

# PARFAIT III Round 1

Truman State

William Regot, Ali Pearson, Tyson Koenig, Christopher Stone, Kent Buxton

November 17, 2007

# 1 Truman State Tossups, Round 1

1. A green book lies at the feet of the central character, who had beaten a man during an attempt to steal a cloak. Only the title figure wears a hat as he points to Aris Kindt's forearm positioned over the loincloth and flexes his hand to demonstrate the flexores digitorum to the seven figures looking at the event in this painting. For ten points, the Preparator who performs the actual dissection is notably missing from what Rembrandt painting showing Nicolaes Tulp explaining arm musculature?

**Answer:** The Anatomy Lesson of Dr. Nicolaes Tulp or Anatomische les van Dr. Nicolaes Tulp

2. She released a rabbit from her robes and thanked Andraste in an account by Dio Cassius, who also said that creditors had called in debts left by her husband, King Prasutagus, who left his kingdom jointly to his daughters and Nero. She led her people in revolt, destroying the 9<sup>th</sup> legion, and the cities of Camulodunum, Verulamium, and Londinium before being defeated by Paulinus in 60 AD. For ten points, name this queen of the Iceni who led a revolt against the Romans in Great Britain.

**Answer:** Boudicca or Boadicea

3. Their leader filled Ernst Mach's university chair in 1922 and was assassinated on the university steps in 1936. That same year, its most famous member started working at the University of Chicago after leaving the city with which they're identified in 1931, a year which also saw Herbert Feigl's flight. They crusaded against "metaphysics," which they defined as anything that makes claims of substantivity but cannot be expressed in formally rigorous terms or tested empirically. This, their Marxism, and their Jewishness made such men as Hans Hahn, Otto Neurath, Moritz Schlick, and Rudolf Carnap unpopular. For ten points, name this group of philosophers based in the capital city of then-Nazi-controlled Austria.

**Answer:** The Vienna Circle (or Wiener Kreis)

4. It allegedly paid for a ten day stay at the Lindell Hotel, a brand new horse and carriage, and a twenty-four hundred dollar shirt stud for a man of whom the president said "let no guilty man escape." However, the president later changed his mind and testified to Orville Babcock's innocence in the scandal. John McDonald, an IRS agent in St. Louis, reported that shipments to New Orleans, Milwaukee, Chicago, and Peoria were being sold rather than stored, thus defrauding the government of tax revenue. For ten points, name this scandal of the Grant administration where over 3 million dollars in taxes was stolen in a conspiracy that included high government officials and alcohol distillers.

**Answer:** Whiskey Ring

5. With Wilhelm Weber, he invented an electromagnetic telegraph. A map projection with the equator parallel to the axis of a cylinder is named after him and Krüger. Using data obtained by Giuseppi Piazza, who observed 1/40 of the orbit of the asteroid Ceres, he calculated its orbit using his "method of least squares" with such accuracy that he was made Professor of Astronomy and head of the astronomical observatory at Göttingen in 1807. He famously responded "To praise him would be to praise myself" regarding the

work of Janos Bolyai on hyperbolic geometry. For ten points, name this German mathematician, the namesake of the CGS unit of magnetic flux density and one of Maxwell's equations.

**Answer: Carl Friedrich Gauss**

6. An 1877 story by him tells of a protagonist strangling a pigeon with “wild and tumultuous pleasure” before committing patricide in bed. In addition to *St. Julian*, he also wrote about Saint Antoine, and diligently researched Punic dress to tell the tale of Matho and Spendius's pranks against Salammbô. He drew on family history for the treatment of Hippolyte Tautain's club foot by a country doctor who is cuckolded by Léon and Rodolphe and whose wife eventually kills herself. For ten points, name this author of *Madame Bovary*.

**Answer: Gustav Flaubert**

7. He and Jeduthan Baldwin testified at the court martial of Arthur St. Clair, supporting the prudent decision to retreat. He showed less prudence later after winning early victories against Ingelström's lieutenant Denisov, and was captured by Suvorov in 1794 at Maciejowice. Thus, his crusade against the Targowica confederation and the puppet king Stanislaw August failed. For ten points, name this engineer honored for his role in the American Revolution and as a hero of Polish nationalists.

