PARFAIT III Round 11

Princeton Guy David, Bio and Chem by Mason Liang November 17, 2007

1 Princeton Tossups, Round 11

1. Her sister offers the handmaid Bilhah to her husband, so she does the same with her own handmaid, Zilpah, raising the two sons of that union, Gad and Asher. This is despite the fact that she herself bears a daughter, Dinah, and six sons, including Reuben, Simeon, Levi, and Judah, who become six of the Twelve Tribes of Israel. Her husband worked for seven years to win her sister, but was tricked with a bridal veil into marrying her by her father, Laban. For ten points, name this Old Testament first wife of Jacob and sister of Rachel.

Answer: Leah

2. Her sister was Asteria, who turned into a quail to flee the advances of Zeus, and her parents were the titans Coeus and Phoebe. In one tale, Lycian peasants stirred up mud from the bottom of a lake to prevent her from drinking; as revenge, she turned the peasants into frogs. In another episode, she was attacked and nearly raped by the giant Tityos before being saved by her children. Those children also famously took revenge when their mother's childbearing was insulted, this time by Niobe. After being cursed by Hera to be unable to give birth on any firm land, for ten points, what figure found the floating island of Delos, where she was able to give birth to twins Apollo and Artemis?

Answer: Leto

3. Late in his career, he was named ambassador to Mongolia, and then became the Soviet delegate to the International Atomic Energy Agency. These posts came after his expulsion from the Politburo for feuding with Kruschev. Earlier in his career, he rose as high as chairman of the Council of People's Commisars, though he replaced Litvinov in his most famous post in 1939. For ten points, name this foreign minister for the Soviet Union during World War II, who negotiated a famous pact of non-aggression with Ribbentrop.

Answer: Vyacheslav Mikhaylovich Molotov or

Vyacheslav Mikhaylovich Skryabin

4. Early in his reign, a group of his thugs known as "the 42" traveled the country in a red "car of death", committing attacks on political opponents like Virgilio Martnez Reyna and Frederico Velzquez. These attacks occurred mere months after his rise to power in 1930, when he seized control from then-president Horacio Vasquez. In 1937, he ordered the banishment of all "illegal people", leading to the Parsley Massacre in which thousands of Haitians were killed. For ten points, name this man who, from 1930 until his 1961 assassination, served as dictator of the Dominican Republic.

Answer: Rafael Lonidas Trujillo Molina

5. Its language's written form was created by Venceslaus Hammershaimb in the 19th century, and is notable for its many diphthongs and the phenomenon of "skerping". Its capital is Tórshavn on Streym Island and it is explicitly not part of the European Union. However, since 1948 it has sent two members to the Folketing, the parliament of Denmark, and its economy has relied on Danish aid as well as trade with Iceland and the Shetlands. For ten points, name this autonomous province of Denmark, a group of 17 islands north of

Great Britain.

Answer: Faroe Islands

6. The Mukaiyama version of this reaction does not follow the Zimmerman Traxel model, which proposes a six membered transition state in a chair conformation. Discoverd by both Wurtz and Borodin, it can proceed via an enol mode if an acid catalyst is used, or an enolate mode in the case of an alkoxide or mild base. For ten points, name this carbon-carbon bond forming reaction between a ketone and an aldehyde.

Answer: Aldol Condensation

7. The "Ladder" in the title locale connects communal buildings with each other, which the main characters learn about only after seeing sheep in a pen that used to be electrified, but is no longer so. The philosopher Augustine Castle, based on one of the author's colleagues at the University of Minnesota, is skeptical of the place's advances, as is Barbara, the girlfriend of Roger. The psychologist Burris, the narrator, is persuaded by Frazier to visit and then to stay at the title locale. Published along with the author's textbook Science and Human Behavior, for ten points, name this book in which the titular utopia is based on the psychological principles of behaviorism, a work of B.F. Skinner.

