

2004 Truman State
Brainal Leakage
Packet 1

Tossups

1. (tallpaul_bhist) **This early king of England was so obese in his later years that his gigantic belly burst when the priests tried to shove him in his coffin.** (*) An illegitimate child, he married his distant cousin Matilda despite her earlier rebuffs. After their marriage, he built a monastery for men, and she built a nunnery for women as atonement, both of which were built in Caen and still stand today. FTP, name this first English king of the Norman dynasty who conquered Harold in the Battle of Hastings.

Answer: _William I_ (accept William the Conqueror, William of Normandy, and William the Bastard)

2. (Maddog_AmHist) **The political scandal that toppled John A. MacDonald's Conservative government as well as stark opposition nearly destroyed the project to build this structure, so it was remarkable when intensive construction began in 1882.** (*) The parent company received \$25 million and 25 million acres of land to undertake the building of this pathway and had expanded into shipping, petroleum, coal, and real estate before construction was finally completed three years later. FTP, name this railroad, whose construction was one of the main stipulations of British Columbia joining Canada.

Answer: _Canadian Pacific_ Railway

3. (piguy_bio) **Types of this disease include eastern equine, western equine, Venezuelan equine, and St. Louis.** (*) The disease is an inflammation of the brain caused by a variety of togaviruses or by a flavivirus. Most people afflicted with this disease exhibit no symptoms, and the illness does not last long. Serious cases can cause headaches, high fevers, lethargy, convulsions, delirium, coma, and death. FTP, name this disease, the most common mosquito-borne disease in the United States.

Answer: _encephalitis_

4. (jlive_philo) **His nominalism led to an epistemological rejection of universals, but he maintained a form of abstraction in thought and is thus seen by some as a forerunner of British empiricism.** (*) Ordained as a subdeacon in 1306, he defended the unpopular doctrine that Jesus and his disciples owned no property, a position that forced him to take asylum with Emperor Louis of Bavaria. FTP, identify this English philosopher who deserves credit for anticipating DeMorgan's laws but is better known for his razor.

Answer: William of _Ockham_

5. (Maddog_geog) **After the end of World War I, German navy ships that had surrendered were kept at the naval base in this basin. On June 21, 1919,** (*) a week before the Treaty of Versailles was signed, the crews of the ships scuttled their ships in this basin. Twenty years later, in 1939, German submarines penetrated the supposedly secure base in this basin and torpedoed the British Battleship HMS *Royal Oak*. FTP, name this basin in the Orkney Islands off of Scotland, the principle naval base for the United Kingdom during World War I and II.

Answer: _Scapa Flow_

6. (jgaunt_alit) **This American author lives a life similar to that of his best known character. Both have spent a considerable portion of their lives tracking down shipwrecks, with the author discovering the wreck of the CSS (*) *Hunley* in May 1995.** He currently serves as the director of the National Underwater Marine Agency, an organization he founded. FTP, name this author whose popular creation is Dirk Pitt, a character who was formerly the Special Projects Director of NUMA.

Answer: Clive _Cussler_

7. (piguy_chem) **This concept helps to explain the polarity of molecules where formal charge and electronegativity predict opposite charge configurations, such as in the BF_4^- <BF₄ minus> ion.** (*) This principle states that any negative charge should be placed on the most electronegative atom, and any positive charge should be placed on the least electronegative atom. Proposed by Linus Pauling in 1948, FTP, name this principle that declares that the electrons in a molecule are distributed in such a way that the charges on the atoms are as close to zero as possible.

Answer: _electroneutrality_ principle

8. (piguy_phys) **This phenomenon is applied in medicine by an eponymous flow meter that can detect the motion of a fetal heart as early as 8-10 weeks after conception** (*) by emitting a continuous 5 MHz tone. When the sound is reflected back from the red blood cells, its frequency changes because of the movement of the cells, and that change allows the speed of blood flow to be measured. FTP, name the effect you encounter when a train passes while blowing its whistle.

