

2003 Singles (Tossups by Subash Maddipoti and Seth Teitler)

Seeding Round A

(40 tossups, plus 1 extra)

A1. Its barfly character of Dr. Hasselbacher is based on a pedophile German count the author encountered on Capri. Later in the novel the protagonist is sent the help of Beatrice, with whom he falls in love. The protagonist, in his attempt to keep up with his daughter Milly's demands, makes easy prey for the designs of Hawthorne. As a result he reports falsely on the dealings of Segura, even daring to pass off vacuum parts diagrams as bomb plans. FTP, name this comedy about Wormold, set in Cuba and written by Graham Greene.

Answer: **Our Man in Havana**

A2. Notable books on this event include Stephen B. Oates' *Fires of Jubilee*. Almost all of our information comes from Thomas Gray's interviews with its leader, who felt that a solar eclipse was the sign to begin it. The plan had been to raid the town of Jerusalem and move east to the Dismal Swamp. However, only 75 blacks banded together for this event in Southampton County. FTP, identify this 1831 slave revolt in Virginia.

Answer: **Nat Turner's Revolt**

A3. One of these types of solutions is used industrially to remove water from the Fisher esterification reaction. Their definition specifically applies to such compositions as a solution of sulfuric acid with a concentration of 98.33 percent acid. They can not physically be separated by fractional distillation, for that will achieve no change in their composition. FTP, name these solutions of liquids that have a constant boiling point.

Answer: **azeotropes**

A4. He focused on the U.S. in such works as *Character and Opinion in the United States* and *The Genteel Tradition at Bay*. He became interested in the systems of Plato and Aristotle and divided his works into the personal and the academic. Some of his other works include *Lucifer: A Theological Tragedy*, *Dialogues in Limbo*, and the memoirs *Persons and Places*. FTP name this philosopher, a long-time professor at Harvard who wrote *The Sense of Beauty* and *The Last Puritan*.

Answer: George **Santayana**

A5. George Steiner established five constants of conflict to explain the power of this play. The ending mentions that Megareus has died, though it his brother's death that prompts Eurydice's suicide. In his version, Jean Anouilh showed more sympathy for the father of Haemon. FTP, name this play about the stubbornness of Creon, the concluding one in Sophocles' Oedipus trilogy.

Answer: **Antigone**

A6. This Supreme Court case answered the first of two questions by granting that "the sword and purse" are entrusted to the government, interpreting the "necessary and proper" clause to support a creation of Congress. The second question was answered by the claim that "the power to tax is the power to destroy," thus no state could tax a federal institution. FTP, name this case in which a national bank was deemed constitutional, an 1819 decision that voided a tax levied by Maryland.

Answer: **McCulloch v. Maryland** (just "McCulloch" is enough after Maryland is mentioned)

A7. First discovered in avian red blood cells, these water-soluble compounds are found in their greatest concentrations in the thymus and pancreas. Particularly rich in lysine and arginine, four of them form an octamer that contributes to a beadlike structure known as a nucleosome. The five main types are the H1, H2A, H2B, H3, and H4. FTP, identify these chromosome proteins around which the DNA helix winds during packaging.

Answer: **histones**

A8. As a teenager he wrote the libretto and music for an opera, *The Death of Pierrot*. Despite the failure of *The Island God*, he gained fame with such operas as *Maria Golovin* and *The Last Savage*. Other accomplishments include his founding of The Festival of Two Worlds at Spoleto, Italy and writing the libretto for Barber's *Vanessa*. FTP, name this operatic composer of *Amelia Goes to the Ball* and *Amahl and the Night Visitors*.

Answer: Gian Carlo **Menotti**

A9. After release from debtor's prison this writer produced the play *The Forced Marriage*, which was quickly followed by *The Amorous Prince*. The posthumous *The Widow Ranter* failed miserably, unlike earlier successes *The Town Fop* and *Abdelazer*. Her *Poems on Several Occasions* appeared seven years after *The Rover*. FTP, name this one-time spy for Charles II and novelist of *Oroonoko*, considered England's first professional female writer.

Answer: Aphra **Behn**

A10. As a teenager he was mentored by Adrian of Utrecht, later Pope Adrian VI. His younger brother Ferdinand gained the throne of Hungary after Louis II was killed at Mohacs, and this man ensured supremacy of Italy with a victory at Pavia over Francis I. The son of Phillip I and Juana the Mad, FTP, name this 16th century monarch, who ruled as both king of Spain and Holy Roman Emperor.