Answer: Walden Two

8. In response to its author being called an "extremist", it contains the lines "Was not Jesus an extremist for love? Was not Amos an extremist for justice?", and places his recent actions in a historical context with events such as the biblical defiance against Nebuchadnezzar, resistance of early Christians to Roman persecution, and the Boston Tea Party. It contains the oft-quoted line "Injustice anywhere is a threat to justice everywhere." Written as a reply to a 1963 "Call For Unity" by Alabama clergymen, which advised African-Americans against demonstrating, this is, for ten points, what epistle penned by Martin Luther King, Jr?

Answer: <u>Letter</u> from a <u>Birmingham</u> City <u>Jail</u>

9. After capturing Ctesiphon, he is said to have reached the Persian Gulf and wept, as he was too old to continue to India like Alexander the Great. He dispatched Pliny the Younger to Bithynia-Pontus, and notably instructed him not to actively seek out Christians. His most famous military exploits were a set of AD 101 to 106 campaigns in which he defeated Decebalus and conquered Dacia, making him the first emperor in years to significantly expand the empire's borders. For ten points, name this second of the "good emperors" and predecessor of Hadrian, also the namesake of a Roman column.

Answer: Trajan

10. A climactic scene is brought about when the title character reads lines beginning, "Star of descending night! fair is thy light in the west!", from James McPherson's Ossian. Thomas Mann's The Beloved Returns is a response to it, telling of the real person Ms. Kestner, who was the inspiration for the tale. In the work, Albert is a thirty year old secretary who marries Lotte, the girl of the title character's dreams. Ending with the suicide of its title character, this is, for ten points, what epistolary "Sturm und Drang" novel by Goethe?

Answer: The Sorrows of Young Werther or Die Leiden des jungen Werthers

11. He befriended Emile Zola at the College Bourbon in Aix, but at the outbreak of the Franco-Prussian war he relocated to Estaque, featured in many of his landscapes. Another move, to Pontoise, brought him in contact with Camille Pissarro, whose Impressionist influence can be seen in works such as 1873's The House of the Suicide. In 1999, one of his paintings became the most expensive still-life ever sold: Rideau, Cruchon, et Compotier, and his Le Montagne St. Victoire sold for nearly \$40 million in 2001. For ten points, name this French post-impressionist, whose most well-known work may be of card-players.

Answer: Paul Cézanne

12. The "Dance of the Tumblers" in Act III features *skomorokhi*, while the "Cortege" of Tsar Benderey in Act II features some discordant percussion, meant to represent the fear of the title character at being brought to trial by Kupava for stealing her fiancé. That title character is initially enamored of the shepherd Lel, but at the end is finally able to declare her love for the tartar Mizgir, with help from her mother, Spring. For ten points, name this Rimsky-Korsakov opera, in which the title character then saddens Mizgir by melting in the sun.

Answer: The Snow Maiden or Snegúrochka

13. Futuristic devices are sold by the mysterious Mr. Simpson of the NATCA corporation in his first published work of fiction, *The Sixth Day*. A group of World War II refugees tries to flee from Eastern Europe to Palestine in his novel *If Not Now, When?* Stories about a vagabond lead miner, four people stranded on an island filled with mercury, and the author's own youthful researches into electrolysis appear in his most famous short story collection, *The Periodic Table*. For ten points, *If this is a Man*, or *Survival in Auschwitz* was penned by what Italian Jewish author and chemist?

Answer: Primo Levi (accept $\underline{The\ Sixth\ Day}$ and other tales before mentioned)

14. The Cipango Planum is near its equator, while the Abatos Planum can be found further south. It is unique for its surface of nitrogen ice, occuring in part due to the coldest surface temperatures in the solar system. Also unusual is the large tilt, 157 degrees, of its plane of rotation. The theory of its capture may explain both this unusual feature and the eccentric orbit of Nereid. More famously, it is the only large satellite in the solar system with a retrograde orbit. For ten points, name this largest moon of Neptune, named for a mythological son of Poseidon.

