

2004 Truman State
Brainal Leakage
Packet 12

Tossups

1. (brian_religion) **Born to a devout Jewish convert mother and pagan Greek father, (*)** the apostle Paul called this man his “true child in the faith,” as it is believed that Paul himself had no natural children. He is best known as first pastor of the church at Ephesus and the stress of the job apparently got to him, as Paul advised him to “drink a little wine for [his] stomach.” FTP, who is this apostolic father, the recipient of two of Paul’s epistles?

Answer: _Timothy_

2. (Maddog_AmHist) **In 1859, the state of Wisconsin championed this cause by overturning a United States Supreme Court conviction (*)** that imprisoned an abolitionist for violating the Fugitive Slave Law. Proponents of this doctrine cited the 10th Amendment as all the justification they needed. This doctrine embraced both absolute state sovereignty as well as the strict constructionist interpretation of the U.S. Constitution. FTP, name this doctrine, the rallying cry of John C. Calhoun and later the Confederacy.

Answer: _States’ Rights_

3. (piguy_sports) **In 1990, the Pro Set card company produced hand-numbered holograms featuring this trophy and inserted it into every 10th case of their football cards. (*)** The subject of this hologram, a mirror-like, sterling silver trophy produced by Tiffany & Company, has been given out 37 times before the 2003 NFL season and is named after the man who coached the Green Bay Packers from 1958 to 1967. FTP, name this trophy that is given to the winner of the Super Bowl every season.

Answer: Vince _Lombardi Trophy_ (prompt on Super Bowl trophy)

4. (Maddog_geog) **This massive inlet stretches 680 miles across from Cape Pasley to Cape Carnot. Home to very shallow waters, its coastline is dominated by the desolate Nullarbor Plain, (*)** creating massive cliffs with few safe refuges for ships from the violent storms that sweep up from Antarctica. FTP, name this body of water stretching from Western Australia to South Australia, a wide inlet of the Indian Ocean.

Answer: The _Great Australian Bight_

5. (kerrith_blit) **At first he thinks he’s a bird, so he goes to live on an island in the river Serpentine. When the birds there tell him that he is a human boy, (*)** he loses faith and can no longer fly, becoming trapped on the island. However, the poet Shelley sends a five-pound note floating down the river, with which the boy pays the birds to build him a giant nest to serve as a boat. He sails across the river to live in the park where today there is a statue of him. FTP, name this character, who played his pipes in Kensington Gardens.

Answer: _Peter Pan_

6. (Maddog_archaeol) **A student of early writing systems, he revealed his study of ancient sealstones in *Cretan Pictographs and Pre-Phoenician Script*. (*)** While in Crete researching the sealstones, he stumbled upon a larger project, unearthing a palace that covered more than 2 hectares. This project led to the discovery of two unknown languages, one of which has never been deciphered. FTP, identify this discoverer of the Ancient Palace at Knossos, the man who coined the term “Minoan civilization.”

Answer: Sir Arthur _Evans_

7. (Maddog_econ) **By its very nature, this economic system was dependent on precious metals. Gold and silver not only served as an index of national power but also allowed countries to raise armies. (*)** If a country did not have reserves of such metals within its territories, the only way to accumulate them was through a favorable balance of trade. This desire led to governmental policies that favored the production of lots of cheap exports, such as low wages and child labor. FTP, name this economic system focused on national self-sufficiency, the dominant system in Europe from the 16th to 18th centuries.

Answer: _mercantilism_

8. (jgaunt_alit) **His family has been a well-to-do clan in Minnesota for three generations, but he longed for a more exciting life. After fighting in the Great War, (*)** he settles down in Long Island, hoping to get involved in the bond

market. Disgusted by the affairs of his cousin's husband, he finds solace in the man who represents everything which he scorns, yet is great nonetheless. FTP, name this narrator of *The Great Gatsby*, the cousin of Daisy Buchanan.
Answer: _Nick Carraway_ (accept either name)

