## Seeding Round C

(70 tossups, plus 4 extras)

C1. The hymn serving as its national anthem, officially adopted in 1950, is by Charles Gounod and Antonio Allegra. Its absolute ruler, the sixth since it became a recognized independent state in 1929, has held office since 1978. For 10 points—name this small state which operates one railroad station, one broadcasting facility, and one newspaper, the Osservatore Romano.

answer: Vatican City State (or Stato della Città del Vaticano)

C2. An edgy hip minimalism has been the hallmark of this young author who has recently been called her country's leading pop novelist. Works such as N.P., Lizard, and Amrita have all sold well, both in Japan and in foreign translation, though her greatest success remains her first novel, 1991's Kitchen. For 10 points—what writer has been the object of reader enthusiasm dubbed "Bananamania"?

answer: Banana Yoshimoto

C3. The illuminance on a surface illuminated by light falling on it perpendicularly from a point source is proportional to the inverse square of the distance between the surface and the source. If the rays meet the surface at an angle, then the illuminance is proportional to the cosine of the angle with the normal. The luminous intensity of light decreases exponentially with distance as it travels through an absorbing medium. For 10 points—these are the three laws of what 18th-century German physicist, who gives his name to the cgs unit of brightness?

answer: Johann Heinrich Lambert (accept Lambert's Laws)

C4. Its first spoken line, at a funeral following a motorcycle accident, is "He was the most extraordinary man I ever knew." Its cast includes Jack Hawkins, Anthony Quayle, Claude Rains, Arthur Kennedy, Jose Ferrer, Anthony Quinn, Alec Guiness, and Omar Sharif. For 10 points—name this David Lean film, the winner of seven Academy Awards including Best Picture, whose title character is played by Peter O'Toole.

answer: Lawrence of Arabia

C5. He was devastated during his presidential campaign by the freak death at age 16 of his son and namesake: playing tennis without socks, the boy blistered his toe and developed a fatal infection. Other tragedies in his life included the early deaths of a sister, Abbie, and of his mother, Victoria Josephine Moor. For 10 points—name this president whose own death came January 5, 1935, at his home in Northampton, Massachusetts, after which he was buried in the family plot in Plymouth, Vermont.

answer: (John) Calvin Coolidge

C6. Two of his major works are in the Palazzo Vecchio in Florence—his portrait of Laura Battiferri and his design of a series of tapestries on the *Story of Joseph* fresco. This pupil and adopted son of Pontormo was introduced as a child portrait in Pontormo's *Joseph in Egypt*. He personified Mannerist painting with the confused posturing assumed in his most famous work, *Venus*, *Cupid*, *Folly*, and *Time*. For 10 points—name this painter born Agnolo di Cosimo.

answer: Agnolo Bronzino (accept early Agnolo di "Cosimo")

C7. He trained in Vienna with Anna Freud before emigrating to the U.S. in 1933 and beginning to teach at Harvard. In 1958 he pioneered the field of psychohistory with his study of a religious reformer, and continued in that vein with a later work on Mohandas Gandhi. But his most influential work was one outlining eight stages of psychosocial development in human lives. For 10 points—identify this psychologist who authored Young Man Luther, Gandhi's Truth, and Childhood and Society.

answer: Erik Erikson

C8. It winds up being \$250 in cash paid by Sam and Bill, though their original plan had been \$2000 in the other direction. The subject of this payment is Johnny Dorset, who correctly bills himself as "the terror of the plains" when taking on his Indian persona. For 10 points—in what O. Henry short story do roughed-up kidnappers wind up paying the father to agree to take the kid back?

answer: The Ransom of Red Chief

C9. The Romanovs valued his skill and would not have allowed him to emigrate, but he escaped Czarist Russia by using his makeup to give himself a sickly pallor and convincing Nicholas II to order him to a German spa. Moving on to Los Angeles, his inventions were indispensible to the glamour of Hollywood, including such innovations as flexible grease paint, lipstick as we know it, the mascara wand, and the concept of color harmony. For 10 points—the company founded by what "beauty consultant to the stars" became easily the world's leading manufacturer of cosmetics?