Answer: Triton

15. The first stanza describes the natural world by remarking on "salmon-falls" and "mackerel-crowded seas." Later on, the speaker asks for his heart to be "consumed away," so that he can take "such a form as Grecian goldsmiths make," and these requests are addressed to the sages standing by the "holy fire" in the title city. The second stanza remarks, "an agèd man is but a paltry thing," a sentiment affirmed by its famous opening line. Beginning by saying "That is no country for old men," this is, for ten points, what William Butler Yeats poem?

Answer: Sailing to Byzantium

16. His piano style was influenced by the Harlem pianist Fats Waller, from whom he received some organ lessons. His later groups, the so-called "New Testament" of the 50's and on, had talent like Eddie "Lockjaw" Davis on tenor sax, and Joe Williams singing on songs such as this man's "Everyday I Have the Blues." His "Old Testament" version of the 30's and 40's featured Lester Young on sax and Jimmy Rushing on vocals, churning out hits like "One O'Clock Jump." For ten points, name this influential jazz musician and big band leader, whose nickname was meant to put him alongside Duke Ellington as jazz nobility.

Answer: William "Count" Basie

17. They form in the earth's atmosphere from the decay of pions, which are in turn created by cosmic rays in the atmosphere. They have a half life of 2.2 microseconds, but relativistic effects allow them to travel through the earth's surface. Discovered by Carl Anderson and Seth Neddermyer in 1936, they were originally thought to be the mesons predicted by Yukawa to explain the strong nuclear force. However, they were discovered not to be mesons at all, and decay by the weak force into an electron and two neutrinos. For ten points, name these leptons, heavier than electrons but lighter than tauons.

Answer: Muons

18. He created the fictional socialite Percy "Thrills" Thrillington to publicize his 1977 album *Thrillington*, which contained instrumental versions of many of his earlier songs, such as "3 Legs" and "Dear Boy" from his album *Ram*. "Too Many People", also from *Ram*, mocked his former bandmate. That bandmate responded with the song "How Do You Sleep", which told this man, "those freaks was right when they said you was dead," and, "the only thing you done was yesterday," referring to an earlier song by this man. For ten points, name this author of such songs as "Let it Be" and "Hey Jude", who along with John Lennon was the main songwriter for The Beatles.

Answer: Paul McCartney

19. Norm Kretzmann analyzed its argument in an essay entitled "Abraham, Isaac, and" its title character. Near its end, the title character is compared to Proteus, as his companion continues to ironically press him for answers. The title character is coming to court to lay charges against his father, for allowing a worker in his care to die in a ditch on Naxos, after that worker had murdered a slave. For ten points, in what Platonic Dialogue does Socrates question the title character about his "dilemma", wondering whether pious actions are just those which are loved by the gods?

Answer: Euthyphro

20. He was in solitary confinement from 1967 to 1969, as related in his poetry collection *The Man Died*, and an unscrupulous "beach prophet" is the title character of his *The Trials of Brother Jero* and *Jero's Metamorphosis*. Absurdist theater and his nation's civil war of the late 60's influenced 1970's *Madmen and Specialists*. The beginning of his most famous play mocks traditional notions of courtesy when Sidi is helped in her water-carrying task by the protagonist, Lakunle. For ten points, name this Nigerian author of *The Lion and the Jewel*.

Answer: Akinwande Oluwole "Wole" Soyinka

21. Minor mix-ups include the confusion of Mrs. Bell for the landlady Mrs. Hirsch, and a clock that runs twenty minutes fast. The protagonist is urged to "stay way out of it" by the black cook Sam, but refuses. That protagonist and his friend, the diner manager George, are derisively referred to as "bright boys" by the title characters, the mysterious Al and Max, who are looking for Ole Anderson. For ten points, name this short story featuring Nick Adams and two men looking to assassinate a boxer, a work by Ernest Hemingway.

Answer: The Killers

2 Princeton Bonuses, Round 11

- 1. It is the third and only surviving part of a trilogy concerning the descendants of Laius. For ten points each...
 - 10 What is this tragedy, in which Eteocles defends the title locale from his brother Polyneices, and which ends with the two brothers slaying each other?