Answer: _Doppler_effect

9. (jgaunt_mischist) **He was the son of his tribe's chief Senzangakhona and a young girl named Nandi, a member of the Langeni clan. As a young man, he joined the army of Dingiswayo and became its highest commander.** (*) Towards the end of his reign, he led his army from one battle to the next, with the cruelties becoming out of hand. He was eventually assassinated by his half-brother Dingane in 1828. FTP, name this famous South African warrior of the Zulu Tribe.

Answer: _Shaka Zulu_

10. (chalsey_religion) **This Christian feast was celebrated outside of Rome as the Feast of the Three Miracles.** (*) It originally celebrated Christ's baptism in the Jordan River or his birth at Bethlehem and the date of January 6th, its date of celebration, is theorized to correspond to the date of the Egyptian winter solstice. FTP, name this feast of the manifestation of Jesus Christ that also represents the final day of the twelve days of Christmas.

Answer: _Epiphany_

11. (jlive_math) **Her major contribution to mathematics is the ascending chain condition for ideals. When her appointment to the faculty at Gottingen was blocked because she was a woman,** (*) Hilbert complained, "We are a university, not a bathing establishment." FTP, identify this mathematician and physicist whose namesake theorem states that for every symmetry property there corresponds a conservation law.

Answer: Emmy_Noether_

12. (piguy_sports) **The last time this particular play did not occur in an NFL game was on December 3, 1950, when the Browns beat Philadelphia 13-7. This play was first made legal in 1906.** (*) According to the rules that originally made this play legal, the ball could go no farther than 20 yards, and there was a penalty of 15 yards if this particular play did not work. FTP, name this currently essential football play that was the staple of the "Air Coryell" offense.

Answer: _forward pass_ (prompt on pass, throw, etc.)

13. (Maddog_blit) **Like the epics of Homer and Virgil, the author of this work intended for it to be composed of 12 books, but only six were finished. The Knight Redcrosse is the protagonist of Book I,** (*) representing holiness, while Britomart serves the same role in Book III as the Knight of Chastity. The title character never appears in the poem, but her castle is the goal of Redcrosse and Britomart, as well as that of Arthur, the work's central hero. FTP, identify this work by Edmund Spenser, an allegory of 16th century England.

Answer: _The Faerie Queene_

14. (piguy_cs) **Some of the newest credit cards contain small microprocessors that incorporate one of these devices that can typically be categorized as analog, digital, or mixed signal.** (*) The digital variety can contain anything from one to millions of logic gates, flip-flops, or multiplexers in a few square millimeters. These devices are generally constructed on a single-crystal silicon wafer. FTP, give the name for these devices that can consist of millions of interconnected electric components, such as transistors.

Answer: _integrated circuit_

15. (jgaunt_alit) **Though he is probably more well-known for his novels, this Canadian author can also write screenplays, writing the script for the Keanu Reeves farce *Johnny Mnemonic*.** (*) Another script to his credit is an episode of the *X-Files* in which a computer's artificial intelligence tries to turn on its creators by trapping them in a virtual reality world in the episode "Kill Switch." FTP, name this author of *Neuromancer*, the father of cyberpunk.

Answer: William_Gibson_

16. (piguy_chem) **A recent biography of this Oxford-educated chemist said that she "personified the transformation of crystallography from a black art into an indispensable scientific tool."** (*) Her achievements were numerous, and they included a determination of the structure of cephalosporin, penicillin, and insulin. FTP, name this scientist that earned the Nobel Prize in chemistry in 1964 for the determination of the structure of vitamin B₁₂.