Answer: Charles V or Charles I of Spain (prompt on just "Charles I")

A11. In two circuit connections maximum power is transmitted when the output type of this value for one device equals the input type for the second device. Designated by the letter Z, it is equal to the voltage across a circuit divided by the current through that circuit. Its reciprocal is termed admittance, and this value, like resistance, is measured in ohms. FTP, name this measure of the total opposition that a circuit presents to electric current.

Answer: impedance

A12. The king of Pessinus, he was an adopted son of Gordias and Cybele who gained favor with the gods with his kind treatment of the satyr Silenus. Later in life he worshipped Pan and was given donkey ears by Apollo. His greatest gift and curse was given to him by Dionysus, though he washed it away by bathing in the Pactolus River. FTP, name this man whose greed led him to ask that he everything he touch turn into gold.

Answer: Midas

A13. The title character's vacation to Maine proves to be only a brief respite. As this novel opens he reluctantly wakes from a recurring dream about his savior fairy girl. He believes to have found that fairy girl in Tanis Judique, but that delusion ends when he learns of his wife's appendicitis. He had already been shattered by Paul Riesling's murder of his wife, prompting his rebellion. FTP, name this work about the titular real-estate broker from Zenith, a novel by Sinclair Lewis.

Answer: Babbitt

A14. He threw his mother in prison after succeeding his father, Eurgetes. Following the partitioning of Galatia between himself and Nicomedes III of Bithynia, he suffered several defeats to Fimbria, but rebounded with victory over the consul Cotta at Chalcedon. He was finally conquered at the hands of Pompey in 66 BC. FTP, name this king of Pontus, the sixth of his line, whose name means "gift of the god Mithra."

Answer: Mithradates VI Eupator

A15. Memphis Facula is the largest of this satellite's palimpsests, or ancient craters, while Gilgamesh is its largest impact basin. Simon Marius discovered this moon in 1610, and its most notable feature might be the massive oval spot known as Galileo Regio. In structure it resembles its outer neighbor Callisto, but this third Galilean moon is unique for one major reason. FTP, name this satellite of Jupiter, the largest moon in the solar system.

Answer: Ganymede

A16. Its marine life consists primarily of two species of killifish and a catfish. The Isla de Sol is the largest island within it, and this body of water is separated into two parts by the Strait of Tiquina. The Aymara Indians live around it, while its southern shore contains many Incan ruins. Lying on the border between Peru and Bolivia, FTP, identify this second largest lake in South America, and the highest lake in the world.

Answer: Lake Titicaca

A17. In *Interpretation of Dreams* Freud writes about this character's scruples, and in his lecture "On" this character, Coleridge concentrates on his mental state. T.S. Eliot wrote about him "and His Problems," and his earliest source is Saxo Grammaticus, though Thomas Kyd's *Ur*-version is more famous. FTP, name this character whose last words are spoken to Horatio, after he has killed both Claudius and Laertes.

Answer: Hamlet

A18. It resulted in the recognition of the autonomy of Outer Mongolia and the secret decision to give Byelo-Russia and the Ukraine full membership in the United Nations. It issued the Declaration of Liberated Europe, pledging support for popularly elected postwar governments, though that would be difficult with the 20 billion dollars in reparations the Soviet Union demanded from Germany. FTP, identify this conference at which Stalin agreed to go to war in the Far East, held in February 1945 in Crimea.

Answer: the Yalta conference

A19. In the gastrodermal cells of most Cnidarians these organelles are the site of digestion. They are covered by a membrane known as the tonoplast, which contains permeases to control the concentration of the cell sap solution within them. Lysosomes and peroxisomes are actually a specialized type of this organelle that controls water concentration in the cell. FTP, name these organelles that can constitute up to 90% of the volume of a plant cell.

Answer: vacuole

A20. In chapter five of this work, the tales of *The Talisman* and “The Emperor’s New Clothes” are used explain man’s embarrassment of nakedness. In its preface, the author thanks Wilhelm Stekel for his influence and Otto Rank for helping provide useful examples. The seventh and final chapter elucidates such concepts as repression and wish fulfillment during the title occurrences. FTP, name this seminal 1899 work by Sigmund Freud.

