

2004 Truman State
Brainal Leakage
Packet 2

Tossups

1. (piguy_cs) **First released on March 22, 1993, these items used features such as pipelining and larger L1 caches (*) to significantly increase performance compared to its predecessor. They contained the equivalent of 3.1 million transistors and achieved up to 100 million operations per second. The first versions were either 60 or 66 MHz and were designed to better incorporate speech, sound, handwriting, and images. FTP, name this brand of microprocessor, the newest of which features Centrino mobile technology.**

Answer: Intel_Pentium_processor

2. (kyle_misclit) **By the time this play was written, its playwright had effectively minimized drama, instead using substantial amounts of undercutting to vary the emotion. Indirect action was also prominent in this play, with Lopakhin's speech at the end of Act III being the most important example. (*) Although the dramatist insists that the play was a comedy, the family that owns the title location is forced to sell it to pay off old debts. In the chaotic anticlimax, an old man, Firs, is left behind at the locked estate, as the new owners begin chopping down the trees. FTP, identify this play, the work of Anton Chekhov.**

Answer: _The Cherry Orchard_

3. (jlive_math) **The finite indecomposable abelian groups are exactly these groups with order a power of a prime. The Klein four group is not, but zee-four and every group of prime order both are. (*) Every group that is this is also abelian, and if a group is this, then each of its subgroups is also. FTP, we say that a group G is this property if there is some element of G that generates the group.**

Answer: _cyclic_

4. (Maddog_AmHist) **Promoters of this company included Congressman Oakes Ames, and only one man would emerge unscathed, a man who would be elected President of the United States soon after. Two congressmen were censured, vice president (*) Schuyler Colfax's political career was ruined, and even the Speaker of the House was implicated. FTP, name this scandal that didn't destroy James Garfield, but did make it much more difficult for the Union Pacific Railroad to buy members of Congress.**

Answer: _Credit Mobilier_

5. (piguy_phys) **This vector value points in the direction of the average force vector. It is not easy to determine directly, since the average net force cannot be easily measured. (*) Thus, it is usually obtained indirectly by measuring the change in momentum it causes. Having units of Newton seconds, this is FTP, the product of the average force and the time interval during which the force acts.**

Answer: _impulse_

6. (tallpaul_bhst) **After the death of his wife Queen Philippa in 1369, he fell under the influence of his mistress Alice Perrers, while his son, (*) the Black Prince, led divided parties in court along with John of Gaunt. However, this English king is more famous for having established the Order of the Garter and for invading France in 1346, beginning what was later known as the Hundred Years' War. FTP, name this English king whose claim to the throne was based on his descent from France's Philip IV through his mother Isabella who married his father of the same name.**

Answer: _Edward III_

7. (kyle_glit) **He founded the journal *Athenäum* in 1798 with his brother, and used that as a forum for promoting German romanticism. (*) Also serving as an editor for *Europa* and *Concordia*, he wrote several lectures and essays, including *Lucinde* and *Alarcos*, before turning to politics. However, he is best known for his historical work *Die Griechen und Römer*. FTP, identify the author of *On the Language and Wisdom of India*, which laid the foundation for comparative linguistics.**

Answer: Friedrich von _Schegel_

8. (Maddog_asianhist) **Deriving their name from their leader's splendid tent, they laid waste to Lublin and Krakow in 1240, and the city of Breslau followed a year later. (*) Defeating the Silesians, Poles, and Teutonic Knights at**

Leginickie Pole, they were turned away at the siege of Neustadt. They were originally sent across Russia by Ghenghis' successor Ogoidei Khan. FTP, identify this Mongol group that maintained power in Russia until defeated by Ivan the Great in 1480.

Answer: The Golden Horde (accept Kipchak Khanate, but do not accept Mongols or Tatars, as these names do not come from a tent)

9. (kyle_misclit) **This Medieval writer wrote an epic poem in Latin about the conqueror Scipio Africanus and a series of biographies, *De Viris Illustribus*. (*)** However, this poet is better known for his poems in his native tongue Italian, so well revered in his life that he was named Rome's poet laureate in 1341. While living in Avignon, France, he met the woman who would be immortalized in his collection of poems, *Canzoniere*. FTP, name this legendary poet, whose love for Laura helped him develop the sonnet.