Answer: Seven Against Thebes or Hepta epi Thebais

10 Which Greek playwright wrote Seven Against Thebes?

Answer: Aeschylus

10 One of the few other extant Aeschylus plays is this mythological drama, in which the Danaids flee to Argos to avoid marrying their lustful cousins, the sons of Aegyptus.

Answer: The Supplicates or Supplices

- 2. For some light reading, how about learning about some Jewish sports stars? For ten points each...
 - 10 The most famous Jewish American athlete of all time is probably this left-handed Dodgers pitcher, a 3-time Cy Young winner who refused to pitch the opening game of the 1965 World Series because it fell on Yom Kippur.

Answer: Sanford "Sandy" Koufax

10 This Jewish basketball legend and iron-man starred at NYU and for the NBA's Syracuse Nationals in the 50's. He was named one of the NBA's 50 Greatest Players of all time in 1996.

Answer: Adolph "Dolph" Schayes

10 This current Milwaukee Brewer third baseman, occasionally nicknamed "The Hebrew Hammer", broke into the majors in 2007 and picked up two NL Rookie of the Month awards and one NL Player of the Month award.

Answer: Ryan Braun

- 3. It marked one of the first uses of "strict scrutiny" by the Supreme Court in a case of racial discrimination. For ten points each...
 - 10 What was this 1944 case, in which the Supreme Court upheld up the legality of internment because, "military urgency of the situation demanded that all citizens of Japanese ancestry be segregated from the West Coast temporarily."

Answer: Korematsu v. United States

10 One of the three dissenting opinions in Korematsu v. US was by this former governor of Michigan and FDR appointee, who condemned the decision as a "legalization of racism."

Answer: William Francis "Frank" Murphy

10 Murphy dissented again in 1949's Wolf v. Colorado, and was vindicated in 1961 when this case overturned Wolf and ruled that evidence obtained in violation of the 4th amendment was not admissible.

Answer: Mapp v. Ohio

- 4. Answer some questions about the works of John Kenneth Galbraith, for ten points each.
 - 10 In this 1958 book, arguably his most famous, Galbraith criticized the wealth gap and coined the term "conventional wisdom".

Answer: The Affluent Society

10 In this 1967 work, Galbraith argued that competitiveness in the American economy had declined.

Answer: The New Industrial State

10 Galbraith actually did things besides write books, serving as US ambassador to India under what president?

Answer: John Fitzgerald Kennedy or <u>JFK</u>

- 5. Answer the following questions about mathematical induction, for ten points each.
 - 10 Mathematical induction is often taken as a second order axiom for theories of the natural numbers, as in this commonly used set of axioms invented by a 19th century Italian.

Answer: Peano's Axioms

10 Instead of being taken as an axiom, mathematical induction can be proven if one instead takes as an axiom this principle, which states that every non-empty set has a least element.

Answer: Well-Ordering Principle (do not accept Well-Ordering Theorem)

10 Though usually applied to the natural numbers, mathematical induction can be generalized to arbitrary well-ordered sets, such as the ordinals, and is then known by this name.

Answer: Transfinite induction

- 6. Norse gods were big on vengeance. Answer some questions about this phenomenon for ten points each.
 - 10 This son of Odin and the giantess Grid is one of the few Aesir to survive Ragnarok, after which he is supposed to avenge Odin by killing Fenrir.

Answer: Vidar

10 This son of Oden and Rindr was born specifically to kill Hodr, as punishment for Hodr's accidental fratricide.

Answer: Vali

10 In killing Hodr, Vali avenges what god of beauty and brother of Hodr?

Answer: Baldr

- 7. Answer the following about the quantum computer, for ten points each.
 - 10 To represent data, quantum computers use this unit, which can be in a superposition of states.

Answer: qubits

10 One of the most famous quantum computing algorithms is this one, which allows integer factorization in $O((\log N)^3)$ time.

Answer: Shor's algorithm

10 Another famous quantum computing algorithm is this one, which allows for searching an unsorted database with N entries in $O(\sqrt{N})$ time.