**Answer: Tadeusz Kosciuszko**

8. Its last intended use by its original creator was as a manifestation of Gritsko's guilt for arresting Cherevik in order to marry his daughter. Before employed as the Dream Intermezzo of *Sorochintsy Fair*, it was turned into a choral work for the opera-ballet *Mlada*. At the peak of the work, a bell sounds from the village, and the devils directed by Chernobog to make merry disperse. Its sometimes-used title refers to St. John, whose feast day was close to midsummer's night. The version completed by Rimsky-Korsakov has been included on the *Wizard of Oz*, *Saturday Night Fever*, and, most famously, *Fantasia*. For ten points, name this work about a witches' sabbath above the tree line.

**Answer: (St. John's or St. Ivan's) Night on Bald Mountain or Night on Bald Mountain or Ivanova noch na gore**

9. Two molecules of it plus an atom of silver make up Tollen's reagent. The Solvay process is started by passing  $\text{CO}_2$  through a mixture of sodium chloride and it. Its other uses include stabilizing latex when shipped in liquid form, and it is more often consumed in the platinum-catalyzed production of nitric acid. It is most frequently produced with an iron-based catalyst at pressures of about 1000 atmospheres in a process created to wean Germany off of nitrate imports from Chile. For ten points, name this compound with formula  $\text{NH}_3$ .

**Answer: ammonia or azane**

10. The protagonist twice feels like he's living in a dream when his eyes “start out of his head” after being dropped off at Barnard's Inn by Wemmick. It is only then that he is able to connect Herbert's face to the positions at a funeral table earlier explained to him, Sarah Pocket, and Camilla. That explanation comes at the house of his supposed benefactor who actually uses Magwitch's generosity dispensed through Mr. Jaggers to

further tease the protagonist with the wiles of Estella. For ten points, name this Dickens work about the jilted Miss Havisham's games with Pip and his lofty ambitions.

**Answer: Great Expectations**

11. The courtship of Nala and Damayanti was recounted in an episode. A large portion of the text in this work is spent telling such traditional stories, among which is one about some guy rescuing his kidnapped wife with the help of a monkey, told to Yudhishtira and his brothers by the sage Lomasa. The main story tells of the war between the sons of two royal brothers, Dhritarashtra and Pandu. The Pandavas ultimately defeat the Kauravas, while Arjuna, the hero discourses with Krishna during the Bhagavadgita. For ten points, Vyasa is said to have written in Sanskrit what epic poem of India, a compendium of topics on Hindu life, legend, and thought?

**Answer: Mahabharata, prompt on "Bhagavadgita"**

12. They have been shown to form G quadruplexes, which decrease the activity of their namesake enzyme. The first ones were isolated from *Tetrahymena thermophila* which consisted of 50-70 tandem copies of TTGGGG, while those of vertebrates consists of GGTTAG. In Leach's Petrel, these were found to lengthen over time, while Allsop et al found that fibroblasts from Hutchinson-Gilford progeria donors had short ones. They help during the DNA replication process by providing buffers at the end of DNA molecules and cap the ends of eukaryotic chromosomes. For ten points, give this structure whose length inversely correlates with the age of the cell, named by Muller and McClintock for the Greek words for "end segment."

**Answer: telomere**

13. Their law code stated that intercourse of a human with a pig or dog is punishable by death, though the penalty for intercourse with a horse was only banishment from priesthood. Their court of justice was known as "pankus," and was discussed in an edict of Telepinus as a means of handling succession and punishing officials. Their king Shuppiluliumash I was asked to provide a spouse for the widow of King Tut, and their capital was at Hattusa. For ten points, name these famed charioteers of Anatolia who fought the battle of Kadesh against the Egyptians.

**Answer: Hittites or Nesilim**

14. His teenage son wrote the lyrics for a song sung by Johnny Mandel that brought in royalties worth over ten times what he received for directing the film containing the song "Suicide is Painless." Often reviled for a musical in which Ray Walston plays Robin Williams' father and Shelley Duvall plays Olive Oyl, he went on to direct better films including *Jazz '34*, *Dr. T and the Women*, and *Gosford Park*. For ten points, name this notable filmmaker who died in 2006 whose last film was *A Prairie Home Companion*.