Answer: Petrarch (accept Francesco Petrarca)

10. (Maddog_mischist) **Covering over sixty acres and surrounded by a massive wall, its ruins were discovered in 1871 by a German explorer. It was composed of two complexes of stone buildings, (*)** a fortress, and an elliptically shaped temple. Established by cattle herders in the eleventh century, between 1100 and 1400 it was the dominant trading center between the rich gold mines of south-central Africa and ports on the Indian Ocean. FTP, name this city that died abruptly around 1400, most likely from overexploitation of resources.

Answer: Great Zimbabwe

11. (piguy_bio) **The difference between corms and this structure is that in corms, most of the food is stored in an enlarged basal plate, while in this structure, the food is stored in the meaty scales. (*)** In plants, it is a modified underground bud in which fleshy storage leaves are attached to a short stem. It is round and covered by paper-like scales, which are modified leaves. It frequently forms axillary [yes, axillary, NOT auxiliary] buds that develop into smaller forms of this plant structure. FTP, name this plant part with which gardeners are quite familiar.

Answer: bulb

12. (Maddog_Art) **When open, the left wing of this triptych portrays the patron and his sons kneeling in prayer, while his wife and daughters do the same to the left. The devil lurks above the head of an ox (*)** at the top center of the work, barely visible. The most striking portion of the painting is the still life in the foreground, portraying violets for humility, lilies and irises for the Passion, columbine for the Holy Spirit, and red carnations for the Crucifixion. FTP, name this 1483 work depicting the nativity, the masterpiece of Hugo van der Goes.

Answer: The Portinari Altarpiece

13. (kerrith_music) **The band will begin at ten to six on a certain Saturday at Bishopsgate, after some days of preparation. (*)** Henry the Horse will be dancing along with them—the waltz, of course. And naturally the Hendersons will all be there, turning summersets as the star performs additional tricks through horse hoops and garters and a hogshead of real fire! FTP, name this title character from a Beatles tune, based on a real person who performed in Pablo Fanque's Circus from 1843 to 1845.

Answer: Mr. Kite (accept "Mr. K") [also accept "Being for the Benefit of Mr. Kite"]

14. (jlive_philo) **He changed his name from Teitelbaum to distance himself from his Jewish heritage and better his chances of obtaining an academic position in Poland. In 1924, he published a joint paper on measure theory with Stefan (*)** Banach, proving that a sphere can be cut into a finite number of pieces and then reassembled into two spheres each equal to the first in volume. In 1933, he published his most famous paper, "The concept of truth in formalized languages." FTP, identify this mathematician and philosopher represented in the collection *Logic, Semantics, Metamathematics*.

Answer: Alfred Tarski

15. (kyle_blit) **This line is uttered by the play's title protagonist in Act 3, Scene 1, line 65. (*)** This six-word phrase was also the title of a 1982 Mel Brooks film in which he utilizes his theatre as a waypoint to help Jewish families escape Nazi-occupied Poland. FTP, what is this line, the start of Hamlet's most famous soliloquy and Shakespeare's most quoted line?

Answer: "To be or not to be"

16. (piguy_chem) Without knowing what chemical compound made it effective, Hippocrates recommended an infusion of willow bark to ease the pain of childbirth. It wasn't until the 19th century when Raffaele Piria isolated this active compound from the bark. (*) Soon thereafter, it was found that this acid could be isolated from the wild flower *Spiraea ulmaria*. While this compound is an effective analgesic, it is also very irritating to the stomach lining. FTP, name this compound, formula $C_7H_6O_3$, that is a precursor to aspirin and is also used in many skin-care products. Answer: salicylic acid (accept 2-hydroxybenzoic acid) [also accept salicin until Piria is mentioned; but do not accept aspirin, as it was not synthesized until 1897]