answer: Max Factor

C10. For many years it was the principal raw material for making phthalic anhydride, and large quantities of it are converted for use as dyestuff intermediates. It is commercially produced by crystallization from the intermediate fraction of condensed coal tar, and from the heavier fraction of cracked petroleum. With chemical formula C-10-H-8 it is the simplest of the polyaromatic hydrocarbons. For 10 points—identify this compound composed of two benzene rings sharing two adjacent carbon atoms.

answer: naphthalene

C11. As players, coaches, and managers, this has been a legendary hockey family. Glenn, Craig, and Muzz all played and coached in the NHL. Frank, Lynn, and Lester are each in the Hall of Fame. In 1989 Lynn's son Craig was hired as general manager of the team that went on to win the 1991 Stanley Cup, the Pittsburgh Penguins. Appropriately, the Penguins play in the NHL division named for a member of Craig's storied family. For 10 points—what family is this, that is neither Norris, Smythe, nor Adams?

answer: Patrick

C12. Prince de Conde [cohn-day] continued to fight this conflict, even though a peace had been reached. Its cause was nonpayment of a large dowry, for which Marie Therese had, before marrying, renounced her rights to the disputed area. When Marshal de Turenne was ordered into Flanders, the United Provinces, England, and Sweden formed an alliance against France. Ending with peace in 1668—for 10 points—what conflict began when Louis XIV claimed the Spanish Netherlands for his own?

answer: War of the Devolution

C13. In France she was supposedly married to the convert Zaccheus, and she supposedly brought relics of the Blessed Virgin to Soulac-sur-Mer, where she died and was buried. Eusebius tells of her as having lived at Caesarea Philippi and having been healed of a hemorrhage by Christ. For 10 points—name this legendary woman who, moved by the sight of Christ carrying his cross to Golgotha, gave him her kerchief to wipe his brow, after which he handed it back imprinted with his image.

answer: Saint Veronica

C14. It occurs in many solids, liquids, and gases and is proportional to Verdet's constant, which depends upon the material, the strength of the magnetic field, and the thickness of the substance. It was first discovered when its namesake was studying light waves that had been plane polarized by passing through a block of glass. For 10 points—identify this effect that is defined as the rotation of the plane of polarization of a light beam by a magnetic field, and is named for an English physicist.

answer: Faraday effect or Faraday rotation

C15. Published in the London Times in July, 1897, it echoes the passage in Deuteronomy, "Then beware lest thou forget the Lord." Beginning with an invocation to the "God of our fathers, known of old, Lord of our far-flung battle line" to "be with us yet," the poem was addressed to a Britain dazzled by the pomp and splendor of Queen Victoria's Diamond Jubilee. For 10 points—identify this short Rudyard Kipling poem given the title of a hymn accompanying an egress.

answer: Recessional

C16. Originally calling themselves the Tories, they changed to the Shrinky Dinx, but quickly changed again when Hasbro threatened a suit because of copyright infringement. The three albums they have released to date are 1995's Lemonade & Brownies, 1997's Floored and 1999's, 14:59. Headed by the vocals of Mark McGrath—for 10 points—identify this band that had Top Ten hits with "Fly," "Every Morning," and most recently, "Someday."

answer: Sugar Ray

C17. Named for a Dutch navigator who died in 1597 in pursuit of the Northeast Passage, the Norwegian port of Vardö and Russian port of Murmansk both lie on its shores. For 10 points—name this arm of the Arctic Ocean partially enclosed by Novaya Zemlya, Franz Josef land, and Svalbard, between the Norwegian Sea and the Kara Sea.

answer: Barents Sea

C18. It developed as a result of a state legislature setting maximum rates that private companies could charge for the storage and transport of agricultural products. In its decision, the Supreme Court upheld the power of government to regulate private industries. For 10 points—identify this best known of the Granger cases, an 1877 dispute arising in Illinois.

