PARFAIT III Round 7

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1 Princeton Tossups, Round 7

1. The doctrine of his reign was proclaimed by Count Sergey Uvarov and called "Official Nationality." His reign saw the expansion of the duties of the Royal Chancery: its sixth department formulated plans for Transcaucasia, its third was this man's oft-used secret police, and its fourth managed the the doings of the empress dowager Maria. Upon the death of his predecessor, his elder brother Constantine made an attempt at the throne, Constantine's by right if not for an unfortunate marriage. This power play led to the the 1825 Decembrist Revolt, crushed by this man at the start of his reign. For ten points, what autocratic czar succeeded his brother Alexander I in 1825, and oversaw Russia's entrance into the Crimean War?

Answer: Nicholas I Romanov

2. The first measurements of it were made by Nichols and Hull at Dartmouth and Lebedev in Russia, using a mirror attached to a torsion balance. The intensity of light was measured by the temperature rise of a blackened metal disk and compared to the angle the torsion balance moved through. Maxwell predicted that it would be twice as large for light reflected at 180 degrees as for absorbed light, given in the latter case by the intensity divided by c, giving it units of force per area. For ten points, name this phenomenon when photons impart momentum to an object, the principle that allows solar sails to function.

Answer: radiation pressure

3. Its original authors were Starke R. Hathaway and J. C. McKinley, who first published it in 1942. Developed using the then-novel test construction technique of empirical typing, its current standardized version released in 1989 has 567 true-or-false questions and is for adults 18 or older. The various scales on it are used to produce T-scores, which are generally interpreted in the positive direction. L scale to test for lying behavior, scale 9 for hypomania, scale 7 for psychasthenia, and scale 2 for depression are just some of the clinical scales created for this test. For ten points, name this most commonly used personality test in mental health fields that takes its name for the Northern US university where it was created.

Answer: Minnesota Multiphasic Personality Inventory

4. The historian Berossus recorded that he married Amytis, granddaughter of King Cyaxares of the Medes, which united the Median and Babylonian dynasties. In 605 B.C., his father sent him with a powerful army to reconquer from Necho the western provinces of Syria. The ensuing battle saw him soundly defeat the combined forces of Egypt and Assyria and thus end Assyrian independence in the Middle East. Egypt abandoned its ambitions in the region after the battle, but in the 37th year of his reign, he took the fight to Mitzraim in Egypt, forcing King Amasis of Egypt to leave in exile. For ten points, name this Chaldean king of Babylon who built the hanging gardens to remind his wife of her homeland.

Answer: Nebuchadnezzar II

5. A recent poll conducted in Quebec rated "Suite Madame Blue," one of this band's well-known songs, the third most popular song in Canada. Not bad for a song specifically written for the American bicentennial celebration in 1976 that also features the singer, Dennis DeYoung, chanting "America" no fewer than twenty-four times. Some of this band's other accomplishments include penning the 1972 song "Lady," often called the first real power ballad, and introducing the oft-quoted phrase "Domo Arigato, Mr. Roboto" into American culture. For ten points, name this American rock band best known for such hits as "Come Sail Away" and "Renegade," and for being Adam Sandler's favorite band.

Answer: Styx

6. Its importance, to a large extent, is determined by the Rossby number, a ratio of velocity to the product of length scale and its namesake parameter. It is instrumental in Ekman dynamics in the ocean, in the Sverdrup balance in the ocean flow, and in the Eotvos effect, where objects traveling on the Earth will feel heavier or lighter, depending on the direction of travel. For ten points, name this effect, partially independently discovered by Laplace that causes objects moving in a straight line to appear to follow a curved path in a rotational frame of reference.

Answer: Coriolis Effect

7. One of the characters breaks off from prayer in order to adjust a spirt lamp, and that same character breaks a plate and is unable to be calmed by Alcindoro before she breaks into "When I go Alone Down the Street," which implies the men of the town like to look at her ass. This second act strife is in contrast to the joy at the start when Schaunard recounts how an Englishman hired him to play until his parrot died, allowing the musician to bring back provisions to the garret. Leoncavallo composed an opera of the same title, but that work focuses more on the relationship between Musetta and Marcello, rather than Mim and Rudolfo. For ten points, name this opera by Giacomo Puccini about the lives of some starving artists.