**Answer: Robert Altman**

15. It is traditionally preceded by a recitation in a form of Sanskrit that is now incomprehensible by a man wearing a mask symbolizing Okina, a symbol of long life. Its name was originally appended to a form of dance literally meaning "monkey music," but was shortened to a word meaning "skill." Plots hinge on events in the past, and characters introduce themselves and describe the setting: a necessity given the bare stage. Brought

to prominence by Kanami Kiyotsugu and Zeami Motokiyo during the 14th century, for ten points, name these stylized works of Japanese stage drama.

**Answer:** Nohgaku

16. It describes a town where individuals cannot leave their houses and must stand at the windows for inspection by the indendants of wards who likewise cannot leave their subdivisions. Although ostensibly designed to prevent the spread of plague this system serves as a way to inspect and root out all abnormality; the chapter compares the city to the Panopticon of Bentham, saying modern society's armies, hospitals, and prisons all derive from the same need for homogenization and greater efficiency. Recounting the evolution from public torture to incarceration rounds out the other half of the title. For ten points, name this work by Michel Foucault.

**Answer:** Discipline and Punish: The Birth of a Prison or Surveiller et punir: Naissance de la prison

17. Peaks on this mountain are the Batian, Lenana, and Nelion, which are ridges separating seven principal valleys that hold the Lewis and Tyndall glaciers. These glaciers in turn feed the Tana and Ewaso Ng'iro rivers, and the Kitaru falls before reaching Kipini, where the Tana empties into the Indian ocean. 200 miles north of the continent's tallest mountain and almost directly on the equator, for ten points, name this mountain of Eastern Africa that shares its name with the country it's found in.

**Answer:** Mount Kenya or Kirinyaga

18. This poet spoke about a "sweet-voiced girl" who might be the same woman who was told, "I loved you once, Atthis, long ago." Other biographical figures mentioned in verse are Cleis, a daughter, and Charaxus, a brother. However, because "Ode to Aphrodite" is the only complete extant work, much of her biography, including an attachment to fellow poet Alcaeus, is speculative. For ten points, name this ancient Greek poet, the supposed themes of whose work led to the coining of the word "lesbian" from the name of her native island of Lesbos.

**Answer:** Sappho

19. Usually three in number, two are called Aegle and Erytheia; they either lived far in the west or among the Hyperboreans. Hesiod considered them the offspring of Erebus and Night, but later writers named Phorcys and Ceto as their parents. The chthonic dragon Ladon helped them in the task assigned to them, though he was slain by a hero's arrow. They were said to enjoy singing and have beautiful voices, and their Greek name means Daughters of Evening. For ten points, name these nymphs, best known for guarding the golden apples stolen by Heracles in his eleventh labor.

**Answer:** Hesperides

20. In a 1969 note proposing his wee partition spectrum, Feynman discussed inclusive experiments where this happened and exclusive ones where it did not. The Feynman diagram for this process and that for pair production from gamma ray conversion are cross-symmetrical, meaning that they are the same except for time running backwards in one compared to the other. Due to the screening effect of the energy levels of atomic electrons, incoming beta particles decelerate abruptly in the field of an atomic nucleus,

causing X-rays to be produced by, for ten points, what phenomenon that is German for “braking radiation?”

***Answer:* Bremsstrahlung**

21. The day this Monarch ascended to power in England is celebrated as Oak Apple Day. His reign saw the birth of both the Whigs and the Tories. His Lord High Treasurer resigned after he acceded to the Test Act proposed by the Cavalier Parliament, which required all public officials to receive the sacrament under the forms prescribed by the Church of England. Both the Great Plague and Great Fire of London happened during his reign, and earlier in his life he was forced to flee to France when his father was executed. For ten points, name this British King who came to power in 1661 in what is known as the Restoration.