Answer: *The Interpretation of Dreams* or *Die Traumdeutung*

A21. It ends with the poet awaking with the story of Ceyx and Halcyone, which he had been reading earlier. In a dream the poet joins the hunting party of Emperor Octovien and meets a knight in black who mourns the loss of his lady. Written as a lament on the death of Blanch of Lancaster, the first wife of John of Gaunt, FTP, name this poem by Geoffrey Chaucer.

Answer: *The Book of the Duchesse*

A22. After the successive rules of Malric and Almaric, this title was disputed for 20 years before it passed into the hands of Guy de Lusignan. Guy was stripped of it at Hattin in 1187 when he was defeated by Saladin, and it virtually ceased to exist. First awarded to Godfrey de Bouillon, FTP, name this monarchical title over the holiest of Middle Eastern cities.

Answer: king of Jerusalem

A23. Cooper pair formation takes place by electron interaction with them. The scattering of light from them is known as Brillouin scattering, and their population in a given mode can be determined from the spontaneous Raman signal. They carry crystal momentum, and the Mössbauer effect takes place when the lattice recoil energy is below their lowest energy. Propagating at the speed of sound, FTP name these quantized lattice vibrations in solids.

Answer: phonons

A24. After he is caught, he gives a copy of Ayn Rand’s *Atlas Shrugged* to his captor. He is caught because of clues left in the children’s book *Teetle the Timid Taxidermist*, and it is revealed that he is actually the bookmobile driver. He claims that his motive was to teach Officer Barbreedy to read and appears in the “respect my authority” episode. FTP, name this criminal of an early South Park episode, whose love of poultry is perhaps too great.

Answer: Chicken Lover or Chicken Fucker

A25. This novel ends with the tragic hero dying among the prickly pears before he can call his mother’s name. Ashamed by his mother Mistress Nunzia’s poverty, he works for Master Cola. After failing to regain his love, Lola, he provokes a knife fight with Alfio. FTP, name this novel about Turiddu written by Giovanni Verga and turned into an opera by Mascagni.

Answer: *Cavalleria Rusticana* or *Rustic Chivalry*

A26. He finished his major project with the assistance of Richard Stanihurst and William Harrison, and they completed it on a smaller scale. The project had initially been begun by Reginald Wolfe, but he was forced to take over upon Wolfe’s death in 1573. It was primarily used as a source of plots for Elizabethan dramatists and Shakespeare. FTP, name this author of the famous *Chronicles of England, Ireland, and Scotland*.

Answer: Raphael Holinshed

A27. Scientist Pol Swings identified three new ions in these structures, which give rise to Brownlee particles. An early theory of their structure, the sandbank model, was shown to be erroneous by Fred Whipple, who theorized the correct makeup of their nuclei. Famous ones include Arend-Roland and Tempel-Tuttle, while new ones originate in the Oort [Ort] Cloud. FTP, name these celestial bodies that possess a gaseous coma and a luminous tail.

Answer: comets

A28. In the Greek tradition he came from a land of cannibals and dog-headed people, while in the Latin tradition he was a Canaanite. He is represented as a giant leaning on a staff in a side panel of Rubens’ *Descent from the Cross* triptych, which has the theme of bearing Christ. FTP name this patron saint of travelers who carried the child Jesus across a river.

Answer: Saint Christopher

A29. Samuel Butler joked that it was good of God to have this man and his wife marry to make two people miserable instead of four. His translation of Goethe’s *Wilhelm Meister* followed his *Life of Schiller* and other notable biographies include his *Early Kings of Norway* and his *History of Frederick the Great*. His pamphlets include *Past and Present* but he reached his peak with his *French Revolution*. FTP, name this British author of *Sartor Resartus*.

Answer: Thomas Carlyle

A30. According to her most famous biographer, she became a prostitute at the age of seven and became famous for a stage act in which she would perform sexual acts with geese. At the age of thirteen, she retired and became the live-in mistress of the governor of Libya, but soon afterwards abandoned him in favor of the Emperor’s nephew-- a wise move, as

this eventually allowed her to become the most powerful woman in Byzantium. FTP, name this principal subject of Procopius' *Secret History*, the wife of the Emperor Justinian.

Answer: **Theodora**

A31. Reforming reactions on heptane primarily yield this molecule, whose diisocyanate is used in polyurethane production. Extreme exposure to it can result from glue sniffing. It is used as an octane booster in fuel and as a paint-thinning agent, and has chemical formula $C_6H_5CH_3$. Adding a methyl group results in xylene. FTP name this aromatic hydrocarbon, the second T in TNT.