answer: Munn v. Illinois

C19. H. L. Mencken once remarked that the second movement to this musical piece was the only proof he required of the existence of God. The melodies of the opening movement, "Allegro ma non troppo," are in their turn sweet and melancholy. Its second movement contains a melody used before by the composer—in incidental music to the failed stage play that gives its name to this string quartet in A minor. Often proposed as a finale to the *Unfinished Symphony*—for 10 points—identify this work of Schubert.

answer: Rosamunde (accept early "Schubert's String Quartet in A minor" or equivalent)

C20. Physicists Steven Weinberg and Abdus Salam first proposed various types of them. They are difficult to test, since the energy scale required to directly observe the phenomenon they predict is 10 to the 12 times greater than current particle-accelerator capacities. Many of them predict that the proton can decay into lighter particles at a slow rate. Supersymmetry is a special example of them which includes gravity. For 10 points—name these theories that propose to unify the four fundamental forces.

answer: grand unification theories or unified field theories ("unification" and "unified" are interchangeable)

C21. The surname's the same. One was a German artist noted for his bust of Nietzsche and statue of Beethoven, as well as for grandiose paintings such as *Christ on Olympus*. Another was a German dramatist, whose 1776 play *Wirrwar; oder, Sturm und Drang*, gave name to a literary movement. A third was a cross-dressing Mudhens fan. For 10 points—what name was shared by artist Max, playwright Friedrich Maximilian von, and a fictional corporal portrayed by Jamie Farr?

answer: Klinger

C22. After demonstrating brilliance at the monastery of Fulda, he was sent to the Palace School at Aachen. He utilized 23 years of service and research to write his most famous work, which was modeled on Suetonius' Lives of the Caesars, particularly on the "Life of Augustus" section. That work, Vita Karoli Magni, is considered the first medieval biography of a lay figure, and remains a frequently consulted source. For 10 points—identify this Frankish historian, best known as the biographer of Charlemagne.

answer: Einhard or Eginhard

C23. The central character is pretty girl married to a little clerk at the Ministry of Public Instructions. She is dissatisfied with her station in life, but things look up when she is invited to a ball at the palace. Her husband spends his savings to buy her a dress and she borrows an adornment from her friend Madame Forestier, but she loses it and runs herself into debt by replacing it. For 10 points—name this Guy de Maupassant short story about the title piece of jewelry, which is actually a fake.

answer: The Necklace or La Parure

C24. He defined the locus of sociological theory as residing not in the internal field of personality, as emphasized by Freud and Weber, but in the external field of the institutional structures developed by society. In 1951's *The Social System* he attempted to tackle large-scale problems of social order, integration, and equilibrium. For 10 points—name this man who familiarized Americans with the thought of Europe's best sociologists in his work *The Structure of Social Action*.

answer: Talcott Parsons

C25. Its value for aluminum is 1 times 10 to the 7th pounds per square inch, and the value for steel is three times greater, meaning that it takes three times as much force to stretch a steel bar the same amount as a similarly shaped aluminum bar. When a material is under lengthwise tension or compression, this quantity is a measure of the ability of a material to

withstand changes in length. A specific form of Hooke's law of elasticity—for 10 points—name this constant which is defined as stress divided by strain.

answer: Young's modulus

C26. An outstanding quarterback at Columbia, he finished third in the 1938 Heisman Trophy balloting. Two years later he led his pro team to the NFL championship in the most lopsided game in league history, a 73-0 blowout over Washington. Named NFL MVP in 1943, he helped win four NFL titles for George Halas before retiring in 1950. For 10 points—what great who died in 1998 remains the all-time franchise leader in passing yards and touchdowns thrown for the Chicago Bears?

answer: Sid Luckman

C27. He's not Grover Cleveland, but he did serve non-consecutive terms as president. Unlike Grover, each of this man's presidential stints ended in a military coup, the first in 1971 and then again in 1985. And quite unlike Benjamin Harrison, the man who held power between his presidencies was a brutal killer who may have cannibalized some of his victims. For 10 points—what Ugandan was overthrown by, and then helped to overthrow, Idi Amin?

