

Berkeley Late Spring Tournament—I Know Kung Fu (2004)
Packet by Chicago B (David Press, Jared Sagoff, Ray Sun, Murtaza Akhter)

1. In 586 B.C.E. the Babylonians destroyed the first Jewish temple. In 70 C.E. the Romans destroyed the second Jewish temple. In 1492, the Spanish expelled the Jews. All these events occurred on this day, which ends 3 weeks of mourning starting on the 17th of Tammuz, which was the day the walls of Jerusalem were breached by the Babylonians. FTP, name this holiday, named after the date on which it falls on the Hebrew calendar, for which observers must mourn and fast.

Answer: Tisha B'Av (accept Ninth of Av)

2. The protagonist has several sexual encounters with a nameless widow whose only motivation in life is "community spirit." The protagonist, a schoolteacher, is left alone after the widow dies from an ectopic pregnancy. This happens after he misses the last bus into town after a trip to the countryside in search of a rare beetle. He is offered a place to stay for the night by the coastal townsfolk, but is chagrined to find that he has been tricked into slavery. Niki Jumpei attempts to escape, but eventually resigns himself to digging sand in a pit for the rest of his life. FTP, name this Kobo Abe novel.

Answer: Woman in the Dunes or Suna no Onna

3. Public choice theorists feel that government interference in the economy increases this quantity, while public interest theorists believe that government influence decreases it. Other common causes of it include monopoly pricing or externalities. Occurring when the market is not Pareto optimal, this is, FTP, what economics concept, defined as wasted resources that could make some better off without making others worse off?

Answer: Deadweight loss

4. It sometimes abstracts a proton, but the resulting carbanion is resonance-stabilized and sterically hindered and thus unreactive. Keto-enol tautomerism is important, as it is a deprotonated enol that abstracts an alpha-hydrogen and drives the reaction. It can happen intramolecularly, in which case it forms a ring structure and is called a Dieckmann reaction. FTP, name this condensation reaction between two esters in the presence of a base to form a beta-keto ester.

Answer: Claisen Condensation (prompt on early Dieckmann reaction)

5. Among the territories ceded in it were the Pescadores Islands. On the 23rd of April, 1895, a week after this treaty was signed, the Liaodong Peninsula was returned to the defeated power, with the victor receiving a considerable monetary sum in exchange. This was orchestrated by France, Germany, and Russia, and in gratitude, Russia was given freedom to build and operate railroads across Manchuria. Other territories given to Japan included Taiwan, and nominal independence was granted to Korea. FTP, name this treaty that ended the Sino-Japanese War.

Answer: Treaty of Shimonoseki

6. Scholars have debated for years as to which version of this play – the 1608 Quarto or the 1623 Folio – is the one Shakespeare intended for performance. Only the Quarto has a bit part for a "Doctor," and only the Folio contains the fool's prophecy in Act III. Both versions open with the marriage suits of the Duke of Burgundy and the King of France, although the former withdraws his proposal after he finds out he isn't getting a dowry. FTP, name this Shakespeare play about an aging monarch and his daughters?

Answer: King Lear

7. An expression in this system is inductively defined as an identifier, a function with an identifier argument and an expression body, and an expression applied to another expression. Rosser and its inventor proved that its beta-reduction satisfies the diamond property, and Kleene (pron. clean-ee) proved that it was equivalent to his partial recursive functions. The previous result combined with a similar one with the Turing Machine, led to the Church-Turing thesis. In 1936, Alonzo Church created what formal system on which many functional languages such as Lisp model themselves?

Answer: Lambda Calculus

8. In *A Tramp Abroad*, Mark Twain called it "the foulest, the vilest, the obscenest picture the world possesses." This painting commissioned by Duke Guidobaldo della Rovere inspired a later painting featuring Victorine Meurent, which replaces the sleeping white dog in the right foreground with a hissing black cat. The subject of the painting, posed in front of a dark green drape, clutches a bouquet of flowers in her right hand, while holding her left suggestively over her body. FTP, name this reclining nude which inspired Manet's *Olympia*, a 1538 painting by Titian.