17. (laura_psych) Developed in the late 1930s, this test is currently widely employed in court cases to provide personality information on defendants or litigants. (*) It includes 500 questions grouped into ten clinical scales and four validity scales and its personality scales are hypochondriasis, depression, conversion hysteria, masculinity-femininity, paranoia, neurosis, schizophrenia, hypomania, and introversion. Consisting of true-false questions, high scores outside the norms are used for diagnoses. FTP, name this test developed by Hathaway and McKinley at the University of Minnesota. Answer: MMPI (accept Minnesota Multiphasic Personality Inventory)

18. (greg_ceurhist) Against her family's wishes she trained as a dancer, but when a knee injury ended her stage career, she turned to film. She made her debut as an actress in 1926's *Der Heilige Berg* and soon after (*) she was directing and producing still photographs. Later, she documented native tribes in Africa, but this work was overshadowed by the controversial films that she directed in the mid-1930s, a body of work that led to her being called "Hitler's director." FTP, name her, the director of *Triumph of the Will* and *Olympia*. Answer: Leni Riefenstahl

19. (Maddog_gender) In her work *His Religion and Hers*, she argued that the glory of a woman's life was giving birth, and if religion was written through the eyes of woman it would have focused on giving life, not taking it away. (*) A prolific writer of both nonfiction and poetry, she also lectured on women's rights issues. Her story "The Yellow Wallpaper" reveals her bout with depression, but she is probably best known for her work denouncing women's financial dependence on men. FTP, name this author of the feminist classic, *Women and Economics*. Answer: Charlotte Perkins Gilman

20. (brian_polisci) The political world was stunned on election night, 1994, when this little-known Republican state senator from Peekskill defeated three-term incumbent and national Democratic icon (*) Mario Cuomo to the governorship of New York. Known as a pro-choice moderate, he previously served two terms as mayor of Peekskill until his 1984 election to the State House and 1992 election to the State Senate. FTP, name this governor of New York. Answer: George Pataki

21. (piguy_bio) These essential members of the world's ecosystems typically release simple inorganic molecules that can be reused by producers in the ecosystem. Without these members of the environmental community, potassium, nitrogen, and phosphorus would remain (*) in dead organisms, never to be used again. This group of organisms breaks down organic material and uses the products to sustain themselves. FTP, name this group of organisms that includes most bacteria and fungi. Answer: decomposers (accept saprotrophs)

22. (jgaunt_alit) He met Herman Melville at a picnic on August 5, 1850, and they had a short lived friendship. Melville later wrote an effusive review on this author's short story collection (*) *Mosses from an Old Manse*. Some of his other short stories include *The Blithedale Romance*, *Ethan Brand*, and *The Birth Mark*. FTP, name this author of *Young Goodman Brown* and the novel *The Marble Faun*. Answer: Nathaniel Hawthorne

23. (greg_ceurhist) There were twelve of them in total. The first, beginning in 1928, aimed to promote (*) the development of heavy industry and collective agriculture. World War II interrupted the third, and the last began in 1986 and aimed to increase the production of consumer goods. FTP, give the name of these often disastrous Soviet development programs that were characterized by the implementation of production quotas over a set period of time. Answer: Five Year Plan(s)

Bonii 2

1. (Maddog_geog) FTPE, identify these islands of North America.

10—The second largest island in Canada, the northern tip of this island at Cape Columbia is the northernmost point of North America.

Answer: Ellesmere Island

10—During the 17th and 18th centuries, this island in southeast Massachusetts was a prominent whaling center. Today its chief industry is tourism.

Answer: Nantucket Island

10—This largest island in Lake Superior is only 15 miles from Ontario, yet is part of Michigan. The entirety of the island is preserved as a Wilderness area.

Answer: Isle Royale

2. (piguy_sports) Home runs are becoming almost commonplace in the current baseball era, but some home run feats still almost never happen. Hitting home runs from both sides of the plate in one game is rather uncommon, but Mickey Mantle still accomplished the feat 10 times. Hitting switch-hit home runs in the same inning, however, is an extremely rare occurrence, happening only twice.

15—Name the man who first accomplished switch-hit home runs in the same inning on April 8, 1993 against the New York Yankees as a member of the Cleveland Indians.