answer: (Apollo) Milton Obote

C28. His books include a memoir of his experience as a young Marine in the Pacific war of World War II; a history of America from 1932 to 1972; the four-century history of a German industrial dynasty; and an account of a five-day period in 1963. For 10 points—name this author of Goodbye Darkness, The Glory and the Dream, The Arms of Krupp, and The Death of a President.

answer: William R(aymond) Manchester

C29. Among the hidden characters in the latest U.S. edition of this series of games is the mysterious gunman Vincent Valentine. In the 2nd of the series, you control a party of five, headed by the paladin Cecil. Cloud Strife is the hero of the 7th one, which was voted the best game of 1997 by numerous organizations. All of them contain the creatures known as Chocobos. For 10 points—identify this series of immensely popular role-playing games designed by Squaresoft.

answer: Final Fantasy

C30. The azygos, which services the chest wall and bronchii, opens into it. It is formed by the joining of the two brachiocephalic blood vessels at a point in the back, not far below the collarbone, and on the right side of the breastbone. Emptying into the right atrium of the heart, it drains the arms, head, and chest area above the diaphragm, pretty much the entire upper body. For 10 points—name this large vein.

answer: superior vena cava (prompt on "vena cava")

C31. Some of the best known paintings associated with this movement include *Dynamism of a Dog on a Leash* and *Noise of the Street Penetrates the House*. In music it is often associated with Luigi Russolo and his *L'arte de rumori*, or "The Art of Noises." It originated with publication of a manifesto in the newspaper *Le Figaro* in 1909. For 10 points—name this artistic movement concerned with the machine and motion, and associated with Filippo Marinetti and Umberto Boccioni.

answer: futurism or futurismo

C32. In 1999 her husband of more than 40 years, literary critic John Bayley, published an "elegy" for her, a memoir of her gradual disappearance into the fog of Alzheimer's disease. In 1956, when she married, she was lecturing in philosophy at St. Anne's College, Oxford, and had already published two novels, *Under the Net* and *The Flight from the Enchanter*. For 10 points—name this once-prolific writer whose other works include *The Bell* and *The Sea*, *The Sea*.

answer: Dame Iris (Jean) Murdoch

C33. The temptress is the same. The future King George IV of Great Britain was 18 when he commenced an affair with an older actress of this name. The young Branwell Brontë, too, fell in love with an older woman of the same name. Benjamin Braddock accused this older woman of trying to seduce him—and he was right. For 10 points—name this adulterous subject of a Simon & Garfunkel song featured in the film *The Graduate*.

answer: Mrs. Robinson

C34. The name's the same, first and last. One was the founder of the *Memphis Post*, U.S. commissioner of education from 1870 to 1886, and the first superintendent of public schools in Puerto Rico. The other was U.S. minister to Spain from 1836 to 1840, and a Tennessee senator in the 1820s whose marriage to a widowed tavernkeeper caused a scandal. For 10 points—identify this shared name, one of whom was Andrew Jackson's Secretary of War, whose wife Peggy O'Neale was ostracized by Washington society.

answer: John Eaton

C35. This city, founded by Yusuf ibn Tashfin in 1062, today houses the Université Ben Youssef, a center of Islamic studies. Now its country's fourth-largest city and a tourist center renowned for leather goods, it served as capital of a sultanate in the 11th, 12th, 16th and 17th centuries. For 10 points—what city located in the foothills of the Atlas Mountains about 130 miles south of Casablanca was the destination of an "express" celebrated in a 1970s Crosby, Stills and Nash song?

answer: Marrakesh

C36. His third book, due soon, will chronicle his travel cross-country via American waterways. His second was a "deep map" exploration of landscape and history in Chase County, Kansas. He debuted with a 1983 description of a 13,000-mile automobile journey through 38 states. For 10 points—name this travel writer whose penname reflects his partly-Osage ancestry, author of the forthcoming *River Horse*, as well as the earlier *PrairyErth* and *Blue Highways*.