Answer: Venus of Urbino

9. Although he claims early on that "you can always count on a murderer for a fancy prose style," he sums up his mother's death in a freak accident in a mere two words. After his first wife divorces him, his second wife is run over by Frederick Beale's car. We are informed of his own death by Dr. John Ray, Jr., who tells us that he died in jail of coronary thrombosis on November 16, 1952, just before his trial was about to start. FTP name this man, accused of killing child pornography czar Clare Quilty.

Answer: Humbert Humbert

10. His influence on the imperial court was strengthened by his sister's marriage to Fyodor Ivanovich, the mentally weak son of the Czar. When the Czar died, this man and Nikita Romanovich Yuriev were appointed as joint guardians of the nominal tsar Fyodor. He was the first to use Siberia as a place of banishment and he legalized serfdom in 1587. FTP, name this man who, when Nikita died, became sole regent and essentially the head of state of Russia.

Answer: Boris Godunov

11. This Omaha, Nebraska company got its name from a 1950s merger between two milling companies. Under new management, it shed its factory assets and moved into the insurance business with the acquisition of National Indemnity and National Fire and Marine Insurance. Because insurance companies tend to have a lot of cash sitting around waiting for risks that may or may not eventuate, they become a perfect vehicle for investment in liquid assets, such as stocks and bonds. FTP name this successful company, owner of GEICO, of which 40% of its shares are owned by Warren Buffet.

Answer: Berkshire Hathaway

12. Eblis O'Shaugnessy reports this character's death in the catacombs beneath the necropolis of Litharge. The dying Hector Hall is made to believe that he is this character by Brute and Glob, two escaped Major Arcana. He defeats Choronzon, a Duke of Hell, to regain his helmet after being imprisoned by Roderick Burgess, who was trying for his older sister, Death. FTP, name this member of the Endless and title character of a series of comics written by Neil Gaiman, the lord of dreams.

Answer: Sandman; or Lord or Prince Morpheus; or Oneiros (accept Dream of the Endless before "lord of dreams." There are a bunch of other acceptable names; if someone says something that's not here and claims they're right, talk to Seth)

13. One of the distinguishing features of this mineral is that, unlike its more ferrous cousin, it is unstriated, and is not an important component in gabbro or basalt. Having formula KAlSi_3O_8 , it is a major constituent of rhyolite and granite, along with amphibole and quartz. For ten points, what is this pinkish mineral with Mohs hardness 6, one of the two main varieties of feldspar along with plagioclase?

Answer: Orthoclase feldspar (accept K-spar until the chemical formula is read)

14. His novel concerning the romance of tubercular Lillian and race-car driving Clerfayt (pron. clair-fate) is named *Heaven Has No Favorites*. The consumptive love-interest theme is shared in his novel of a trio of car mechanics living in late 1920s Germany called *Three Comrades*. The extravagant inflation in Weimar Germany is expressed in his *The Black Obelisk*, echoing his cross-novel themes concerning the effects of World War I on the culture. FTP, name this author of *The Road Back*, the sequel to his World War I exposé *All Quiet on the Western Front*.

Answer: Erich Maria Remarque

15. The case, as heard before the Supreme Court, actually combined four cases: the namesake case, *Briggs v. Elliott*, *Gebhart v. Belton*, and *Davis v. Prince Edward County*. It directly reversed the Court's previous decision in *Cumming v. Richmond County*, and was followed a year later by another ruling from the court

which ordered the states to comply with the first ruling "with all deliberate speed". Argued for the plaintiffs by Thurgood Marshall, for ten points, what is this landmark 1954 Supreme Court ruling which mandated the desegregation of public schools?

Answer: Brown v. Board of Education of Topeka

16. He claimed that proper outward acts are based on the five virtues of kindness, uprightness, decorum, wisdom and faithfulness. Some of his works include the *Chunqui*, or the Spring and Autumn Annals, as well as the *SiShu*, or the Four Books. Living as he did in the time of the Zhou dynasty when feudalism degenerated in China and intrigue and vice were running rampant, he deplored the contemporary disorder and lack of moral standards. FTP, name this proponent of the virtue of reverence for parents, living or dead, who also wrote the *Analects*.

Answer: Confucius

17. The proportionality constant can be calculated with the Neumann formula for two wire loops; that constant depends only on the geometry of the situation, and is positive, resulting in a back EMF. An expanding or collapsing magnetic field can produce it in a stationary wire. This is the basis for a transformer. This principle is also behind the rotary electric power generator and was discovered by Michael Faraday. FTP, name this principle that a changing magnetic flux gives rise to an electric field.