Answer: La Bohème

8. In 2006, Edmund Phelps won a Nobel Prize in Economics for describing how NAIRU theory differentiates between the short term and long term varieties of this entity, explaining that the short term one appeared normal while the long term one was vertical, resulting in an explanation of how stagflation is possible using this model. Its original form is no longer used, as modern economists agree that it simply fails to work, though modern modifications have allowed it to remain influential. Its equation can be derived from the short run Lucas aggregate supply function. For ten points, name this curve which describes a historical inverse relationship between unemployment and inflation.

Answer: Philips Curve

9. In 1990, Fredman and Willard gave a linear time algorithm for finding them in graphs with small integral edge weights, and in 1995 Karger, Klein, and Tarjan gave a randomized linear time algorithm to do the same thing. This technique is based on the first known algorithm to find them, Boruvka's algorithm, which works when all edge weights are distinct. Prim's algorithm builds them one vertex at a time, while Kruskal's algorithm sorts the edges of the graph by length in order to find one. For ten points, what are

these graph theoretic structures, the smallest subgraphs with no cycles that contain all the vertices of a graph?

Answer: minimum spanning tree

10. One of the so-called "treasonous" activities which eventually led to his death was the transporting, piece-by-piece of a fleet of ships across mountains in order to explore the Gulf of San Miguel; that death came after he was arrested, ironically, by Francisco Pizarro. After arriving in Haiti with Rodrigo Bastidas in 1500, he failed as a farmer and stowed away on an expedition to Colombia led by Martín de Encíso. Ferdinand II dispatched Pedro Arias Dávila with him on an expedition south of the colony he led, but he feuded with Dávila, and eventually was executed for treason in that very colony, Daríen. For ten points, name this Spanish explorer, the namesake of the currency of Panama and the first European to sight the Pacific Ocean.

Answer: Vasco Núñez de Balboa

11. At 57 he decided to retire from composing, but a friendship with the clarinet player Richard Mühlfield led him to write several pieces for that instrument before his death. He ventured into symphonic writing with the first piano concerto, in D minor, which received poor reviews. It was only with the premiere in 1868 of a composition for chorus and orchestra that his reputation as a composer was established. That piece, Ein deutsches requiem, uses material from a symphony that he had abandoned. His first completed symphony took him over fourteen years to write, and pays homage to Beethoven in such an obvious way that Hans von Bülow nicknamed it "Beethoven's Tenth." For ten points, name this composer of a famous lullaby and a set of Hungarian dances.

Answer: Johannes Brahms

12. A 1795 collaboration of Dutch chemists produced "oil of the Dutch chemists" from this olefiant gas. Because its double bond is a region of high electron density, most chemical reactions with this molecular occur at this position. It has been used by agronomists dating back to the ancient Egyptians, and the Chinese burnt incense in closed rooms to help pears ripen. The first gene encoding a receptor for this substance was cloned from Arabidopsis thaliana by Caren Chang and Eliot Meyerowitz at Caltech. For ten points, name this plant hormone responsible for stimulating and regulating the ripening of fruit with chemical formula C₂H₄.

Answer: ethylene or ethene

It is bordered on one side by the Weichert-Gutenberg discontinuity, which consists mainly of silicon. That boundary also contains a mineral called "post-perovskite, appearing in a region first named by Bullen, the D" ("D double prime") layer. Budget cuts forced the cancellation of the American Miscellaneous Society's project "Mohole" to break into it, though Japan has made plans to drill seven kilometers beneath the seabed in the Chikyu Hakken project, accomplishing the original goal of the US effort. For ten points, name this thick layer of the Earth, bounded by the Mohorovicic discontinuity.