***Answer:* Charles II**

## 2 Truman State Bonuses, Round 1

1. Answer these questions about the battle of Marathon for ten points each.
  - 10 This was the commander of the winning force at Marathon.  
**Answer:** Miltiades
  - 10 What Greek general cast the deciding vote that favored attacking the Persians rather than continuing to wait?  
**Answer:** Callimachus
  - 10 Herodotus recounts that this runner went from Athens to Sparta to request help, while Lucian says that he went from Marathon to Athens.  
**Answer:** Pheidippides (don't accept or prompt on "Thersippus" or "Eukles," who are in Plutarch)
2. Answer the following questions related to calculus's Mean-Value theorem for ten points each.
  - 10 This theorem, a special case of the Mean-Value Theorem, states that the derivative of a function vanishes at least once between any two consecutive zeros.  
**Answer:** Rolles Theorem
  - 10 An application of the Mean-Value Theorem named for a 17th century French student of Bernoulli, it says that an indeterminate form may be evaluated by replacing the ratio in the limit with the ratio of the derivatives.  
**Answer:** L'Hôpital's Rule
  - 10 Gauss's Mean-Value theorem applies only to complex functions that have this property, meaning that they are complex differentiable.  
**Answer:** analytic or holomorphic
3. For ten points each, answer the following questions about the geography of the Danube.
  - 10 The Danube flows through this capital of Upper Austria before heading on into Lower Austria and Vienna.  
**Answer:** Linz
  - 10 After Austria, the Danube next flows through the cities of Bratislava and Komarno in this nation.  
**Answer:** Slovakia or Slovak Republic or Slovensko or Slovensk republika
  - 10 The Danube eventually empties into the Black sea in Romania and this former Soviet Republic.  
**Answer:** Ukrayina or Ukraine
4. He wrote *The Principles of Teaching Based on Psychology* and *Educational Psychology*. For ten points each. . .

- 10 Name this Columbia psychologist who studied how cats escape from puzzle boxes to formulate his “law of effect.”  
**Answer: Edward Thorndike**
- 10 This 1994 book by Charles Murphy and Thorndike stated blacks and hispanics have a lower mean intelligence and takes its title from the shape of a normal distribution.  
**Answer: The Bell Curve**
- 10 Thorndike developed the alpha and beta tests, the latter for soldiers who couldn’t read, that became this aptitude test.  
**Answer: ASVAB or Armed Services Vocational Aptitude Battery**
5. He is a waste management consultant for Barone Sanitation and part owner of Caputo Poultry, Satriale’s Meat Market, and the Bada Bing Strip Club. For ten points each. . .
- 10 Name this de facto head of a New Jersey Crime Syndicate.  
**Answer: Tony Soprano (accept either answer)**
- 10 The actual head of the organization and from whom the organization takes its name is this man, who is serving life in federal prison in Springfield, Illinois.  
**Answer: Domenico Ercole “Eckley” DiMeo**
- 10 This uncle of Tony succeeded Jackie Aprile as acting boss of the DiMeo criminal organization.  
**Answer: Uncle Junior or Corrado John Soprano**
6. For ten points each, answer these questions about the rivers of the classical underworld.
- 10 Flowing from a gorge in Epirus in northwestern Greece, this river, whose name means “river of woe” in Greek, was thought to be the entrance to Hades.  
**Answer: Acheron**
- 10 In Dante’s Inferno, it was located at the top of Mount Purgatory in the former Garden of Eden and its waters were drunk by those who needed to forget their sins.  
**Answer: Lethe**
- 10 Adherents of Orphism were told to not drink from Lethe but from this river, taking its name from a daughter of Uranus and Gaea and mother of the muses.  
**Answer: Mnemosyne**
7. Answer the following about organic chemistry for ten points each.
- 10 This process is used to make small alkenes of up to about six carbon atoms on a large scale by heating a mixture of long-chain alkanes normally in the presence of aluminosilicate catalysts.  
**Answer: Catalytic Cracking**

- 10 Electrophilic attack to form a halonium ion from an alkene, followed by water doing a backside attack on the halonium ion and deprotonation, produces halohydrin, which is an example of this kind of organic molecule with a hydroxide attached to an alkyl group.

**Answer:** alcohol

- 10 Created by treating a nickel-aluminum alloy with a strong sodium hydroxide solution, this catalyst named after an American chemist is effective in the hydrogenation of ketones and aldehydes to alcohols.