Answer: Grover's algorithm

- 8. Answer the following about some functionalists, for ten points each.
 - 10 One early functionalist was this Polish anthropologist famous for his work in the Trobriand Islands.

Answer: Bronislaw Malinowski

10 This British anthropologist is sometimes considered the founder of structural functionalism. He is most famous for 1922's *The Andaman Islanders* and 1952's posthumous *Structure and Function in Primitive Society*.

Answer: Alfred Reginald Radcliffe-Brown

10 This American, another founder of structural functionalism, is credited with introducing the works of Weber and Pareto to America, as well as for works such as 1937's *The Structure of Social Action* and 1951's *The Social System*.

Answer: Talcott Parsons

- 9. Some of his comrades are known as "The Tall Man," "The Loud Man," and "The Tattered Man," and a fleeing Union soldier opens a cut in his head. For ten points each...
 - 10 This is what New York farm boy and soldier, the protagonist of a Civil War novel? **Answer:** Henry Fleming
 - 10 Henry Fleming is the main character of what 1895 novel?

Answer: The Red Badge of Courage

10 What New Jersey-born novelist wrote The Red Badge of Courage?

Answer: Stephen Crane

- 10. She was known for her views against the myth of the "eternal feminine", as well as her relationship with Jean-Paul Sartre. For ten points each...
 - 10 Who was this French existentialist philosopher?

Answer: Simone de Beauvoir

10 Simone de Beauvoir's most famous work of philosophy is this 1949 treatise on feminism.

Answer: The Second Sex or Le Deuxime Sexe

10 Famous among de Beauvoir's works of fiction is this 1954 work for which she won the Prix Goncourt. It is a chronicle of French intellectuals and existentialists, the title group, in the years after World War II.

Answer: The Mandarins or Les Mandarins

- 11. He is probably best known for his innovation of the twelve-tone method of composition. For ten points each...
 - 10 Name this Austrian-Jewish composer.

Answer: Arnold Schoenberg

10 Schoenberg's most famous opera is this unfinished biblical piece composed in the years around 1930. It is one of the most explicit expressions of Schoenberg's Judaism.

Answer: Moses und Aron or Moses and Aaron

10 One of Schoenberg's earlier works, based on his twelve-tone system, was this mythological symphonic poem based on a play by Maurice Maeterlink. Schoenberg was unaware that Debussy had recently written an opera based on the same play.

Answer: Pelleas und Melisande or Pelleas and Melisande

- 12. They wrote mostly secular poetry about love and honor, and were so named because of their social class and support for King Charles I. For ten points each...
 - 10 This is what group of 17th century English poets, which included Thomas Carew and Robert Herrick, among others.

Answer: Cavalier Poets

10 This playwright of *Volpone* is has been called the "father" of the Cavalier Poets for his influence.

Answer: Ben Jonson

10 Typical Cavalier poet themes included love, battle, and duty, all three of which are summed up in the lines "I could not love thee, dear, so much / Loved I not honour more," from what Cavalier poem?

Answer: To Lucasta, Going to the Wars

- 13. At the Battle of Gettysburg, he was ordered by Robert E. Lee to form a cavalry screen and gather intelligence, but went on a raid of his own. For ten points each...
 - 10 What Confederate cavalry general thus arrived at the battle late, on July 2 1863, and was supposedly greeted by Lee with a frosty, "Well, General, you are here at last."

Answer: James Ewell Brown "Jeb" Stuart

10 At this earlier battle, Stuart was ordered by Lee to temporarily take command of Stonewall Jackson's 2nd Army Corps, after Jackson was fatally wounded.

Answer: Battle of Chancellorsville

10 Earlier still in his career, Stuart distinguished himself by harassing Union troops led by this commanding general at the First Battle of Bull Run.

Answer: Irvin McDowell

- 14. Answer the following questions about The Style. Or, as they say in Dutch, De Stijl. For ten points each...
 - 10 The most famous member of De Stijl was this Dutch painter of "Broadway Boogie Woogie".

Answer: Piet Mondrian

10 This painter launched the group's namesake magazine in 1917, but later clashed with Mondrian over the use of diagonals in his "elementarist" paintings.

