 10 First, name this African nation.
Answer: Republic of Djibouti
- 10 The Bab el Mandeb connects the Red Sea to this Gulf that lies off of Djibouti.
Answer: Gulf of Aden [AH-dahn]
- 10 An extension of sea-floor spreading zone in the Gulf of Aden, this gulf that juts into Djibouti also names the second largest province of the nation.
Answer: Tadjoura
14. Answer the following about the work of Lars Onsager for ten points each.
- 10 His first achievement was to modify the Debye-Hückel theory governing these solutions that contain ions.
Answer: electrolytes

- 10 That modification was to apply this model of random fluctuation of particles in a fluid named for a Scottish botanist.
Answer: Brownian Motion
- 10 In 1949, Onsager predicted a fluid composed of rods will transition from isotropic to nematic when compressed, laying the foundation for understanding these mesogens.
Answer: liquid crystal
15. Identify some divine relatives of Osiris from clues, for the stated number of points.
- 10 For ten points, name Osiris's brother, the god of the desert, who later became associated with evil and with the murder of Osiris.
Answer: Set or Seth
- 5,5 For five points each, the parents of Osiris were these gods of the earth and the sky.
Answer: Geb (or Keb or Seb) and Nut (or Nuit)
- 5,5 For five points each, the grandparents of Osiris were these gods of dryness and moisture, the children of Atum-Re.
Answer: Shu and Tefnut
16. He shared the 1906 Nobel prize with Camillo Golgi, but vehemently disagreed with the later's belief that the nervous system was composed of diffuse elements. For ten points each...
- 10 Name this Spanish author of *Textura del Sistema Nervioso del Hombre y los Vertebrados*.
Answer: Santiago Ramón y Cajal
- 10 Cajal originated the idea that these cells, named by Waldeyer in 1891, were the basis of the contiguous parts of the nervous system.
Answer: neurons
- 10 Cajal's "law of dynamic polarization" postulated that connections between neurons were made via changes in ion potentials conducted by these long, slender projections from a neuron that conduct electrical impulses to other neurons.
Answer: axons
17. For ten points each, answer the following questions about Seljuk sultans.
- 10 The Seljuk empire reached its height under this ruler whose name is a combination of the Arabic and Persian words for king. With help from his vizier, Nizam al-Mulk, his reign was marked by great architectural projects in the capital of Isfahan and the poetry of Omar Khayyam.
Answer: Malik Shah
- 10 Malik Shah's father, Alp Arslan, was the victor at this 1071 battle over Emperor Romanus Diogenes IV of the Byzantine Empire.
Answer: Battle of Manzikert

- 10 The ascendancy of the Seljuks began when the uncle of Alp Arslan, Togrul Beg, captured this city in 1055.
Answer: Baghdad
18. For ten points each, identify the composers from some piano trios and/or string quartets. You will get five points if you identify them from more famous compositions.
- 10 *Archduke* trio, *Ghost* trio, *Razumovsky* quartets
 5 *Coriolan Overture*, *Egmont Overture*, *Leonore Overtures*
Answer: Ludwig van Beethoven
- 10 *American* quartet, *Dumky* trio
 5 *Moravian Duets*, *Slavonic Dances*
Answer: Antonin Leopold Dvorak
- 10 *Elegaic* trio
 5 *The Rock*, *Rhapsody on a Theme of Paganini*
Answer: Sergei Rachmaninoff
19. Identify the following about the Roman Catholic process of canonization, 5-10-15:
- 5 This pope beatified 1340 people during his pontificate, more than any other pope, and canonized more than the previous five centuries of popes combined, according to the Vatican.
Answer: John Paul II
- 10 What is the total number of intecessory miracles attributed to a candidate which is required for sainthood?
Answer: 2
- 15 All or nothing, put the four titles given in the canonization process in order of increasing holiness: Blessed, Servant of God, Saint, Venerable
Answer: Servant of God, Venerable, Blessed, Saint
20. Answer the following about lipid membranes for ten points each.
- 10 This technique coats a membrane with a fluorescent reagent and shines a laser to bleach part of it irreversibly. The amount of fluorescence that returns measures the amount of mobile lipids and the rate of return gives the diffusion coefficient.
Answer: fluorescence recovery after photobleaching or FRAP
- 10 Produced in the Golgi and found in stressed membranes like apical surface of the gut, this type of lipid is more stable due to free OH hydrogen bonding. Its thickness is unaffected by cholesterol and it's commonly found in myelin sheaths.
Answer: sphingolipids
- 10 To increase membrane fluidity, you'd need shorter lipids, fewer sphingolipids, introduce small concentration of cholesterol, or provide fatty acids with kinks or double bonds in them, which are known as this type of fatty acid.
Answer: unsaturated fatty acids