Answer: **toluene** or **toluol** or **phenylmethane** (accept **methylbenzene** before it is mentioned in the question); prompt on methacide or Antisal IA

A32. Mozart famously reorchestrated this piece of music for a 1789 performance in Vienna. It was originally written for the benefit of a foundling home in Dublin, thus the first version is known as the "Dublin version." Divided into three parts, its opening section is "And The Glory of The Lord." FTP, identify this piece of music often performed during Holy Week and known for its "Hallelujah" chorus, the most famous oratorio of Georg Handel.

Answer: **Messiah**

A33. His experimental works include *Marilyn*, a pictorial life of Marilyn Monroe, and the massive historical novel, *Ancient Evenings*. In the 1960s he wrote primarily polemical works like *Why Are We In Vietnam?*, *An American Dream*, and a Pulitzer Prize-winning account of the 1967 protest march on the Pentagon entitled *Armies of the Night*. FTP, name this American novelist of *Tough Guys Don't Dance*, whose time in the Pacific during World War II inspired his first novel, *The Naked and the Dead*.

Answer: Norman **Mailer**

A34. One group by this name fought two wars, with the latter being waged between 1526-29. The second group by this name was defeated at Arques and Ivry. It was originally formed under the auspices of Henry of Guise and subsidized by Philip II of Spain. The First was arranged by Julius II among the Italian and European powers. FTP, give the common names for these organizations that also defeated the Ottomans at Lepanto.

Answer: **Holy League**

A35. Bertrand's method can be used to find simple algebraic integrals of motion for Hamiltonian systems with two of these. Gibbs' phase rule implies that a single component at its triple point has none. The equipartition theorem assigns an average energy of $kT/2$ to each one. In aeronautics, pitch, roll, and yaw are the 3 for rotations. FTP, name this term for the least number of independent parameters required to uniquely define a material system's position.

Answer: **degrees of freedom**

A36. He first gained fame for using tapered columns to support the pressroom roof in the newspaper office of Abo. The Villa Mairea is his most luxurious design, and he followed that up with an innovative showroom of undulating glass and molded wood at the 1939 New York World's Fair. He later designed Baker House at MIT, using many furnishings from his Artek design firm. FTP, name this Finnish architect.

Answer: Alvar **Aalto**

A37. At the suggestion of the publisher William Collins he wrote his first full-length novel *HMS Ulysses*. The varied settings for his novels include the China Seas for *South by Java Head*, Greenland for *Night Without End*, and Scottish islands for *When Eight Bells Toll*. These are written in the style of the adventure novel whose form he perfected in works like *Ice Station Zebra*. FTP, name this popular British novelist of *Where Eagles Dare* and *The Guns of Navarone*.

Answer: Alistair **Maclean**

A38. Of particular interest is her correspondence with her sister, Mary Cranch. The novel *Those Who Love* is a fictional account of her life by Irving Stone and tells of her direct descent from the Puritan preacher Thomas Shepard through her mother Elizabeth Quincy. This is also available in her memoirs published by her grandson, Charles Francis, that also include her famous letters to her husband. FTP, name this wife of John Adams.

Answer: **Abigail Adams** (prompt on last name) or Abigail **Smith**

A39. It is the underlying topological space for all complex elliptic curves. With some added structure, it is the only closed Riemann surface with non-trivial abelian fundamental group, and the only one with a flat metric. This genus one surface is the Cartesian product of two circles, and can be constructed by rolling and gluing opposite edges of a rectangle. FTP, name this space which looks like the surface of a donut.

Answer: **torus**

A40. His mistress is a giantess whose name means "iron cutlass," and his wife is the mother of his two sons, Magni and Modi. Also known as Donar, he is married to the goddess Sif. The dwarves Brok and Eitri fashion his most useful tool, with which he kills the Midgard Serpent during Ragnarok. Always seen wielding his hammer Mjollnir, FTP, name this Norse god of thunder.

Answer: **Thor**

A41. Blodgett and Bradley edited the definitive "Reader's Edition" of his major work, including the posthumous "Old Age Echoes" cluster. In his essay about him, Ezra Pound writes that "His crudity is an exceeding great stench, but it is America." His poems of note include "Calamus," "Children of Adam," and "When I Heard the Learn'd Astronomer." FTP, name this poet of "Out of the Cradle Endlessly Rocking" and "Song of Myself."

Answer: Walt **Whitman**