9. (jlive_phys) **Her mathematical assistant, Samuel König, had been a student of Maupertuis, which might explain her early support of Newtonianism.** (*) She even helped her lover Voltaire with his *Elements of the Philosophy of Newton*. But she later supported Leibniz's ideas in her work, *Institutions of Physics*, published in 1740. FTP, identify this woman, the only person thus far to translate Newton's *Principia* into French.
Answer: Madame _du Chatelet_

10. (Maddog_misclit) **In this 1521 work, the author was one of the first to give politics and war a functional unity, with war serving as the instrument of politics, an idea adopted by Clausewitz.** (*) The author also proposes the return of the Roman legion as the dominant battlefield formation. FTP, name this Renaissance-era war treatise by Niccolo Machiavelli, with a name you've probably heard before.
Answer: *The _Art of War_*

11. (Maddog_AmHist) **Started in 1869 by tailors from Philadelphia and led by Uriah Stephens, it was a secretive group until 1878,** (*) when it reached a national scope. It accepted women, blacks, and employers, and the only professions disallowed membership were lawyers, gamblers, and stockholders. FTP, name this immensely powerful labor union responsible for many successful railroad strikes, yet grossly weakened by the failure of the Missouri Pacific Railroad Strike and perhaps unjustly blamed for the Haymarket Square riot.
Answer: _Knights of Labor_

12. (piguy_chem) **Its name is derived from the Greek for acid-forming, because it was once thought to be a part of all acids.** (*) Discovered simultaneously and relatively independently in 1774 by Joseph Priestley and Karl Wilhelm Scheele, this element was first described as "fire air." FTP, name this gaseous element that is important to all aerobic cellular processes.
Answer: _oxygen_ (prompt on O)

13. (Maddog_AmHist) **It resulted in the ceding of over 7,000 square miles of territory to the United States, including the Aroostook** (*) River valley, a heavily disputed region. It opened several waterways, including the St. John's River, to both involved countries, but totally ignored border disputes in the Oregon Territory. FTP, name this treaty of 1842, which is named after the U.S. Secretary of State at the time and the official title of British Noble Alexander Baring.
Answer: _Webster-Ashburton Treaty_ (Note: Baring was the 1st Baron of Ashburton)

14. (brian_religion) **It became official Catholic doctrine after edicts by Pope Gregory XVI in the 1830s** (*) and is now considered a cornerstone of Church teaching. It holds that Mary, unlike all other human beings except Christ Himself, was born without the scar of original sin. FTP, name this belief, which raises Mary to perfect moral status.
Answer: _Immaculate Conception_

15. (brian_asianhist) **Originally named Ma Sanbao, this man was a close confidant of Yongle and helped to put to action the Emperor's tremendous interest in world exploration.** (*) As commercial activity flourished with the development of industry in the Yangtze valley, Yongle ordered a fleet of sixty-two trading ships commanded by this man carrying 28,000 men to sail south in 1405 in hopes of entering the growing international trade routes. This commander was a eunuch admiral who ended up exploring the rim of the Indian Ocean. FTP, name this admiral, who is thought to have reached the east coast of Africa.
Answer: _Zheng He_ (accept Cheng Ho)

16. (kyle_misclit) **Born in the Hague, this Dutch diplomat and poet translated John Donne's poems into Dutch in 1630.** (*) In addition to his native Dutch, he wrote poetry in French, Italian, and Latin, and was collected in the 27-volume anthology entitled *Cornflowers*. He often engaged in dialogue with René Descartes during his several trips across Europe. He even composed airs for strings, but, FTP, who is the man whose son Christiaan dwarfed all his accomplishments by becoming a renowned scientist?
Answer: Constantijn _Huygens_

17. (piguy_bio) **In its mildest form, this disease is called gingivitis and affects only the gums. In its most severe form, the disease is called trench mouth, named because it was common among stressed World War I soldiers “in the trenches.”** (*) The disease is a combination of gum inflammation and erosion of mouth ligaments and the alveolar bone that supports teeth. FTP, name this disease that occurs when plaque is allowed to accumulate, resulting in overgrowth of potentially virulent bacteria.