Answer: Induction (accept inductance before "stationary wire")

18. He served as president of the Kentucky Central Railroad after losing the 1869 Ohio gubernatorial election to Rutherford B. Hayes, and spent the last four years of his life as minister to Germany. In 1864, this antiwar Democrat served as George McClellan's running mate. For 10 points--name this politician who earned his most enduring fame in the Senate, where he sponsored a namesake 1883 civil service reform act.

Answer: George Hunt Pendleton

19. It begins by showing the title character reading Gray's *Anatomy* in an examination chair. The protagonist enters medical school at the University of Winnemac, where he begins to work closely with Dr. Gottlieb, the professor of bacteriology. He helps immunize the people of St. Hubert against bubonic plague. At the end of the novel, he has returned to doing pure science in the woods of Vermont. The author was awarded the Pulitzer Prize for this work, but he declined the award. FTP, name this work by Sinclair Lewis.

Answer: Arrowsmith

20. This feature was formed about 155 million years ago from the intersection of the Pacific and Philippine plates and slopes at an angle of 64 degrees. Located about 250 miles to the southwest of Guam, psychrophilic and barophilic organisms thrive here. It was found by filling a submarine's air tanks with gasoline, which, due to the lighter density compared to water, propelled the sub downward in the ocean. Its deepest point, "The Challenger Deep," comes from the name of that sub. FTP, name this formation that was discovered by Jacques Piccard off Japan and could fit Mount Everest inside.

Answer: Marianas Trench

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Chicago B

1. FTPE, name these results from number theory from descriptions.

10) This theorem states that there is exactly one solution to a system of congruences where all the moduli are relatively prime.

Answer: Chinese Remainder Theorem

10) This theorem states that if 'p' is prime, then, for every integer 'a' greater than 0 and less than 'p', 'a' to the 'p' minus one power is congruent to one modulo 'p'.

Answer: Fermat's Little Theorem

10) This theorem states that 'p' is prime if and only if 'p' minus one factorial is congruent to negative one modulo 'p'.

Answer: Wilson's Theorem

2. Identify these musical terms FTPE.

10) This is an indication to hold a note for an arbitrary amount of time, and is written as a dot enclosed by a semicircle over the note.

Answer: fermata

10) This term for a phrase that is repeated identically throughout a large section of a piece is from the Italian for 'stubborn'. An example is found in Holst's "Mars" from "The Planets."

Answer: ostinato

10) This is an extended instrumental solo that accompanies an aria in an opera. The term was originally used to indicate that a given part was indispensable to the piece, but now, ironically, means that it is optional.

Answer: obbligato

3. Name these T. S. Eliot poems from opening lines FTSNOP.

5) "April is the cruellest month, breeding/ Lilacs out of the dead land"

Answer: The Waste Land

5) "Let us go then, you and I, / When the evening is spread out against the sky/ Like a patient etherised upon a table"

Answer: The Love Song of J. Alfred Prufrock

10) "Because I do not hope to turn again/ Because I do not hope/ Because I do not hope to turn"

Answer: Ash-Wednesday

10) "A cold coming we had of it, / Just the worst time of the year/ For a journey, and such a long journey"

Answer: Journey of the Magi

4. Answer the following questions about the African-American struggle to gain the vote in the Deep South FTPE.

10) This was the name of the 1964 campaign where civil rights workers spread throughout the South to boost African-American voter registration and participation.

Answer: Freedom Summer

10) Led by Fannie Lou Hamer, a group was formed to challenge the state party organization by offering an integrated alternative to the Democratic Party in this U.S. state.

Answer: Mississippi

10) Attacks on protesters in Selma, Alabama, by Sheriff Jim Clark and the death of two northern whites there pushed President Johnson to propose this law.

Answer: Civil Rights Act of 1965 (accept Voting Rights Act)

5. Five, ten, fifteen, answer the following questions regarding the band Outkast:

10) What is the name of the Outkast song that topped the pop charts in Dec. 2003?

Answer: Hey Ya!

10) Which former NATO commander said "I don't know much about hip-hop, but I do know OutKast can make you shake it like a Polaroid picture"?

Answer: Wesley Clark

10) "The Way You Move", chart topper in Feb. 2004, was sung by which partner of Andre (3000) Benjamin?