answer: William Least Heat-Moon or William Trogdon

C37. In the modern world its collection has been left up to the individual, except in certain countries where the Shari'ah is strictly maintained. Levied on a total of five categories of property, some of its targets are food grains; gold and silver; and camels, cattle, sheep, and goats. Like the sadaqah, or voluntary almsgiving, it is intended for the needy. One of the five Pillars of Islam—for 10 points—identify this obligatory tax required of all Muslims.

answer: zakat

C38. Named for the West Virginia city that served as the site of the 1961 conference where it was first discussed, it was primarily formulated by scientist Frank Drake. As an equation its value is dependent upon six factors, the first of which is R sub star, or the mean rate of star formation in the Milky Way. For 10 points—identify this equation that purports to yield the number of technically advanced civilizations in our galaxy.

answer: Green Bank equation

C39. He was governor-general of the Dutch East Indies when, in 1642, he commissioned a voyage of exploration of the "Great South Land" which resulted in the first circumnavigation of Australia. That expedition's commander, Abel Tasman, honored him by attaching his name to the island separated from Australia by the Bass Strait. For 10 points—name this original namesake of the island now known as Tasmania.

answer: Anton Van Diemen

C40. She lived with Robert Downey Jr. for seven years during the 1980s. Her first big movie break came playing the character of Sande, Steve Martin's bimbo girlfriend in *LA Story*, and her low might have come starring opposite Bette Midler and Kathy Najimy in *Hocus Pocus*. For 10 points—what actress and wife of Matthew Broderick, who played the title role in the original Broadway run of *Annie*, was recently nominated for an Emmy for her work in *Sex and the City*?

answer: Sarah Jessica Parker

C41. The work is dedicated to the author's son, Faustinus. Like the work's author, the narrator becomes a priest and is initiated into the rites of Isis and Osiris. It is important as the original written source of the tale of Cupid and Psyche, which occupies most of Books 4 through 6. The speaker of the tale, Lucius, has fallen in love with Fotis, a sorceress, who intends to change her lover into a bird. For 10 points—name this satirical romance written by Lucius Apuleius.

answer: The Golden Ass or Metamorphoses (plural)

C42. The first of them consisted of a mixture of titanium tetrachloride and an alkyl derivative of aluminum. The first one was originated in the 1950s for the polymerization of ethylene at atmospheric pressure, and now this class of mixtures of chemical compounds is noted for their ability to effect the conversion of olefins to polymers of high molecular weights and stereoregular structures. For 10 points—identify these catalysts, whose discovery gave their namesake German scientists the 1963 Nobel.

answer: Ziegler-Natta catalysts

C43. Some of the actors and actresses who turned down the leads in this movie included Mary Pickford, Pola Negri, and Montgomery Clift. Some of the figures who played themselves in it included Hedda Hopper, Cecil B. DeMille, and Buster Keaton. It tells the story of the struggling screenwriter Joe Gillis and the faded movie star Norma Desmond. For 10 points—identify this 1950 Billy Wilder film starring Eric von Stroheim, William Holden, and Gloria Swanson.

answer: Sunset Boulevard

C44. It was vetoed by President Nixon, but Congress overrode during the political "firestorm" following the so-called "Saturday Night Massacre." It was first invoked—in part—in 1983, after President Reagan sent troops to Lebanon. It requires that Congress be notified within 48 hours of troop deployments abroad, and that troops be withdrawn within 60 days unless Congress approves. For 10 points—what legislation is this, which shares its acronym with the New Deal's Works Progress Administration?

answer: the War Powers Act of 1973

C45. The inspiration for this poem was the story of François Bonivard, a 15th-16th century Swiss patriot, about whom the poet heard while on a trip to Lake Geneva. Beginning "My hair is gray, but not with years, / nor grew it white / In a single night,"—for 10 points—what 14-stanza poem by Lord Byron imagines Bonivard's long imprisonment in a castle dungeon?

answer: The Prisoner of Chillon

C46. In this work the author argued that the U.S. should shift resources to improve schools, the infrastructure, recreational resources, and social services, providing a better quality of life instead of a greater quantity of consumer goods. The title term ironically referred to a post-World War II U.S. that was rich in private resources, but poor in public ones because of a misplaced priority on increased private sector production. For 10 points—name this book published in 1958 by John Kenneth Galbraith.