Answer: Mantle

13. The closest this man ever came to receiving the Republican Presidential Nomination was in 1940 when he entered the convention as a front runner, despite his lack of experience

in the Senate at that time, but lost the nomination to Wendell Wilkie. Although he tried again in 1948 and 1952, he eventually lost his Presidential ambitions, and settled into his role as Senate Majority Leader in 1953. Dying of cancer seven months later, his son and granson – both named after him – went on to become governors of Ohio. For ten points, name this prominent Ohio conservative nicknamed Mr. Republican, coauthor of a labor managment act with Fred Hartley.

Answer: Robert Taft (prompt on "Taft")

14. Born in Roseland, South Carolina, this Southerner attended South Carolina College, now known as USC, but was expelled shortly before graduation for threatening local policemen with firearms. He served with the Palmetto Regiment in the Mexican-American War, but was later shot in the hip during a duel by a future Senator from Texas, Louis Wigfall. This injury forced him to use a walking cane for the rest of his life, most notably a Gutta-percha cane that he used to defend the honor of his cousin, Andrew Butler. He would have settled with merely challenging the offender to a duel, but his colleague Laurence Keitt, who later used a pistol to hold other Senators at bay during the caning, suggested something a little more brutal. For ten points, name this Democratic antebellum Representative, best known for caning Charles Sumner on the Senate floor.

Answer: Preston Brooks

15. Its earlier name, Waitu kubuli, approximately translates as her body is tall in the anguage of the native Kalinago people. Dame Eugenia Charles became the first female prime minister in the Caribbean when she came to power there in 1980, while its current prime minister is Roosevelt Skerrit. It lies between the French departments of Martinique and Guadeloupe, and its national bird is the Sisserou parrot, featured on its flag. For ten points, name this Caribbean island nation with capital at Roseau, likely named for the day of the week on which Columbus discovered it.

Answer: Dominica

16. One of them goes to war over claims of dominance over the land between the Arnon and Jabbok rivers. That same member of this group also lived in the land of Tob until recalled to fight the Ammonites and Ephraimites, whom Jeptha recognized by their inability to say shibboleth. Others include Ehud, and Deborah, who were sent by God to lead the people away from their sinful ways. Samson was the last of, for ten points, what titular members of an Old Testament book that comes after Joshua and before Ruth.

Answer: Judges

17. A story of his job interview is told in *Miscellany for Marquises*. He writes that the moonlight is like "frost upon the ground" in *Thoughts on a Still Night*, and of an ape "howling at the moon" in a poem later translated in a collection called *The Chinese Flute*. "The River Merchant's Wife: A Letter" was translated in the more famous collection *Cathay*. His exposure in the West is largely due to the aforementioned Ezra Pound translation and his works' use in *Das Lied von der Erde* by Gustav Mahler. For ten points, name this Tang Dynasty poet who, according to legend, drowned when he tried scoop the reflection of the moon out of a river.

Answer: Li Bai or Li Bo or Li Po or Rihaku

18. In a rival's play, Pax, his avarice is mentioned; Oldfather contends this because of his father's job as Istrus, a knife-maker, and not because he elected by Athenians as one of its ten generals in 441 B.C. that crushed the Samos revolt. His fragmentary works include an account of Hermes amusing satyrs in *Ichneutae*, and he also portrayed Heracles in a negative light in *Trachiniae*. Best known for a play where the sister of Ismene defies the orders Creon gave concerning the burial of her brother, for ten points, name this Greek tragedian whose surviving plays include *Philoctetes*, *Ajaz*, and *Antigone*.

Answer: Sophocles

19. The mortuary temple of Amenhotep III contained around 700 statues of her, one standing and one sitting for each day of the year. She was the companion or sister of Ptah and was worshipped primarily at Memphis. Created from the Eye of Ra, she went on a killing rampage but was tricked by Ra into thinking the Nile ran red with blood, when in reality it was beer and pomegranate juice. She then became more gentle and was associated with the goddess of love, Hathor. The warrior goddess of Upper Egypt, she became superior to the other warrior goddess, Bast, because upper Egypt had conquered lower Egypt. For ten points, name this Egyptian goddess of war and vengeance, depicted as a lioness.