Answer: Antwan (Big Boi) Patton (either Big Boi or Patton is enough)

6. FTPE, name the following about continental drift:

10) This German meteorologist, explorer, and geologist developed the continental drift hypothesis in his *The Origins of Continents and Oceans*. He died while leading an expedition to Greenland.

Answer: Alfred Wegener (VEG-ner)

10) Wegener gave this name to the one ocean surrounding Pangaea.

Answer: Panthalassa

10) As Pangaea started to separate late in the Triassic period, it broke up into two landmasses. The northern portion was termed "Laurasia" while the southern continent, which included present-day South America, Africa, and Australia was given what name?

Answer: Gondwanaland

7. FTPE, name the major rivers that go through the following US cities.

10) This river runs through Wichita, KS. It starts in the Colorado Rockies and ends in its eponymous state.

Answer: Arkansas River

10) This river starts at Mount Shasta, runs through its eponymous city, and flows into the San Francisco Bay.

Answer: Sacramento River

10) This river starts at its eponymous town where its two main tributaries join. It then runs by Columbus, Fremont, and then south of Omaha as it empties into the Missouri River.

Answer: Platte River

8. Give the first names of these characters from Jane Austen novels FTPE.

10) The eldest of the five Bennet sisters, she is shy, good-natured, and sweet. She falls in love with Mr. Bingley.

Answer: Jane Bennet

10) The daughter of an unknown wealthy gentlemen, she is a pretty girl in Mrs. Goddard's Highbury boarding school. She looks up to Emma with awe for her wealth, social status, and intelligence.

Answer: Harriet Smith

10) The eldest son of Mrs. Ferrars, he is actually in love with Elinor Dashwood, but he remains loyal to Lucy Steele, who doesn't deserve him and leaves him for his brother Robert.

Answer: Edward Ferrars

9. FTPE, answer the following about famous councils.

10) This 19th ecumenical council of the Catholic Church held from 1545 to 1563 sought to respond to the challenge of the Protestant Reformation and formed a key part of the counter-reformation. The council refused any concessions to the Protestants and strongly codified Catholic dogma.

Answer: Council of Trent

10) This council, held in 1409, was called in order to resolve the Great Western Schism which occurred in 1378. The council declared Alexander V the new pope to replace Gregory XII, the Roman pope, and Benedict XIII, the Avignon pope.

Answer: Council of Pisa

10) Held from 1414 to 1418, this council, which considered itself an extension of the Council of Pisa, was convened to settle the papacy after there had been three different popes from 1409 to 1414.

Answer: Council of Constance

10. Answer these questions about the history of Israel FTPE.

10) Name the 1917 letter to Lord Rothschild declaring British sympathies with the Zionist movement.

Answer: Balfour Declaration

10) Name the 1947 UN resolution that partitioned the Palestine mandate and essentially created Israel.

Answer: General Assembly Resolution 181

10) Name the war, prompted by an Egyptian blockade and a massing of troops in the Sinai peninsula, that was launched by Israel on June 5, 1967 in which it captured Sinai, the Gaza Strip, the Golan Heights and the West Bank.

Answer: Six-Day War

11. Answer the following questions about circulation FTPE.

10) This value can be calculated by multiplying stroke volume by the heart rate and is a measure of the volume of blood pumped per unit time from a ventricle.

Answer: Cardiac output

10) This is the space between the ectoderm and endoderm which is often found in invertebrates that have open circulation and contains the fluid hemolymph.

Answer: Hemocoel

10) Name the law that states that in laminar flow, the flow is directly proportional to the driving pressure and resistance is independent of flow.

Answer: Poiseuille's Law

12. Name these works set in bars FTPE.

10) In this Camus novel, Jean-Baptiste Clamence delivers a monologue while sitting alone in an Amsterdam bar.

Answer: The Fall or La Chute

10) This play, set in Harry Hope's bar, features a bunch of people clinging to their pipe dreams.

Answer: The Iceman Cometh

10) The dangerous title character of this Robert Service poem sits in the Malamute saloon, watching his lady Lou.

Answer: The Shooting of Dan McGrew

13. FTPE, name the following Napoleonic War battles from descriptions.

10) Napoleon almost lost his army when Austrian General Michael Melas counterattacked in this Italian battle on 14 June 1800.