Answer: _periodontal_ disease

18. (kerrith_music) **It is described as disorienting; impossible to discern what key the piece is in. Full of pentatonic scales, whole tone scales, quartile harmonies and multiple scale types,** (*) it marks the beginning of the 20th century's escape from traditional tonality. As radical as the music was, most people were shocked by the openly sexual content of the poem on which this piece was based, and later by Nijinsky's suggestive choreography. FTP, name this Debussy piece that supposedly caused a riot in Paris when it premiered.

Answer: _Prelude to the Afternoon of a Faun_

19. (Maddog_Art) **It was a massive undertaking, built in two phases, from 1705-1712, and then from 1715-1725. The architect, John Vanbrugh,** (*) used symmetrical design and a heavy angular style to create an imposing look. The grounds were redesigned by Capability Brown in the 1760s, and ushered in a radical new style of landscape architecture. FTP, name this palace in Oxfordshire, England, funded by Queen Anne and Parliament to honor John Churchill, The Duke of Marlborough.

Answer: _Blenheim_ Palace

20. (Maddog_asianlit) **This novel is unique in that each character is introduced by a three part name—a surname, given name, and then a style name.** (*) The story follows the quest of three sworn brothers to help the emperor put down the Yellow Turban Rebellion. After the rebellion is put down, the brothers struggle surviving in an era dominated by warlords. FTP, identify this novel by Lou Guanzhong describing a turbulent period in China's history.

Answer: The _Romance of the Three Kingdoms_

21. (tallpaul_bhlist) **This man is commemorated by the 50 roads or streets named after him in the UK, his depiction among the Moonstones, two individual statues, and a statue of him, Matthew Boulton, and William Murdoch located in Birmingham.** (*) This extravagant display of commemoration was based on his impressive contribution to mathematics and engineering, although he also learned the trades of mathematical-instrument-making and surveying. FTP, name this man who introduced the unit of horsepower and received a patent in 1769 for his invention of the first efficient steam engine.

Answer: James _Watt_

22. (laura_mischist) **In 1880, this man along with his brother Jacques, demonstrated that an electric potential was generated when crystals were compressed.** (*) Prior to his famous doctoral studies on magnetism he designed and perfected an extremely sensitive torsion balance for measuring magnetic coefficients. He studied ferromagnetism, paramagnetism, and diamagnetism, and discovered the effect of temperature on paramagnetism. FTP, identify this scientist who died in 1906 after being run over by a carriage.

Answer: _Pierre Curie_

23. (brian_polisci) **He formerly served a term as junior senator from Idaho before his election to the governor's mansion in 1998.** (*) This Republican Idaho governor, whose focus issues are education and the environment, has developed a reputation as a likable, freewheeling conservative. FTP, name this Idaho governor who was elected to the chair of the National Governors' Association in 2003.

Answer: Dirk _Kempthorne_

Bonii

1. (Maddog_asianhist) Because I've always had a thing for *Quotations of Chairman Mao*, FTPE, identify these leaders of Communist China.

10—In October 1949, this man became the first premier of the Communist regime and held the post until 1976. He also held the post of foreign minister, and in 1972 he signed the Shanghai Communiqué with Richard Nixon.

Answer: _Zhou Enlai_ (accept Chou Enlai)

10—Long time defense minister and hand picked successor of Chairman Mao, he led a plot to assassinate the Chairman. After the plot was discovered, he and his family died in a plane crash while fleeing to the Soviet Union.

Answer: _Lin Biao_ (accept Lin Paio)

10—Purged from office by the Gang of Four in 1976, he returned as Vice Premier in 1977 and was in firm control of the government by the next year. He was the de facto ruler for two decades, and after he died in 1997 power was smoothly shifted to Jiang Zemin.

Answer: _Deng Xiaoping_

2. (Maddog_Art) FTPE, answer these questions about the works of the early German artist Albrecht Durer.

10—Durer created multiple images of this Saint, the author of the *Vulgate Bible*, the standard in the Roman Catholic Church for centuries.