Answer: Dorothy Crowfoot_Hodgkin_

[NOTE: Rosalind Franklin is definitely NOT acceptable, as she went to Cambridge and NEVER to Oxford]

17. (kyle_glit) **Although regarded as one of the greatest epic poets of his time, it is known that he was illiterate, as he mentions in his greatest work that he recorded his work by dictation. As a minnesinger, he also wrote lyric poetry.** (*) Debate persists about whether his epic poem on the Holy Grail is original or based on Chrétien de Troyes's *Perceval*. Born in 1170, this poet's 25,000 line poem largely influenced Richard Wagner, who made him a prominent character in the opera *Tannhäuser*. FTP, who is this author of *Parzival*?

Answer: _Wolfram_von Eschenbach_

18. (greg_ceurhist) **He rose to the rank general under Justin I and later won acclaim for his innovative troop deployment in his victory over the Persians at the battle of Dara** (*) in 530. He went on to play a key role in the suppression of the Nika riots and in the re-conquest of North Africa. Later, he was briefly imprisoned after being convicted of corruption charges but was pardoned by Justinian I. FTP, name this Byzantine general whose life was later chronicled in a 1938 historical novel by Robert Graves.

Answer: _Belisarius_

19. (Maddog_asianlit) **His novel *The Guide* begins with the comic story of a rogue but evolves into a serious examination of day-to-day life in India. Almost all of his novels, including *The Guide*, are set in fictional** (*) Malgudi, a village in southern India. However, he may be best known for reviving classical Indian works with his translations set in contemporary settings. FTP, name this Indian author who condensed both *The Ramayana* and *The Mahabharata* for modern audiences.

Answer: R.K._Narayan_

20. (Maddog_Art) **It was 1,851 feet long, covered more than 18 acres, and had room for nearly a million square feet of exhibition space. It was actually designed by a professional gardener** (*) and was built of a skeleton of cast iron with iron-framed glass panes. FTP, name this structure created by Joseph Paxton for the London Great Exhibition of 1851 that was later destroyed by fire in 1936.

Answer: The _Crystal Palace_

21. (Maddog_mischist) **Ruling a massive empire roughly twice the size of ancient Ghana with a population of nearly 8 million people, he was one of Africa's most innovative rulers.** (*) He utilized a practice common in France and China of the time, appointing his family members as provincial governors to better rule his empire. He was also the first ruler of his kingdom to convert to Islam, even hiring the great architect al-Saheli to build a new Mosque in Timbuktu. FTP, name this ruler of ancient Mali, most famous for his pilgrimage to Mecca and the trail of gold left in his wake.

Answer: _Mansa Musa_

22. (Maddog_gender) **She twice received the Academy of American Poets Prize for poetry while still in college, and in her work *Promiscuities, the Secret Struggle for Womanhood*,** (*) she explores how the sexual experiences of a girl's early years determine her sense of her own value as an adult. Her most famous work proposes the idea that beauty was contemporary culture's most effective means of controlling women. FTP, identify this author of *The Beauty Myth*.

Answer: Naomi _Wolf_

23. (kyle_misclit) **The Swedish Academy awarded this author the Nobel Prize for Literature in 1955 because of "his vivid epic power which has renewed the great narrative art in** (*) Iceland." Thus, it comes as no surprise that this novelist is best known for his expressionist epics on life in Iceland. His novels include *Salka Valla*, *Independent People*, and *World Light*, and after World War II, *The Fish Can Sing* and *A Parish Chronicle*. FTP, identify this novelist who died on February 1, 1998.

Answer: Halldór _Laxness_

Bonii

1. (piguy_bio) FTPE, name the following eye constituents given their descriptions.

10—The human eye has 6.5 million of these. They are responsible for color vision and allow us to perceive fine detail.

Answer: _cone(s)_

10—The cones are most concentrated at this point, a small depressed area in the center of the retina. It is the region of sharpest vision.

Answer: _fovea_

10—The axons of the ganglion cells extend across the surface of the retina and unite to form this structure. At the area where this structure passes out of the eyeball, there exists a “blind spot” that lacks rods and cones.

Answer: _optic nerve_

2. (Maddog_ceurhist) FTPE, identify the battle of ancient Europe from clues.