Answer: Sekhmet

20. After the protagonist of this novel leaves home, his room is taken over by a lodger named Joe, and his parents apologize that Joe has paid rent in advance. The protagonist's stomach throbbed like an engine that makes pain when Brodsky said "I think that should be enough for Day One, don't you Branom?" when the protagonist finished with the Ludovico Technique. That protagonist talks to his droogs Dim, Pete, and George, using a language called Nadsat when he's not appreciating the music of Beethoven or taking in a bit of the Ultraviolence. The American edition of this book famously omits the final chapter in which Alex decides to abandon his criminal ways and settle down and start a family. For ten points, name this Anthony Burgess novel.

Answer: A Clockwork Orange

21. Nagel's paper on the topic differentiates four types of this phenomenon: resultant, circumstantial, constitutive, and causal. His paper is a response to this concept's originator, who seems to think that this phenomenon is destructive enough to lead one to reject Kant's position and focus on ethics. It challenges the Control Principle, which states that people are only morally culpable or praiseworthy depending on factors under their control. In contrast to that claim, this phenomenon is exemplified by the situation of a murderer and an attempted murderer, who ought to be equally culpable for a crime but in actuality are not treated equally. Most famous for its discussion in Bernard Williams's eponymous essay, this is, for ten points, what serendipity of ethical agents.

Answer: moral luck

2 Princeton Bonuses, Round 7

- 1. Visit Spain, where no means "no." Name these regions of Spain, for ten points each.
 - 10 The wedding of Ferdinand of Aragon and Isabella of this region led to the reunification of Spain.

Answer: Castile (or Castilla)

10 This region in the South is identified with Moorish architecture and Flamenco.

Answer: Andalusia

10 This region at the Northwest tip of Spain is home to the birthplace of Francisco Franco.

Answer: Galicia or Galiza

- 2. Answer the following about non-mainstream Olympic events, for ten points each.
 - 10 Participants in this Olympic sport, added in the 2000 Sydney games, compete from either a 10 meter platform or a 3 meter springboard.

Answer: synchronized diving

10 On this artistic gymnastics apparatus, a man swings his legs in a circular motion while performing various technical skills

Answer: pommel horse

10 Yelena Isinbayeva is the only member of the women's "5 metres club" for this athletics event.

Answer: pole vault

- 3. Name these films of Ingmar Bergman, for ten points each.
 - 10 This 1957 film borrows its title from the book of Revelations. It features a knight beating Death in a game of chess.

Answer: The Seventh Seal (Det Sjunde Inseglet)

10 This 1982 Bergman film is about two siblings and their life after their mother remarries a bishop.

Answer: Fanny and Alexander (Fanny och Alexander)

10 This Bergman film, released in the same year as *The Seventh Seal*, is about the doctor Isaac Borg, who is traveling to Lund to receive an honorary doctorate.

Answer: Wild Strawberries or Smultronstället

- 4. He held that God is identical to nature and that everything that happens is logically necessary. For ten points each...
 - 10 Name this Dutch philosopher whose writings form the basis for Naturalistic Pantheism.

Answer: Benedict (or Baruch) de Spinoza (accept variants)

10 In this 1670 Spinoza work, he denies the existence of miracles, rejects the idea that Moses composed the entire Old Testament, and advocates a secular government.

Answer: Tractatus Theologico-Politicus or Theologico-Political Treatise

10 Spinoza met with Leibniz to discuss this famous 1677 work, from which Leibniz probably stole.

Answer: Ethics

- 5. Answer the following about a cartoon for ten points each.
 - 10 The premise of this Genndy Tartakovsky show involves a warrior transported forward through time to a dystopian future, where the earth is ruled by a villainous demon.

Answer: Samurai Jack

10 This is that villainous demon, voiced by Mako, who rules the future in *Samurai Jack*.

Answer: Aku

10 This actor who provided the voice for Jack is probably better known for being an original cast member of MADtv, where he effectively impersonated such celebrities as Chris Rock, and for getting shot in the face by John Travolta in Pulp Fiction.