Answer: _Jerome_

10—Durer revealed his belief in Lutheranism with this diptych, donated to the city of Nuremburg. The four title figures are dressed in luxuriant robes and long inscriptions at the bottom of the painting warn viewers not to fall victim to false prophets.

Answer: The *Four Apostles* (Accept "The Four Holy Men")

10—This Durer woodcut is based upon figures from Revelations 6: 1-8. It portrays mounted horsemen trampling civilians while an angel floats above.

Answer: The *Four Horsemen of the Apocalypse*

3. (Maddog_alit) Because Maddog wants to shamelessly write a question about his favorite book, FTPE identify the character from *Catch-22* from clues.

10—Once a photographer for *Life* magazine, this crazed member of Yossarian's squadron never misses an opportunity to take pictures of naked women.

Answer: _Hungry Joe_

10—This alcoholic Native American's family was a beacon for oil companies, as wherever they settled oil was found. He is determined to die of pneumonia.

Answer: _Chief White Halfoat_

10—The tragedy of this gunner who dies in Yossarian's arms haunts our protagonist throughout the novel.

Answer: _Snowden_

4. (piguy_bio) For the specified number of points, answer the following related questions.

5—The volume of the thoracic cavity is increased by the contraction of this large, dome-shaped muscle that forms the floor of the thoracic cavity.

Answer: _diaphragm_

10—The thoracic cavity is closed so that no air can enter except through the trachea. When the chest wall is punctured, air enters the pleural space. What drastic medical condition does this result in?

Answer: _collapsed lung_

15—Collapsed lungs are possibly life-threatening, making them big news in the world of sports. Name the San Diego Chargers receiver/punt returner that suffered a collapsed lung in a game in November, 2001.

Answer: Tim _Dwight_

5. (Maddog_mischist) For the stated number of points, name the Chilean Dictator or would-be dictator.

5—He rose to become commander and chief of the armed forces under Salvador Allende, eventually leading a U.S.-backed coup in 1974. He is known for his numerous human rights violations.

Answer: Agusto _Pinochet_

10—The illegitimate son of an Irish born Spanish governor of Chile, he fought in the revolutions of 1810 and 1813. Fleeing the country in 1814, he returned in 1817 with the help of Argentinean freedom fighter Jose de San Marti and defeated the Spanish, becoming the supreme dictator of independent Chile.

Answer: Bernardo _O'Higgins_

15—Member of the Chilean National Assembly from 1870-1878, he also served as Ambassador to Argentina and Interior Minister. Lawfully elected president in 1886, he lost the support of the Assembly in 1891 and attempted to install himself as dictator. Civil War erupted and he committed suicide.

Answer: Jose Manuel _Balmaceda_

6. (piguy_chem) FTPE, answer the following questions about reaction kinetics.

10—This is the minimum kinetic energy that the reacting molecules must possess to overcome the repulsions between their electron clouds when they collide.

Answer: _activation_ energy (prompt on E_a)

10—The activation energy represents the energy difference between the reactants and this state, which is the highest-energy state in a molecular collision that leads to a reaction. Name this state.

Answer: _transition_ state (accept rate-determining)

10—This is a molecule or a fragment of a molecule that is formed in a reaction that exists for a finite length of time before it reacts in the next step. This type of species is stable as long as it does not collide with other atoms or molecules.

Answer: _intermediate(s)_

7. (kerrith_blit) FTPE, tell whether the following lines were written by Emily Dickinson or Christina Rossetti.

10—"I heard a fly buzz when I died. / The stillness in the room / Was like the stillness in the air / Between the heavens of storm."

Answer: _Dickinson_

10—"Where souls brimful of love abide and meet; / Where thirsting longing eyes / Watch the slow door / That opening, letting in, lets out no more."

Answer: _Rossetti_

10—"I shall not see the shadows, / I shall not feel the rain; / I shall not hear the nightingale / Sing on, as if in pain."

Answer: _Rossetti_

8. (kerrith_music) FTPE, given a film that won an Academy Award for Best Film Score, name the composer.

10—*On The Waterfront*.