Answer: Theo van Doesburg (accept Christian Emil Marie Küpper)

10 This architect co-founded the De Stijl periodical with van Doesburg, and became a chief housing architect in Rotterdam.

Answer: Jacobus Johannes Pieter Oud

- 15. He killed his brothers before taking the throne, but is probably most well known for his later conversion to Buddhism. For ten points each...
 - 10 Who was this Indian emperor of the 3rd century BCE?

Answer: Ashoka (accept Ashoka the Great)

10 Ashoka was a member of what Indian dynasty?

Answer: Mauryan

10 Ashoka's conversion to Buddhism came after his war with which independent state on the east coast of India?

Answer: Kalinga

- 16. It can be thought of as the square of the ratio of the elementary charge to the Planck charge, and is approximately 1/137. For ten points each...
 - 10 What is this dimensionless constant, often denoted alpha, which describes the strength of the electromagnetic interaction?

Answer: Sommerfield fine structure constant

10 One way of measuring the fine structure constant is through this effect, in which the resistance of a two-dimensional metal takes on quantized values related to the fine structure constant.

Answer: quantum Hall effect

10 The amount by which the resistance in the quantum Hall effect is quantized is a constant denoted Rk and known by this name, after the discoverer of the effect.

Answer: von Klitzing constant

- 17. For ten points each, name these things about population genetics:
 - 10 This eponymous process describes how mutations accumulate in species whose genes do not undergo recombination. It attempts to explain the evolution of sex.

Answer: Muller's Ratchet

10 This happens when a small number of individuals establish a new population, resulting in genetic and phenotypic differences from the original population.

Answer: Founder Effect

10 This diagram gives all possible allele combinations, allowing one to compute the 3:1 ratio of a hybrid cross, and the 9:3:3:1 ratio of a dihybrid cross.

Answer: Punnet Square

- 18. Answer these questions about some controversies surrounding the Nobel Prize in Literature, for the stated number of points.
 - 10 For ten points, this Swedish poet of "Songs of Wilderness and Love" declined the prize in 1918, but it was awarded to him posthumously in 1931, when he presumably could not decline it again.

Answer: Eric Axel Karfeldt

5,5 The prize was declined on two other occasions in its history: in 1958, by a Russian author who declined out of fear, and in 1964 by a French philosopher who declined on moral grounds. Name both for five points each.

Answer: Boris Pasternak and Jean-Paul Sartre

10 For ten points, this 1970 recipient of the prize did not actually receive it until 1974, due to troubles leaving the Soviet Union. His award was based on such works as 1968's *The First Circle* and *Cancer Ward*.

Answer: Aleksandr Isayevich Solzhenitsyn

- 19. Answer some questions about the Franco-Prussian War and its end, for ten points each.
 - 10 This August 1870 battle followed the bloody engagement at Mars-la-Tour; here the Germans succeeded in trapping the French army at Metz.

Answer: Battle of Gravelotte

- 10 Napoleon III was captured at this September 1870 battle, a decisive German victory. *Answer:* Battle of Sedan
- 10 This treaty of May 1871 ended the war.

Answer: Treaty of Frankfurt

20. Answer these questions about the works of Jan Vermeer, for the stated number of points.

- 10 Among Vermeer's most famous works is this townscape of around 1660. In it we see buildings along the Lange Geer canal of Vermeer's hometown.

 **Answer: View of Delft* or Gezicht op Delft*
- 5,5 For five points each, this pair of late Vermeer paintings are among the only dated ones we have. They each depict a lone scholar, and the model for each appears to be the same man. Some claim both are based on Antony van Leeuwenhoek.

Answer: The Astronomer (De Astronomen) and The Geographer (De Geograf)

10 This other well-known Vermeer work depicts a painter with his back to us, painting a female subject posing as Clio, the Muse of History.

Answer: The Art of Painting or The Allegory of Painting or De Dschilderkunst Die Allegorie der Malerei or The Painter in his Studio or The Artist in his Studio

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