answer: The Affluent Society

C47. Though he is not Pasteur, this man, in 1881, delivered the final blow to spontaneous generation when he proved that germ-free air does lead to food decay. A colleague of Faraday at the Royal Institution of London, his early work was concerned with the magnetic properties of crystals, and the ability of various gases to absorb and radiate heat. For 10 points—name this scientist whose namesake effect deals with the diffusion of light by large molecules and dust, and which explains the sky's blue color.

answer: John Tyndall

C48. A broken man, he committed suicide in England in 1774—the same year that a successor as governor of Bengal, Warren Hastings, received appointment as the first governor general of British India. In the 1750s he had distinguished himself as a soldier, helping to thwart the ambitions of Joseph Dupleix for French hegemony in India, and retaking Calcutta from the Nawab of Bengal. For 10 points—what man had his greatest victory commemorated by his being created Baron of Plessy?

answer: Robert Clive

C49. In March 1999 a palace official said that she would be referred to as the "queen mother"—even though it was actually British-born Antoinette Gardiner, known as Princess Muna, who was mother to the present king. She is, however, the mother of 19-year-old crown prince Hamzeh, the designated successor to Abdullah. For 10 points—name this American-born member of the Jordanian royal family, the widow of King Hussein.

answer: Queen Noor (or Lisa Najeeb Halaby)

C50. This novel, first published anonymously, includes characters named Clinton and Gore, and is set against the backdrop of Washington, DC politics. That is, however, *Schuyler* [SKY-ler] Clinton and *Nathan* Gore; the setting is the year 1868, and the novel was published in 1880. Subtitled "An American Novel," its main characters are Sybil Ross, Senator Silas P. Ratcliffe, John Carrington, and Mrs. Madeleine Lee. For 10 points—name this novel posthumously revealed as the work of Henry Adams.

answer: Democracy, an American Novel

C51. Named for its pioneer founder, a Mr. E. F. Skinner, it is the county seat of Lane County, and its major newspaper is the *Register-Guard*. With a population of about 120,000, it is the second-largest city in its state, about the size of Gresham and Medford combined. For 10 points—name this city on the Willamette river which is home to the University of Oregon.

answer: Eugene, OR

answer: Ani DiFranco

C53. His defense of Valladolid against the revolutionary forces of Morelos won him the command of the military district of Michoacán. His *Plan de Iguala* promised three things: independence from Spain, equality for Spaniards and Creoles, and the supremacy of Roman Catholicism. Thus, his soldiers became the Army of the Three Guarantees, and this man orchestrated the Treaty of Córdoba, giving Mexico independence. For 10 points—what man then briefly ruled as emperor of Mexico under the title of Agustín I?

answer: Agustín de Iturbide (accept Augstín I on early buzz)

C54. Normally appearing pearl gray but sometimes tinged with pink or yellow, its edges are attached to a ring of bone called the annulus. It lies across the end of the external canal, looking like a flattened cone with its apex pointed inward, and it possesses three layers, with the outermost being continuous with the skin on the external canal. For 10 points—name this structure that receives sound vibrations from the outer air and transmits them to the auditory ossicles.

answer: eardrum or tympanum or tympanic membrane

C55. His main rivals were the Russian Vassily Kuznyetsov, and his schoolmate Chuan Yang, who was competing for Taiwan. In the closest finish in Olympic decathlon history he compiled 8,392 points, beating out Yang by only 58 points. The first black to carry the U.S. flag in the Olympic procession, he would dramatically return in 1984 to light the torch to open the Los Angeles games. For 10 points—identify the American athlete who won the Olympic decathlon in 1960.

answer: Rafer (Lewis) Johnson

C56. In the decade from 1763 to 1773, partly inspired by the Dutch followers of Caravaggio, this man produced his famous pictures set near his home in central England west of Nottingham. His hometown, which he was identified with by name, served as one of the great centers of the Industrial Revolution, and such canvases as *The Orrery* and *The Air Pump* drew on industrial subjects. For 10 points—identify this English painter often named as being of Derby.