10—While Marathon gets more attention, it was this 479 BCE battle that destroyed the invading Persian army, ensuring they would not conquer the peninsula.

Answer: _Plataea_

10—In AD 9, Germans under Arminius defeated three Roman legions under Publius Quintilius Varus. Rome was forced to abandon all of its territories east of the Rhine, which became the Empire's northeast boundary.

Answer: _Teutoburg Forest_ (accept Teutoburg Wald)

10—At this 260 BC naval engagement, the Romans defeated a Carthaginian fleet off of Sicily but failed to capture the island.

Answer: _Mylae_

3. (jgaunt_asianhist) FTPE, name the Chinese dynasty given leaders.

10—Shun Zhi, Xian Feng, Xuan Tong.

Answer: _Ching_ Dynasty (accept Qing)

10—Zhao Zeng, Zhao Huhai, Zhao Ziyong.

Answer: _Qin_ Dynasty (accept Chin)

10—Sima Zhong, Sima Zhi, Sima Yao.

Answer: _Jin_ Dynasty

4. (Maddog_currev) Apparently not everybody condones a drive-by shooting while listening to The Human League or Michael Jackson followed by enlisting the services of a prostitute to regain your health. FTPE, answer these questions about a current lawsuit against *Grand Theft Auto: Vice City*.

10—This developer of *GTA: Vice City* has agreed to remove the inflammatory line "kill the Haitians" from future versions of the game.

Answer: _Rockstar_ Games

10—The main character of *Vice City*, it is this ex-convict who is ordered to kill the Haitians.

Answer: Tommy _Vercetti_

10—The lawsuit against Rockstar games asking for \$15,000 in damages and a ban on *Vice City* sales was filed by this Haitian rights group.

Answer: _The Haitian American Coalition of Palm Beach County_

5. (tim_music) Three notes will be given, starting from the lowest and going to the highest. For ten points per question, all or nothing, give the proper chord and identify the inversion, if any.

10—B, E, G.

Answer: _E minor, second inversion_

10—A, C, E.

Answer: _A minor, no inversion_ (root position)

10—F#, B, D#.

Answer: _B major, second inversion_

6. (nick_econ) Given the location of an automotive manufacturing plant, name the automotive manufacturer, FTPE.

10—Anna, Ohio.

Answer: _Honda_

10—Huntsville, Alabama.

Answer: _Toyota_

10—Decherd, Tennessee.

Answer: _Nissan_

7. (Maddog_Art) FTPE, identify these works of the Rococo style.

10—This 1717 work by Jean-Antoine Watteau portrays a group of richly dressed couples visiting the land of love.

Answer: _Pilgrimage to the Isle of Cythera_

10—This 1771 work by Jean-Honore Fragonard portrays the rendezvous of two lovers under the shadow of a statue.

Answer: _The Meeting_

10—In this 1742 painting, Francois Boucher portrays the Roman goddess of the hunt and her attendant, nude of course, resting near a forest.

Answer: _Diana Resting after Her Bath_

8. (jgaunt_alit) Given the subtitle of a work, identify the Stephen Ambrose historical work of nonfiction.

10—The Men and Boys Who Flew the B-24s Over Germany.

Answer: _The Wild Blue_

10—Easy Company, 506th Regiment, 101st Airborne From Normandy To Hitler's Eagle Nest.

Answer: _Band of Brothers_

10—The Men Who Built the Transcontinental Railroad 1863-1869.

Answer: _Nothing Like It In the World_

9. (tallpaul_bhst) For 5 points each, name the six wives of Henry VIII. If you get all six in the correct order, you will receive a round of applause.

Answer: _Catherine of Aragon, Anne Boleyn, Jane Seymour, Anne of Cleves, Kathryn Howard, Katherine Parr_

10. (piguy_psych) FTPE, name these developers of psychodynamic theories not named Sigmund Freud.