Answer: Phil LaMarr

- 6. Identify these organic reagents for ten points each.
 - 10 Used to test for unsaturated hydrocarbons, it turns brown when it reacts with alkenes or alkynes.

Answer: Baeyer's Reagent

10 A solution of zinc chloride in hydrochloric acid, it is used to determine whether an alcohol is primary, secondary, or tertiary.

Answer: Lucas' Reagent

10 This reagent can convert ketones to tertiary alcohols and is made by reacting magnesium metal with alkyl halides.

Answer: Grignard Reagent

- 7. In Chapters 13 through 20, the "original 7" led by Chao Gai rob birthday gifts. For ten points each...
 - 10 Name this Ming dynasty Chinese novel that describes the experiences of 108 Song dynasty lawbreakers.

Answer: Water Margin or Outlaws of the Marsh or

All Men Are Brothers or Shuihuzhuan

10 The authorship of the book (or at least its first seventy chapters) is attributed to this man who might be an pseudonym of Luo Guanzhong.

Answer: Shi Naian

10 One of the first translations appeared as "All Men are Brothers" by this author of *The Good Earth*.

Answer: Pearl Buck

- 8. Identify these Ancient cities for ten points each.
 - 10 This city is mentioned in the Bible as the birthplace of Abraham. It was invaded by Sargon of Akkad in 2340 BC. It is located near the mouths of the Tigris and Euphrates rivers.

Answer: Ur

10 Known as "the city of Amun" it was the capital of Egypt during the reign of the eleventh and eighteenth dynasties. A city of the same name was located in Greece and was at one time ruled by Oedipus.

Answer: Thebes

10 Along with Harappa it was one of the great cities of the Indus Valley Civilization. It had a planned grid layout of streets and the world's first urban sanitation system.

Answer: Mohenjo-Daro

- 9. Name these Baroque artists for ten points each.
 - 10 This painter of *The Crucifixion of St. Peter* is probably more famous for *The Calling of St. Matthew*.

Answer: Michelangelo Merisi da Caravaggio

10 The Cornaro Chapel in Rome contains his *The Ecstasy of St. Theresa*.

Answer: Giovanni Lorenzo Bernini

10 Influenced by Caravaggio, this artist's works include $The\ Conversion\ of\ the\ Magdalene$ and $Judith\ beheading\ Holofernes$

Answer: Artemesia Gentileschi

- 10. A part of the eye is named after 19th century German anatomist Karl Wilhelm Ludwig Bruch. For ten points each...
 - 10 Bruch's membrane is the innermost layer of this vascular layer of the eye between the retina and the sclera.

Answer: choroid coat

10 This photoreceptor contained in rod cells is a geometric isomer.

Answer: rhodopsin

10 This region located at the center of the macula lutea is responsible for the sharp central vision for reading.

Answer: fovea centralis

11. Answer the following about the relatives of Loki, for ten points each.

10 Bound by the gods, this giant wolf will break free and devour Odin at Ragnarok.

Answer: Fenrir or Fenris Wolf

10 This giantess was Loki's mate and the mother of Fenrir.

Answer: Angrboda

10 Loki and Angrboda are also the parents of this morbid goddess, half alive and half dead.

Answer: Hel

- 12. This minimalist composer has scored *The Hours* and *The Truman Show*. For ten points each...
 - 10 Name this composer of the 1976 pointless, I mean plotless, opera about a physicist.

Answer: Philip Glass

10 This 1980 opera about the life of Gandhi forms the second part of Glass's loosely connected "Portrait Trilogy", of which *Einstein on the Beach* is the first.

Answer: Satyagraha

10 Glass composed the score for this film, the first in a trilogy, in 1982. It's title is Hopi and it is subtitled "Life out of Balance;" it consists mainly of photos of various landscapes and cities.

Answer: Koyaanisqatsi

- 13. On April 21, 1918, a Fokker triplane was shot down over Morlancourt Ridge. For ten points each...
 - 10 Name the dead German pilot of this plane whose nickname was the Red Baron.