Answer: Leonard _Bernstein_

10—*The Heiress*.

Answer: Aaron _Copland_

10—*The Red Violin*.

Answer: John _Corigliano_

9. (Maddog_AmHist) I feel bad to have asked questions about the U.S., Mexico, and Canada, and totally ignored the history of Central America. FTPE, answer these questions about the history of Central American nations.

10—This American captured Nicaragua and declared himself president in 1855. He was eventually driven out by a coalition of hostile Central American states and the enmity of Cornelius Vanderbilt.

Answer: William _Walker_

10—Discovered by the Spanish in 1576 in what is now western Honduras, this ruined Mayan city was constructed entirely of volcanic stone and thus is one of the best preserved of the civilization.

Answer: _Copan_

10—Lasting from 1825 to 1838, this confederation of Salvador, Costa Rica, Honduras, Nicaragua, and Guatemala was part of the Mexican republic under Iturbide for four years and was first led by Manuel Jose Arce.

Answer: _Central American Federation_ (accept: Central American Union)

10. (kyle_glit) FTPE, identify the cities where these German newspapers are published.

10—*Der Spiegel*.

Answer: _Hamburg_

10—*Focus*.

Answer: _Munich_ (accept Munchen)

10—*Die Welt*.

Answer: _Berlin_

11. (Maddog_alit) FTPE, given a poem or collections of poems that won the Pulitzer Prize, name the author.

10—*John Brown's Body*.

Answer: Stephen Vincent _Benet_

10—"Conquistador."

Answer: Archibald _Macleish_

10—"Pictures from Brueghel."

Answer: William Carlos _Williams_

12. (jlive_phys) Five for one, ten for two, twenty for three, or thirty for all four, identify the law of physics being described.

A—Force equals the first derivative of momentum with respect to time.

Answer: _Newton's Second_ Law of Motion

B—Current density equals the electric field strength times the conductivity of the medium.
Answer: _Ohm's_ Law

C—In a mixture of gases that do not react with one another, the total pressure of the mixture is the sum of the pressures each gas would exert if its mass occupied the whole volume of the mixture.
Answer: _Dalton's Law of Partial Pressures_

D—The curl of the electric field equals the negative first partial derivative of the magnetic field vector with respect to time.
Answer: _Faraday's_ Law

13. (greg_ceurhist) Since we had a bonus about people who were the last monarchs of their lines in last year's tournament, how about people who were the first monarch in their line? FTPE, given royal house or dynasty, supply the name of that line's first monarch.

10—The House of Savoy, as kings of Italy.
Answer: _Victor Emanuel II_ (accept Vittorio Emanuele)

10—The English House of Hanover.
Answer: _George I_

10—The Bourbon Dynasty of France.
Answer: _Henry IV_

14. (Maddog_AmHist) It is most definitely the largest and the coldest of the 50 states. FTPE, answer these questions about the history of Alaska.

10—This Danish explorer in the employ of Peter I led the first European exploration of Alaska, and he died on his namesake island in 1741.
Answer: Vitus _Bering_

10—This colonial trading company was chartered by Czar Paul I in 1799, and it had an exclusive monopoly on trading rights in Russian-controlled Alaska.
Answer: _Russian American Company_

10—This governor of Alaska from 1800-1818 saw the establishment of Sitka and the establishment of a thriving fur trade. He is considered the dominant figure in Russian control of Alaska.
Answer: Aleksandr _Baranov_

15. (Maddog_asianlit) FTPE, identify these works of Sanskrit literature.

10—There are many of these Sanskrit writings on primordial times, with eighteen being classified as "Great." They are traditionally attributed to Vyasa, the sage also purported to have compiled *The Mahabharata*.
Answer: _Puranas_

10—Focusing on the nature of Brahman, these mystical writings hold the basis for the six types of Hindu philosophical systems.
Answer: *The* _Upanishads_

10—The shorter of the two great Sanskrit epics, this work consists of seven books and 24,000 couplets and tells of the birth and education of the seventh incarnation of Vishnu.
Answer: _Ramayana_

16. (ray_misclit) Quincas Borba, a wealthy land-owner, bequeaths his entire estate to his friend Rubiao with the only request that he takes care of his dog and treat him as if he was human. The fun in this novel is watching Rubiao turn insane as he gives away his money to anyone who sticks his hand out.