Answer: Marengo

10) Admiral Horatio Nelson successfully defended Egypt against the French fleet in this August 1798 naval battle.

Answer: Battle of the Nile or Battle of Aboukir Bay

10) General Bennigson thought he had it made on 14 June 1807 when he saw only 17,000 French troops here compared to his 60,000 Russians. However, he didn't know about Napoleon's 80,000 troops waiting to split the Russians along the Alle river in what battle?

Answer: Battle of Friedland

14. Answer the following about grand slams in baseball FTPE:

10) This current Red Sox third baseman is the only man to hit two grand slams in a game from opposite sides of the plate.

Answer: Bill Mueller (pronounced "Miller", but be lenient)

10) This man, then with the Cardinals, hit two grand slams in the same inning in 1999.

Answer: Fernando Tatis

10) This man, now a "senior pitching advisor" for the Red Sox, is the only pitcher to hit two grand slams in a game.

Answer: Tony Cloninger

15. FTPE, name the following about quantum physics.

10) This supposed contradiction states that quantum entanglement could cause instantaneous action at a distance, something ruled out by special relativity. Thus, its creators posited local hidden variables that quantum mechanics does not account for.

Answer: Einstein-Podolsky-Rosen Paradox

10) If it could be shown not to be satisfied, this formula would prove that a local theory of quantum mechanics is untenable. It specifies a relation between the number of measurements of the axes of the spins of pairs of photons.

Answer: Bell's Inequality or Bell's Theorem

10) This type of experiment was used to show a violation of Bell's Inequality. In it, the polarizer's settings are changed randomly and quickly in order to remove a possible correlation between the initial settings of the polarizer and the final setting used to measure the photon's spin axis.

Answer: Double-Delayed Choice Experiment

16. Answer the following about an author FTPE.

10) This author's works include the story *The Open Window*, and the collections *Not-So Stories*, *Beasts and Super-Beasts*, *The Unbearable Bassington*, *The Chronicles of Clovis*, and *Reginald in Russia*.

Answer: Saki or Hector Hugh Munro

10) Saki took his pen name from this collection of poems by a Persian writer, which includes the line "Here with a Loaf of Bread beneath the Bough / A Flask of Wine, a Book of Verse—and Thou." It was translated by Edward Fitzgerald.

Answer: Rubaiyat of Omar Khayyam

10) In this Saki story, Conradin worships the titular ferret, who kills Mrs. De Ropp, Conradin's cousin and guardian.

Answer: Sredni Vashtar

17. FTPE, given the short descriptions, name the class of the Hindu caste system.

10) The caste made up of traders, merchants, and people involved in agricultural production:

Answer: Vaishyas or Vaisyas

10) The lowest caste, composed of laborers:

Answer: Shudras or Sudras (the Untouchables are not a caste)

10) People of this caste often becomes cooks so that people of all castes can eat their prepared food:

Answer: Brahmins

18. Name these infantile psychological reflexes FTPE:

10) The most widely studied psychological reflex in infants, this reflex causes babies to hunt for a breast when their cheeks are brushed.

Answer: Rooting reflex

10) Named for a French neurologist, this reflex causes infants' toes to spread apart after the sole has been stroked.

Answer: Babinski reflex

10) When an infant is lowered suddenly, as if in freefall, it will spontaneously throw out its arms as a protective mechanism in this aptly named reflex.

Answer: Parachute reflex

19. Five, ten, fifteen, give the names of the following people based on descriptions who are from the show "Late Night with Conan O'Brien."

5) Give the name of Conan's former "sidekick" that left the show and starred in his own show on Fox.

Answer: Andy Richter

10) Give the name of the announcer for "Late Night."

Answer: Joel Goddard

15) Give the name of the producer of the show who is often ridiculed by Conan.

Answer: Jeff Ross

20. Name the functional group given a brief description FTPE.

10) This functional group consists of an oxygen atom between two carbons.

Answer: ether

10) This useful functional group can be synthesized by addition across an alkene, and it reacts with alkoxy ions in alcohol to form an ether.

Answer: alkyl halide

10) This functional group has an unusually acidic terminal hydrogen, and can be deprotonated by sodium amide to form a nucleophilic carbanion. Treatment with hydrogen gas and Lindlar's catalyst gives a cis-alkene.

Answer: alkyne