Answer: Manfred von Richthofen

10 Richthofen's opposition in World War I included this American ace of German descent who flew Nieuport 28s and SPAD VIIIs.

Answer: Eddie Rickenbacker

10 This American ace scored 21 kills in World War II and another 3.5 in Korea and was shot down in both conflicts

Answer: Walker "Bud" Mahurin

- 14. Given a description of a type of subatomic particle, name the particle or group of particles, for ten points each.
 - 10 This type of particle is a hadron with integral spin. Examples include the pion and kaon.

Answer: Meson

10 This type of quark with charge -1/3 was first found in the K-meson.

Answer: strange quark

10 These are the two types of particles that mediate the weak nuclear force.

Answer: W and Z Bosons

- 15. Name these sculptures of Auguste Rodin, for ten points each.
 - 10 This sculpture of two ill-fated lovers was originally titled *Francesca da Rimini*.

 Answer: The Kiss (Le Baiser)

10 When this nude was first exhibited, Rodin was accused of having cast a living model.

*Answer: The Age of Bronze (L'Age d'Airain)

10 This sculpture depicts a group of men awaiting execution during the Hundreds' Year War.

Answer: The Burghers of Calais (Les Bourgeois de Calais)

- 16. Given the description of a famous case study in psychology, name the person who was studied for ten points each.
 - 10 This man's personality drastically changed when a railroad accident forced a tamping iron to pass through the frontal lobes of his brain.

Answer: Phineas Gage

10 Freud and Breuer studied this patient, whose real name was Bertha Pappenheim, in 1895's *Studies on Hysteria*.

Answer: Anna O.

10 John B. Watson unethically taught this young child to fear a white rat, resulting in empirical evidence of classical conditioning.

Answer: Little Albert

- 17. Identify these naval battles for ten points each.
 - 10 At this 1827 battle, a British, French, and Russian fleet destroyed the ships of Ibrahim Pasha, thus preventing the Egyptians and Ottomans from stopping Greek Independence from going forward.

Answer: The Battle of Navarino

10 In this 1598 battle, the Japanese invasion fleet was repulsed by a combined Chosun and Ming fleet. Admiral Yi Sun-Sin led the Koreans but was killed during the battle.

Answer: The Battle of Noryang Point

10 A Spartan fleet under Lysander destroyed the Athenian fleet under Conon at this 405 BC battle.

Answer: The Battle of Aegospotami

18. Contemporary American Playwrights: Given a lesser known American play, name the playwright, for ten points each. If you need another play as a clue, you can only get 5 points.

- 10 A Memory of Two Mondays
- 5 Death of a Salesman

Answer: Arthur Miller

- 10 The Water Engine
- 5 Glengarry Glen Ross

Answer: David Mamet

- 10 The Prisoner of Second Avenue
- 5 The Odd Couple

Answer: Neil Simon

- 19. In 1948, Hebrew scholar Samuel M. Stern published 24 poems found in a synagogue in Cairo. For ten points each...
 - 10 Name these "short lyric poems written in very archaic Spanish" that are now believed to be the first Ibero-Romance literature.

Answer: jarchas

10 The *jarchas* pre-date an anonymous epic poem divided into three parts about Ruy Diaz de Vivar, who was also written about by Pierre Corneille and was known by what name?

Answer: Cantar de Mio Cid or El Cid Campeador

10 It was not until the mid-thirteenth century that prose gained popularity in Spain, after this King of Castilla gave recognition to the writing form.

Answer: Alfonso X

- 20. Given some information about the losing candidate from a particular US Presidential election, give the year of the election, for ten points each.
 - 10 George McClellan and George Hunt Pendleton were the losing Democrat ticket in this election.

Answer: 1864

10 Despite gaining the support of the Federalists and winning most of the Northeast, New Yorker DeWitt Clinton lost this election to a different Democratic-Republican.

Answer: <u>1812</u>

10 Democrat James Cox, with FDR as his running mate, lost this election to a fellow Ohioan.

Answer: 1920