10—This man was once considered the heir apparent to Freud in the psychodynamic movement. His most original and most controversial contribution to personality theory is the idea of the collective unconscious.

Answer: Carl Gustav _Jung_

10—Like Carl Jung, this man felt that the importance of sexuality in personality development had been overestimated. His psychodynamic theory is known as individual psychology, and it stressed the importance of social and conscious forces.

Answer: Alfred _Adler_

10—Like Alfred Adler, this woman emphasized the social context of development. This German's primary concept is basic anxiety, the cause of neurotic disorders.

Answer: Karen _Horney_

11. (piguy_bio) For 15 points each, name the following medical tests.

15—To perform this test, electrodes are taped to different parts of the patients' scalp to measure the activity of the cerebral cortex. Basically, the test shows electrical activity in the brain.

Answer: _EEG_ (electroencephalogram)

15—This test allows a computer-generated image of a biological activity within the body to be produced. This occurs through the detection of gamma rays that are emitted when introduced radionuclides decay. It is used to detect development of Alzheimer's disease, among other functions.

Answer: _PET_ (positron emission tomography)

12. (Maddog_AmHist) Although many of us may have moral reservations about their actions, Americans are fascinated by organized crime. FTPE, name these prominent figures in the history of organized crime in the U.S.

10—While Al Capone takes all the credit, he actually began his career working for this man, whose empire he would eventually usurp.

Answer: John _Torrio_

10—Whether or not he actually said "The Syndicate is bigger than U.S. Steel" is debatable, but it is known that he was the brains behind Bugsy Siegel and Lucky Luciano, and while others of his ilk were shot or ended up in the electric chair, he died a wealthy old man in Florida.

Answer: Meyer _Lansky_

10—His various nicknames—Mr. Big, The Fixer, The Man Uptown, the Big Bankroll—seem to sum this man up. He never smoked or drank, had a rapier wit and graceful mannerisms, and seemed the antithesis of the gangster. One thing is for sure, he had nerve and he had brains, as illustrated by his fixing of the World Series in 1919.

Answer: Arnold _Rothstein_

13. (jlive_phys) Answer these physics questions for fifteen points each.

15—Vehicles using this type of engine that sounds like it comes out of Star Wars must emit two separate beams of opposite polarity. The beams are controlled by electric or electromagnetic fields, and the reaction forces of particles in the beams cause propulsion analogous to exhaust from rocket fuel.

Answer: _ion_ engine

15—This ratio of thrust produced to fuel consumed is high for ion engines, and it increases as the mass of the ions released decreases.

Answer: _specific impulse_

14. (chalsey_religion) Blow the dust off your copy of the Old Testament and give the name of the book described on a 30-20-10 basis.

30—The author of this book was the only native writing prophet of the northern kingdom living in a period that saw the last years of peace for Israel under Jeroboam II.

20—Its message critiques Israel's perverted faith, with the worship of the fertility gods of Canaan, priests, and monarchy falling under special criticism. The first three chapters, however, speak of God's command of marriage.

10—This book features the author's marriage to Gomer, an adulterous wife, with the author later buying her back out of slavery to another man after the marriage disintegrated. This mirrored God's great love for the unfaithful nation of Israel.

Answer: The Book of _Hosea_

15. (kerrith_astr) FTPE, given a phase of the moon, tell when it rises to the nearest hour.

10—Full moon.

Answer: _6 PM_ or _1800_ hours

10—Third quarter moon.

Answer: _Midnight_ or _12 AM_ or _0000_ hours

10—Waxing crescent.

Answer: _9 AM_ or _0900_ hours

16. (todd_cs) Given the following information, identify the internet programming language for the stated amount of points.

5—This is the most commonly used internet programming language. It is a markup language utilizing cascading style sheets, and has predefined tags and attributes.

Answer: _HTML_ (hypertext markup language)

10—This language was developed by Sun Microsystems and Netscape. It shares a name with another common Sun product.