15—Name this Brazilian novel written by Joaquim Maria Machado de Assis.

Answer: *Philosopher or Dog?*

10—Name Quincas Borba's dog.

Answer: Quincas Borba

5—Rubiao becomes so insane that he insists that he is a French emperor. Name that emperor.

Answer: Napoleon III

17. (Maddog_bhst) Not everything in Churchill's career came out smelling like roses. FTPE, answer these questions about the Dardanelles campaign of 1915.

10—The combined British, Australian, and New Zealand forces landed on the east coast of this peninsula on April 25.

Answer: Gallipoli

10—Name the German general, head of the German military mission to Constantinople, who commanded the Ottoman troops in the campaign.

Answer: Otto Liman von Sanders

10—This man was the head of the British forces, and his poor command led to his dismissal and replacement by Sir Charles Munro.

Answer: Sir Ian Hamilton

18. (jlive_math) Identify these related mathematical terms FTPE.

10—This is any function whose domain is the natural numbers.

Answer: sequence

10—A sequence a_n is this if, for every positive number ϵ , there exists a natural number k such that whenever n is greater than or equal to k , it follows that the absolute value of a_n minus a is less than ϵ .

Answer: convergent

10—A sequence a_n is called this if, for every positive number ϵ , there exists a natural number k such that whenever m and n are greater than or equal to k , it follows that the absolute value of a_n minus a_m is less than ϵ . A sequence is convergent if and only if it is this.

Answer: Cauchy sequence

19. (chalsey_myth) Have you been inspired recently? Given an area of Greek arts and sciences, name the muse responsible for the inspiration FTPE.

10—Comedy.

Answer: Thalia

10—Song and especially dance.

Answer: Terpsichore

10—History.

Answer: _Clio_

20. (jlive_engin) Answer the following questions having to do with circuit analysis FTPE.

10—Impedance and admittance are examples. Generally, one is equal to the ratio of the output phasor to the input phasor. An arbitrary one is usually denoted by a bold capital h.

Answer: _transfer function_

10—The amplitude characteristic times the phase characteristic is called this for the circuit.

Answer: _frequency response_

10—Consider a plot of amplitude characteristic versus angular frequency. For an RLC circuit, this phenomenon occurs at a frequency given by the square root of the quantity one divided by LC minus R squared divided by two L squared.

Answer: _resonance_

21. (jlive_philo) Identify the philosophical argument for the existence of God from descriptions, FTPE.

10—Originating in the *Proslogion* of Anselm, this argument usually defines God as “that being than which none greater can be conceived.”

Answer: _ontological_ argument

10—Everything in nature depends on something else for its existence. Thus, there must exist a non-dependent, necessary being.

Answer: _cosmological_ argument

10—This argument suggests that one can see by analogy to machines and works of art that the universe was created to fulfill a purpose.

Answer: _teleological_ argument (accept argument from design or clear knowledge equivalents)

22. (Maddog_geog) FTPE, identify the religious center.

10—The holiest site in Sikhism is the Golden Temple in this Indian city. It was stormed by Indian troops in 1984, leading to the assassination of Indira Gandhi.

Answer: _Amritsar_

10—The head of the Coptic church is the patriarch of this city, the religion's traditional home.

Answer: _Alexandria_

10—The world headquarters of the Baha'i religion is on the slopes of Mount Carmel, overlooking this city.

Answer: _Haifa_, Israel

23. (nick_chem) You will be given a list of four elements. Tell which one has the smallest atomic radius, FTPE.

10—potassium, fluorine, magnesium, oxygen.

Answer: _fluorine_

10—phosphorous, silicon, aluminum, nitrogen.

Answer: _nitrogen_

10—antimony, tellurium, indium, tin.

Answer: _tellurium_