**Answer:** Raney Nickel

8. Answer the following about Robert Tarjan, for ten points each.

- 10 Tarjan showed a method for using path compression in the union-find algorithm to present a least common ancestors algorithm with this property, where all input must be provided ahead of time rather than one piece at a time.

**Answer:** offline or batch

- 10 Tarjan devised an algorithm for finding these components of a graph in  $O(n)$  (“big oh of n”) time; these are subgraphs such that for every two vertices in the subgraph, there is a path in each direction from one to the other.

**Answer:** strongly connected components

- 10 Hopcroft and Tarjan presented an algorithm for testing whether graphs have this property, meaning they can be drawn on a piece of paper without edges crossing.

**Answer:** planarity

9. Christian Leopold von Buch named it after a town in Tuscany. For ten points each. . .

- 10 Name this dark, intrusive, mafic rock formed from plagioclase feldspar and pyroxene.

**Answer:** Gabbro

- 10 Gabbro is the intrusive counterpart of what extrusive rock?

**Answer:** Basalt

- 10 Intrusive and extrusive describe the two ways what larger class of rocks can form?

**Answer:** Igneous

10. His thoughts were collected in the *Analects*, which form the foundation for a school of thought. For ten points each

- 10 Name this Chinese philosopher.

**Answer:** Confucius or Kongfuzi

- 10 A student of Confucius known for his filial piety, he wrote most of *Da Shue* or *Great Learning*. His students are chiefly responsible for compiling the *Analects*.

**Answer:** Zengzi or Tseng-tzu

- 10 A well known story tells that his mother, in order to better educate him, moved three times successively to more suitable neighborhoods. This later philosopher revitalized Confucianism by advocating that human nature is essentially good.  
**Answer:** Mencius or Meng-tzu
11. For ten points each, identify these American First Ladies.
- 10 The term “first lady” was supposedly first used in the eulogy for her by then-president Zachary Taylor. She served as White House hostess not only during her husband’s term, but also assisted in the administration of the previous president, a widower.  
**Answer:** Dolley Madison
- 10 The youngest first lady in history, this Wells college graduate married her husband while he was in the White House in 1886.  
**Answer:** Frances Cleveland Preston
- 10 She caused controversy by consulting astrologers and living extravagantly, but was well-remembered for encouraging youth to “just say no” to drugs.  
**Answer:** Nancy Reagan
12. As painful as quiz bowl is now, it’s just adding to your repitioire of uncomfortable and surreal experiences that will serve you well as a humorist. Name these humorists for ten points each.
- 10 This American wrote *Hard Lines* and *The Tale of the Custard Dragon* and penned the lines “Candy is dandy, but liquor is quicker.”  
**Answer:** Ogden Nash
- 10 This contributor to NPR’s *This American Life* has published the essay collections *Barrel Fever*, *Me Talk Pretty One Day*, and *Naked*. His sister created the character Jerri Blank.  
**Answer:** David Sedaris
- 10 In addition to founding the satirical magazines *Mark Pasa* and *Karikatür*, this popular Turkish humorist also wrote poetry, novels like *Memoirs of an Exile*, and translated *Satanic Verses*.  
**Answer:** Aziz Nesin (accept Mehmet Nusret or Nusret Aziz Nesin)
13. Get enough of them together, and you have yourself a thermopile. For ten points each. . .
- 10 Name these handy temperature sensors that produce a voltage from temperature differences.  
**Answer:** thermocouple
- 10 A thermocouple employs this effect named after a German-Estonian physicist that turns thermal potential into electric ones.  
**Answer:** Seebeck effect

10 Most modern thermocouples use these devices that have band gaps narrower than insulators, but aren't perfect conductors.

**Answer:** semiconductor

14. Two young angels rest their arms at the bottom frame, and St. Barbara and Sixtus II flank the title figure. For ten points each. . .

10 Name this painting that hangs at the Zwinger Gallerie in Dresden.

**Answer:** Sistine Madonna or Madonna Sistina

10 The Sistine Madonna was painted by this artist who also painted *School of Athens*.

**Answer:** Raphael Sanzio

10 Another Madonna painted while Raphael was in Rome, the Alba Madonna features an infant version of this biblical character along with the Madonna and Christ.