answer: Joseph Wright of Derby

C57. He is described by another character in the play as the "courageous captain of compliments," and "a duellist" . . . "the very butcher of a silk button." That character, eventually his victim, taunts him by calling him "rat-catcher" and "king of cats"—which are references to the similarly-named cat in the story of Reynard the Fox. For 10 points—what hotblooded slayer of Mercutio is nephew to Lady Capulet in Romeo and Juliet?

answer: Tybalt

C58. The Samkhya [sam-KEE-ya] school of Hindu philosophy is primarily concerned with the mechanics of this process, which takes into account a person's *sthula*, or material body, and their "subtle," or immaterial body. When the *sthula* has perished, the "subtle" body will move to another material body. The term means "running around" in Sanskrit, and it ends with *moksha*. For 10 points—identify this Hindu and Buddhist belief that is explained as the transmigration of souls.

answer: samsara (prompt on "transmigration of souls" or equivalent)

C59. A small Nebraska town on the Republican river that was the childhood home of Willa Cather is named for this man, whose real name was Mahpiya Luta. Leader of the Indians responsible for the 1866 Fetterman massacre, his continued hostility to the establishment of the Bozeman Trail across land reserved to the Indians led the government in 1868 to abandon the trail and its supporting forts. For 10 points—name this prominent chief of the Oglala Sioux.

answer: Red Cloud

C60. It first drew attention in the case of alpha decay, though it could be explained as a natural consequence of the alpha particles' wave properties. On the basis of quantum mechanics, particles of subatomic size following the undulations of a de Broglie wave, despite having energies predicted to be too small, can cross an obstruction. For 10 points—identify this phenomenon, also known as barrier penetration, which is the passage of minute particles through seemingly impassable force barriers.

answer: tunnelling (accept "barrier penetration" on early buzz)

C61. He was the Harvard-educated son of one of the nation's most prominent architects. The preface to the first of his series of popularizing works describes his goal as imparting, with the charm of a story-book, knowledge of mythology for the reader of English literature. This being 1855, he does hasten to add that "such stories and parts of stories as are offensive to pure taste and good morals are not given." For 10 points—what author of *The Age of Fable* was the son of the designer of the U.S. Capitol building?

answer: Thomas Bulfinch

C62. He played Dr. Sundesval in *The Killing Fields* and General Smuts in *Gandhi*. In 1992 he played the role of the Reverend Marius Byleveld in *The Road to Mecca*, a film he also helped to direct, and which was based upon his own play. For 10 points—identify this graduate of Port Elizabeth Technical College and the University of Cape Town, whose other plays include *The Blood Knot* and *Boesman and Lena*.

answer: (Harold) Athol Fugard

C63. It is a state situated on the northern Malabar coast, with its capital at Panjim. A state only since 1987, its population is about 40% Roman Catholic, and its territory includes the tomb of St. Francis Xavier. For 10 points—name this region seized by India in 1961 following four-and-a-half centuries as a colony of Portugal.

answer: Goa

C64. Organized in 1926 by opponents of the treaty establishing the Free State, its name means "soldiers of destiny." Led by Eamon de Valera, it gained control of the government in 1932, and kept it all but six of the next 41 years. For 10 points—name this Irish political party which has generally been more stridently anti-British than its rival party, the Fine Gael [feen gale].

answer: Fianna Fáil

C65. Christopher Columbus, August Rodin, Honoré de Balzac, George Danton, Tartuffe, Edmond Dantes, Porthos, Obélix, and Cyrano de Bergerac all have at least one thing in common—this hunky actor has portrayed them all. For 10 points—the filmography of what accomplished winemaker also includes Get Out Your Handkerchiefs, The Last Metro, The Return of Martin Guerre, Jean de Florette, and Green Card?

answer: Gérard Depardieu

C66. In his later years he helped his student Arne Tiselius in the development of electrophoresis, and his studies of nuclear chemistry contributed to the improvement of the cyclotron. Though he was recognized for his work in the chemistry of colloids, his greatest invention allowed him to determine the precise molecular weight of hemoglobin. For 10 points—name this inventor of the ultracentrifuge, whose name still survives as a unit of centrifugation.