Answer: _Java Script_ (do not accept Java, Java applets, or java servlets)

15—This language is a simplified version of SGML, where a user can define the set of tags and attributes for each application. It does not specify any presentation details.

Answer: _XML_ (extensible markup language)

17. (kyle_misclit) FTPE, identify the following writers.

10—This playwright wrote *For Colored Girls Who Have Considered Suicide when the Rainbow Is Enuf*.

Answer: Ntozake _Shange_

10—This Nigerian author wrote *The Open Sore of a Continent* as a protest to General Achaba's dictatorship.

Answer: Wole _Soyinka_

10—This Dutch baroness operated a coffee plantation on the slopes of Mount Kilimanjaro and wrote of her experiences under the pseudonym Isak Dinesan.

Answer: Karen _Blixen_

18. (piguy_chem) FTPE, name the following types of alcohols given their descriptions.

10—During prohibition, this type of alcohol was accidentally used for mixing drinks, leading to blindness and death.
Answer: _methanol_ (accept methyl alcohol or CH₃OH)

10—Distillation of a solution of this alcohol with water cannot increase its concentration above 95% because a 95% solution of this alcohol is an azeotrope.
Answer: _ethanol_ (accept ethyl alcohol or CH₃CH₂OH)

10—This type of alcohol is made by the catalytic hydration of propylene. It is about as toxic as methanol when taken orally but does not pass through skin as easily.
Answer: _isopropyl_ alcohol (accept isopropanol or 2-propanol)

19. (maddog_blit) It's time for a little of the old "ultraviolence," so let's put on some Ludwig Van. FTPE, answer these questions about Anthony Burgess' *A Clockwork Orange*.

10—Who is the protagonist of the novel?
Answer: _Alex_

10—Alex runs with a gang of two other thugs. What name does he use to refer to them?
Answer: _Droogs_

10—What Beethoven composition sends Alex into agony near the end of the novel as a result of the Ludovico Technique?
Answer: _Ninth Symphony_ (accept equivalents)

20. (jlive_blit) Answer the following related questions for the stated number of points.

10—The Angstroms: Harry, Janice, Nelson, Teresa, Judy, and Roy; Thelma and Ron Harrison; and Charles Stavros are the characters in this last of a tetology about Harry Angstrom's life from the 1950's to his death in 1989.
Answer: _Rabbit at Rest_

10—Who wrote *Rabbit at Rest*?
Answer: John _Updike_

10—For five points for one or ten points for all three, what are the titles of the other three works in the series?
Answer: _Rabbit, Run_, _Rabbit Redux_, _Rabbit is Rich_

21. (jgaunt_mischist) 30-20-10—Identify the African country.

30—It was formally established on January 1, 1890 by decree from the King of Italy.

20—Aeschylus described this country as “the lake that is the jewel of Ethiopia.”

10—This country gained independence on May 24, 1993 from Ethiopia.

Answer: _Eritrea_

22. (kyle_glit) FTPE, identify the following German works and/or authors from the early 20th century.

10—This Herman Hesse masterpiece involves the title character's spiritual quest during which he spends time at a river along with Vasudeva, a ferryman.

Answer: _Siddhartha_

10—In his *The Trial*, a banker is falsely accused of a crime on his thirtieth birthday and is put to death without resistance on his thirty-first.

Answer: Franz _Kafka_

10—This older brother of a Nobel laureate vehemently opposed fascism and wrote political commentaries such as *Die Kaiserreich*.

Answer: _Heinrich Mann_

23. (Maddog_AmHist) 30-20-10—Name the American political figure.

30—As a successful lawyer in New York, he became a partisan of Martin Van Buren and the Barnburners of the Democratic Party.

20—As state democratic chairman, he disapproved of corruption and gathered much of the evidence that brought down Boss Tweed.

10—Elected Governor of New York in 1874, he is perhaps most notable for winning the popular vote against Rutherford B. Hayes but not winning the Presidency.

Answer: Samuel _Tilden_