Answer: Carlos Baerga

15—Name the second man to accomplish this feat, doing so on August 29, 2002 against the Milwaukee Brewers as a member of the Chicago Cubs.

Answer: Mark Bellhorn

3. (brian_alit) Name the winner of the Pulitzer Prize for Fiction given the year FTPE. Five points will be awarded if you need the name of the award-winning work.

10—1948.

5—*Tales of the South Pacific*.

Answer: James Michener

10—1961.

5—*To Kill a Mockingbird*.

Answer: Harper Lee

10—1980.

5—*The Executioner's Song*.

Answer: Norman Mailer

4. (Maddog_AmHist) As a result of a shameless ploy by your question writer to get his last name into a question, FTPE answer these questions about the Confederate general John Bankhead Magruder.

10—Although he had little to do with the actual fighting, Magruder's troops' victory at this site on June 10, 1861 made him one of the South's first war heroes.

Answer: Big Bethel

10—Magruder's greatest success during the war was this battle during McClellan's peninsular campaign. Magruder paraded his soldiers around and created "Quaker Guns," or false artillery placements, that tricked McClellan into believing the Confederate army was much larger than it actually was.

Answer: _Yorktown_

10—Magruder's failure in his assault on Malvern Hill on the sixth day of this battle of the peninsular campaign led to his fall from grace with the Confederate leadership. He was censured for his conduct and sent to the Tran-Mississippi Theater.

Answer: The _Seven Days_

5. (jlive_blit) Identify the British playwrights from works, FTPE.

10—*Chicken Soup with Barley, Roots, I'm Talking About Jerusalem.*

Answer: Arnold _Wesker_

10—*The Caretaker, The Homecoming, Old Times.*

Answer: Harold _Pinter_

10—*Jumpers, Rosencrantz and Guildenstern Are Dead.*

Answer: Tom _Stoppard_

6. (Maddog_geology) FTPE, identify the geologists from clues.

10—This Scottish geologist, author of *Principles of Geology*, developed the theory of unitarianism in geology.

Answer: Charles _Lyell_

10—The Austrian geologist proposed that the southern continents once formed a large landmass, which he called Gondwanaland.

Answer: Edward _Seuss_

10—The first scientist to classify minerals systematically, this German was the leader of the Neptunist school of geology, which believed that all of the Earth's stratified rocks were produced by the oceans.

Answer: Abraham Gottlob _Werner_

7. (Maddog_asianlit) FTPE, identify the member of the six Confucian jing, or classics, from descriptions.

10—This "Book of Change" presents the universe as orderly yet constantly changing.

Answer: _I Ching_

10—This "Book of History" concerns itself mainly with the practice of good government.

Answer: _Shu Jing_

10—The "Book of Ritual," it deals with conduct at court and private ceremonies.

Answer: _Li Ji_

8. (piguy_phys) FTPE, name the family of elementary particles given its description.

10—This family has only one member that, not surprisingly, has the same name as its family. Its member particle interacts only with charged particles and only via the electromagnetic force.

Answer: _photon_ family

10—This family of particles consists of particles that interact via the weak nuclear force. Two new leptons have recently been discovered, the tau and the tau neutrino. Four of the better-known members of this family are the electron, muon, electron neutrino, and muon neutrino.

Answer: _lepton_ family

10—This family contains particles that interact via the strong nuclear force and weak nuclear force. The family is divided into two groups: mesons and baryons.

Answer: _hadron_ family

9. (tallpaul_bhst) Name the following ministers of King Henry VIII of England for the stated number of points.

15—This man served as a chaplain to King Henry VII. Through much of the 1520s, he was the most powerful man in England next to Henry VIII, in ecclesiastical affairs as a cardinal and in secular affairs as Lord Chancellor. Name the man who failed to get a papal annulment to Henry's marriage to Catherine of Aragon.

Answer: Cardinal Thomas _Wolsey_

15—This man was prominent in Henry's religious policy, and to create an alliance with Protestant German princes urged the king to marry Anne of Cleves. The failure of this marriage cost him his head in 1540.

Answer: _Thomas Cromwell_ (prompt on Earl of Essex)

10. (kyle_misclit) FTPE, identify these works by Salman Rushdie.