answer: The(odor) Svedberg

C67. It adopted a fictional method of representation, whose members included Sir Andrew Freeport, Captain Sentry, and Will Honeycomb. They represented commerce, the army, and the town, respectively. Milton's *Paradise Lost* appeared in issues no. 267, 273, and others, and famous contributors included Ambrose Philips and Alexander Pope. For 10 points—identify this London periodical published by Steele and Addison, that succeeded *The Tatler*.

answer: The Spectator

C68. An introduction in a dark register of the bassoon with a drone bass and sighing strings sets the mood for this musical piece. The second movement is in an uneven 5/4 time, while the third is a powerful march. In the first movement we also hear a brass chorale with a melody from the Russian Requiem. It was named by the composer's brother as a reference

to a Beethoven sonata of the same name. For 10 points—name this Symphony No. 6 in B Minor, perhaps the most famous of Tchaikovsky.

answer: Symphony Pathetique (accept early "Tchaikovsky's Sixth Symphony" or equivalent)

C69. Of unknown ethnic background, since he accompanied an Arnavut contigent to his adopted country, he may have been Albanian. At 18 he married the first of his wives, who would provide him altogether with 95 children. With great political skill, he managed to be named the *wali*, or the Ottoman sultan's viceroy in his country, and went on to establish a dynasty that would last until the overthrow of King Farouk I in 1952. For 10 points—identify this man who massacred the mamelukes to take control of Egypt in 1811.

answer: Muhammad Ali Pasha

C70. It was first isolated in 1773 by the French chemist Hilaire-Marin Rouelle. With certain straight-chain aliphatic hydrocarbons it forms crystalline inclusion compounds, and large amounts of it are used for the synthesis of barbituates. Also called carbamide, the high nitrogen content of this inexpensive compound was useful when it was first commercially prepared from ammonium cyanate by Friedrich Wohler [VOH-ler] in 1828. For 10 points—identify this chief nitrogenous component of mammalian urine.

answer:	urea (accept early "carbamide")						
	=====			STOP SEEDING ROUND C HERE!			

## Extras for Seeding Round C

C71. Blair, Green, Hill, Lewis, and Kendall were part of the cabinet. The debate was conducted by Nixon and Khrushchev. Prehistoric refuse heaps are termed this kind of "midden." For 10 points—what word used in all these contexts is rendered in Spanish as "la cocina"?

answer: kitchen

C72. It is about 2,000 for barium titanate, 78.2 for water, and 2.25 for paraffin. Symbolized by the Greek letter kappa, it is a number without dimensions. Because its value for air is almost the same as a vacuum, one can conclude that air does not increase the capacitance of a capacitor. In the cgs system it is identical to the permittivity, hence it is alternately known as relative permittivity. For 10 points—name this measure of the ability of an insulating material to resist the formation of an electric field within it.

answer: dielectric constant (accept early buzzes of "permittivity" or "relative permittivity")

C73. Six categories of members exist for its upper house with the highest being princes of the royal blood. Its former upper house, the House of Peers, initially consisted of 300 members, the same number that once made up its lower house, the House of Representatives. It enacted a universal suffrage act in 1925 and 22 years later the House of Councillors replaced the Peers. Now known as the *Kokkai*, it originated under the Meiji Constitution of 1899. For 10 points—identify this national legislature of Japan.

answer: Diet (accept early buzz of Kokkai)

C74. Cornelia, an essay in Senecan tragedy, is one of two plays that we can certainly attribute to him. While sharing lodgings with Christopher Marlowe, he was arrested and then tortured, being suspected of treason. His letter implicating Marlowe as an atheist is the source for almost everything known about him. Many believe that he wrote a play, known to scholars as Ur-Hamlet, from which Shakespeare took his version. For 10 points—name this dramatist who initiated the revenge play with The Spanish Tragedy.

answer: Thomas Kyd