**Answer:** John the Baptist or San Giovanni Battista

15. It's sometimes called the Wolffian body after Caspar Friedrich Wolff, who first described it. For ten points each. . .

10 Name this embryonic organ named for its position relative to two other organs that can become the male reproductive system but can remain as Gartner's cysts in women.

**Answer:** mesonephros

10 In men, the Wolffian duct develops into the epididymis and this structure that is cut during a vasectomy.

**Answer:** vas deferens or vasa deferentia or ductus deferens

10 The function of the Wolffian duct in the embryo of conducting waste from the kidneys to a bladder is replaced by this structure in vertebrates.

**Answer:** ureter

16. Name these Pulitzer winning poets for ten points each.

10 This first woman to receive the Pulitzer wrote "First Fig," "The Ballad of the Harp-Weaver," and "Renascence."

**Answer:** Edna St. Vincent Millay

10 He inspired Japhy Ryder in Kerouac's *Dharma Bums* and won the Pulitzer for the poems "Anasazi," "Four Changes," and "Tomorrows Song" in his collection *Turtle Island*.

**Answer:** Gary Snyder

10 Not winning a Pulitzer Prize until the year he died, 1955, his first book of poetry, *Harmonium*, was published in 1923; notable poems include "Disillusionment of Ten O'Clock" and "Thirteen Ways of Looking at a Blackbird."

**Answer:** Wallace Stevens

17. For ten points each, answer the following questions about Charles Francis Adamses.

- 10 Charles Francis Adams IV was the chairman of this company from the end of World War II, which became Massachusetts's largest industrial employer, manufacturing everything from the first consumer microwave oven, invented by employee Percy Spencer, to missiles.  
**Answer: Raytheon**
- 10 Charles Francis Adams II was likewise involved in big business, serving as the president of this company, which met the Central Pacific at Promontory Point in 1869.  
**Answer: Union Pacific Railroad (Railway)**
- 10 Charles Francis Adams served as the 1848 running mate of Martin Van Buren for this party, who opposed the spread of slavery.  
**Answer: Free Soil**
18. His sister, Elisabeth, married Bernhard Förster, a rabid anti-semiter who used her control of his literary estate to recraft his ideas into what eventually became linked to Nazism after his collapse on the streets of Turin in 1889. For ten points each. . .
- 10 Name this syphilis-addled philosopher.  
**Answer: Friedrich Nietzsche**
- 10 One of Nietzsche's first major works was this work describing Greek drama as a synthesis of Apollonian and Dionysian elements eventually stifled by Socratic rationalism.  
**Answer: Der Geburt der Tragödie aus dem Geist der Musik or The Birth of Tragedy from the Spirit of Music**
- 10 This work defines an Übermensch as a person who can accept the infinite repetition of each moment of life and takes its title from a Zoroastrian prophet.  
**Answer: Also Sprach Zarathustra or Thus Spake Zarathustra**
19. Answer these related questions for ten points each.
- 10 The speaker of the first words of this novel is Anna Scherer, maid of honor and favorite of the Empress Marya Fedorovna, who throws the ball at the start of the novel.  
**Answer: War and Peace or Voyna i mir**
- 10 In *War and Peace*, this illegitimate son of Count Kirill Vladimirovich believes himself to be Napoleon's eventual assassin and kills Elena's alleged lover Dolohov.  
**Answer: Count Pierre Kirilovich Bezukhov (again, any underlined name)**
- 10 Pierre meets this peasant, over fifty with a round face, who ends each night with a prayer to the saints of horses, thinking that nobody else prays for them and teaches Pierre the true meaning of life and suffering.  
**Answer: Platon Karataev**
20. He became archduke of Austria in 1621, king of Hungary in 1625, and of Bohemia two years later. For ten points each. . .

10 Name this future Holy Roman emperor who was denied command of the imperial armies by Wallenstein and in revenge contributed to the general's death.

***Answer:* Ferdinand III**

10 Ferdinand III helped negotiated this separate peace with the Elector of Saxony in 1635 that restored the Peace of Augsburg.

***Answer:* Peace of Prague or Prager Frieden**

10 He agreed to the terms of this treaty, which ended the Thirty Years War.

***Answer:* Peace of Westphalia or Westfälischer Friede**