10—Rushdie won the 1981 Booker Prize for this novel, which became a surprise success.

Answer: _Midnight's Children_

10—His first work published after going into exile was this 1990 children's book.

Answer: _Haroun and the Sea of Stories_

10—In 1999, Rushdie published this novel, largely set in the United States, of two musicians in a love affair, loosely based on the legend of Orpheus and Euridice.

Answer: The _Ground Beneath Her Feet_

11. (piguy_cs) Answer these related computer science questions FTPE.

10—This non-profit technical, professional organization of more than 360,000 individual members in 150 countries is the leading authority in technical areas ranging from computer engineering to telecommunications to consumer electronics.

Answer: _IEEE_ (accept Institute of Electrical and Electronics, Inc.)

10—This IEEE standard's specifications are for an "over-the-air" interface between a wireless client and a base station or access point, as well as among wireless clients. Examples of the available consumer standards using this IEEE standard include A, B, G, and Super G.

Answer: _802.11_ [read: eight oh two dot eleven] [NOTE: the available consumer standards are 802.11a, 802.11b, etc.]

10—This IEEE standard is commonly associated with Firewire, a high-speed serial bus used for transferring data and especially video.

Answer: IEEE _1394_

12. (piguy_chem) FTPE, answer the following questions about qualitative tests used in the analysis of organic substances.

10—This test is used for primary and secondary alcohols and makes use of tertiary alcohols' resistance to oxidation.

When a primary or secondary alcohol is added to the reagent of the same name, the orange color changes to green or blue.

Answer: _chromic acid_ test

10—This test involves adding a solution of silver-ammonia complex to the unknown compound. If an aldehyde is present, its oxidation reduces silver ion to metallic silver in the form of a black suspension or a silver mirror deposited on the side of the container.

Answer: Tollens test

10—This test is a type of haloform reaction that identifies methyl ketones, which halogenate three times and then lose CI_3 to create a yellow precipitate.

Answer: iodoform test

13. (kyle_misclit) 30-20-10—Identify the following playwright.

30—The son of a commercial real estate developer, this man worked through his teen years as a laboratory assistant and attended secondary school in the evenings.

20—His first two plays: *The Garden Party* and *Memorandum*, were banned after the Prague Spring of 1968.

10—He became president of Czechoslovakia after the Velvet Revolution of 1989 and the first president of the Czech Republic in 1993.

Answer: Václav Havel

14. (tim_cs) Today, computers are used for entertainment purposes as well as business. Given the names of six classic games, put them in a list by release date, starting with the earliest and ending with the most recent. 5 points will be given for each program put in its correct place. The games are: Lunar Lander, Battlezone, Tempest, Death Race 2000, Computer Othello, Pong.

Answer: Pong, Death Race 2000, Computer Othello, Lunar Lander, Battlezone, Tempest

15. (piguy_bio) FTPE, answer the following questions about gas exchange in animals.

10—In insects and some other arthropods, the respiratory system consists of a network of tracheal tubes. Air enters these tubes through a series of up to 20 tiny openings along the body surface. What are these tiny openings called?

Answer: spiracle(s)

10—In bony fish, the gills are protected by an external bony plate. In some fish, movements of the jaw and this bony plate help pump water rich in oxygen through the mouth and across the gills. Name this bony plate.

Answer: operculum

10—These specialized lungs of spiders are enclosed in an inpocketing of the abdominal wall. They consist of a series of thin parallel plates of tissue filled with hemolymph. Name these specialized lungs.

Answer: book lungs

16. (Maddog_ceurhist) FTPE, answer these questions about historical figures of Poland.

10—Succeeding Michael Wisniowiecki as king in 1674, this brilliant general defeated the Ottomans, whom he considered his greatest enemy, several times. He is noted for lifting the siege of Vienna in 1683.

Answer: Jan III Sobieski (accept John III Sobieski, Jan III Sobieski, or John III of Poland) (prompt on John III)

10—After Sobieski's death, Russian influence steadily increased in Poland, and in 1764 this lover of Catherine the Great was elected the last King of Poland.

Answer: Stanislaw II Augustus

10—While fighting for the colonists in the American War of Independence, he helped create the victory at Saratoga and directed construction of the Fortifications at West Point. He returned to Poland and after the Second Partition he led a rebellion for Polish independence.

Answer: Tadeusz _Kosciuszko_

17. (mkirch_mischist) Answer these questions about Nobel Prize winners based on their awards and one interesting fact about them, FTPE.

10—This Nobel Prize winner for inventing the transistor admitting to donating sperm to a sperm bank, in his hope of producing exceptionally gifted children.

Answer: William _Shockley_

10—Winner of a Nobel Prize in 1952 for his missionary work, this man also had a pet pelican named Parsifal.

Answer: Albert _Schweitzer_

10—Winning the Nobel Prize twice, once in physics and once in chemistry, she is the first known person to die of radiation poisoning.

Answer: Marie _Curie_

18. (kyle_glit) 30-20-10—Name the German writer given clues.

30—Originally a composer, he changed his third name from Wilhelm to Amadeus in honor of Mozart.

20—Two of his best known works include *The Devil's Elixir* and *Fantastic Pieces in the Manner of Callot*.

10—His stories inspired Jacques Offenbach to compose an 1880 opera named for him.

Answer: Ernst Theodor Amadeus (E.T.A.) _Hoffman_

19. (laura_psych) Answer these related psychology questions for the stated number of points.

5—This American created a psychological setting that he referred to as “client-centered” therapy.

Answer: Carl _Rogers_

10—Once the favorite son of Sigmund Freud, he split with Freud when he posited birth trauma as the causative factor for neuroses, and had a deep impact on Rogers' early thought. One of his earliest works was *The Myth of the Birth of the Hero*.

Answer: Otto _Rank_

15—Rogers' focus on clients' needs was inspired by this reeducation technique, popularized by John Dewey. It was originally developed as a method of vocal and breathing improvement.

Answer: _Alexander_ technique

20. (jlive_philo) Answer these related questions from the world of philosophy, FTPE.

10—This British philosopher's 1905 paper 'On Denoting' introduced definite descriptions and denoting phrases.

Answer: Bertrand _Russell_

10—As contradistinguished from knowledge by description, knowledge by *this* arises when there is direct experience. At the time, Russell thought that only current experiences, the self, and universals could be known in this way.

Answer: _acquaintance_

10—This is the common name given to the philosophy espoused in Wittgenstein's *Tractatus Logico-Philosophicus*. In Russell's 1918 paper on this subject, he suggests that philosophical analysis stops when it reaches elements with which we have direct acquaintance.

Answer: _logical atomism_

21. (Maddog_AmHist) Washington D.C. was torched, Old Hickory routed the Brits at New Orleans, and little was gained on either side. FTPE, Answer these questions about the events that led to the War of 1812.

10—The British practice of impressments was one of the leading causes of the war. Perhaps the most inflammatory occurrence of this practice was the attack and seizure of this American vessel by a British ship, *The Leopard*, in June of 1807.

Answer: The USS Chesapeake

10—Hoping to prevent impressments, Jefferson forced this measure through Congress in 1807, prohibiting any United States trade with nearly all European nations. It would be replaced in 1809 by the Non-Intercourse Act.

Answer: The Embargo Act

10—Frontier members of Congress, among them Henry Clay and John C. Calhoun, argued that the British were encouraging Indian tribes to rebel against the United States. Always motivated by the prospect of more land, they were the greatest agitators for war with Britain, and came to be known by this name.

Answer: War Hawks

22. (Maddog_Art) 30, 20, 10—Name the artist from works.

30—*Dismal Sport*, *Girl With Curls*.

20—*The Great Masturbator*, *Sacrament of the Last Supper*.

10—*The Persistence of Time*.

Answer: Salvador Dali

23. (piguy_trash) Going down to South Park, gonna have myself a time. Friendly faces everywhere, humble folks without temptation. For the specified amount of points, give the last names of these *South Park* main characters.

5—Kyle.

Answer: Broflovski

10—Butters.

Answer: Stoch

15—Jimmy.

Answer: Swanson