## UC Berkeley's WIT 7: Packet by UC Irvine

## Tossups

1. After studying medicine, he became his country's director of National Public Health Service and later the Minister of Health and Labor. A promoter of Black Nationalism and an opponent of the military government of Paul Magloire, he became the president of his country in 1957 and ruled until his death in 1971. FTP, who was this man, the creator of the dreaded civilian militia Tonton Macoute, nicknamed Papa Doc?

## Answer: François Duvalier or Papa Doc Duvalier

2. This play's title character is the father of the main character. While Poins, Gadshill, and Peto join the bandit of fake robbers, Mistress Quickly and Kate Percy prove to be formidable and strong-mouthed women. Also in the play, Douglas kills Blunt, the Prince redeems himself to his father and kills Hotspur, and a notoriously fat man plays dead to protect himself. FTP, what is this play, a fictionalized history of the education of Hal, the future King of England?

Answer: 1 Henry IV or Henry IV, part one
3. Scaled up considerably from an original 9-foot model, it is now set atop a granite and concrete pedestal that cost more money than the statue itself. Originally slated to be placed by the Suez Canal, its surface sheets of copper were sculpted, dissembled, then re-assembled in the 1880s. With an iron and steel framework engineered by Gustave Eiffel, FTP, what is this 152 -foot-tall statue, sculpted by Frédéric Auguste Bartholdi?

Answer: The Statue of Liberty or Liberty Enlightening the World
4. It consists of 26 small parts. Six of them are "centers" which can only move in place. The eight corners and twelve edges can all shift positions. There are about 4.3 times 10 to the 22 nd combinations, but only one possible way of getting all six faces to form a different color. Patented in 1975, FTP, what is this mathematical puzzle, named after its Hungarian inventor?

Answer: [Ernö] Rubik's Cube
5. Quotations from folksongs are used extensively in this work, especially in the section, "Dances of the Young Girls and Boys." Utilizing such techniques as bitonality, polymeter, and dissonance, the performance of this musical composition marked the opening of the Théâtre des Champes-Élysées in Paris. FTP, identify this ballet whose theme of human sacrifice set off a riot in its premiere, choreographed by Vaslav Nijinsky and composed by Igor Stravinsky.

Answer: The Rite of Spring or Le sacre du printemps
6. In June of 1999, shortly after divorcing Anna, his wife of 32 years, this 68-year-old business giant married Wendi Deng, a 32-year-old former Asian TV executive. This mogul of a "self-sufficient global media conglomerate" owns satellite-TV operas, cable channels, and broadcast outlets across five continents. He also owns the Los Angeles Dodgers. Hailing from Australia, FTP, who is this CEO of News Corp. and Fox Group?

Answer: Rupert Murdoch
7. This medical technology originated in the 1970s and today it can generate detailed, multicolor images. It is used in radiotherapy treatment for precise action on small target areas in the patient. The machine rotates around the patient to make a series of pictures that are then reconstructed by computer to represent a "slice" of the patient. FTP, what is this medical technology using computers and X-rays?

Answer: Computerized Axial Tomography Scan or CT Scan (do not accept "MRI")
8. Prior to Alfred Adler, this psychologist invented the term "complex" to refer to a cluster of negatively charged emotional associations. He also developed new classifications of personality types such as "introverts" and "extroverts," but he is most famous for combining a theory of archetypes with the idea that the deepest level of personality was an inherited part of the unconscious mind found in all members of a race or species. FTP, name this Swiss psychologist who coined the term "collective unconscious."

## Answer: Carl Gustav Jung

9. They are most effective when an acid and its conjugate base are present in approximately equal amounts. Some examples of these special types of chemical solutions include acetate for $\mathrm{pH} 4-5$, carbonate for $\mathrm{pH} 6-8$, and ammonia for $\mathrm{pH} 9-10$. Biological systems are particularly dependent upon them to maintain constant pH values. FTP, what are these solutions whose pH is not greatly affected by small additions of strong acids or bases?

Answer: buffers
10. Until 1868 , no woman was allowed to climb this 12,388 -foot peak, snowcapped from October to May. With a nearly perfect cone, this dormant volcano last erupted on record in 1707. Sacred since ancient times, FTP, what is this volcano located in the Chubu region of Honshu?

Answer: Mount Fuji or Fujiyama or Fujisan
11. This movement indirectly questioned traditional authority, pushed for democracy, and led to the establishment of such colleges as Rutgers, Brown, and Princeton. It saw a split between the Old Lights and the New Lights and a schism in the Congregationalist and Presbyterian churches. FTP, Identify this revival of religion during the 1730 s and 40 s in which orators like George Whitefield and Jonathan Edwards gave emotional and captivating sermons.

Answer: the first Great Awakening
12. This effect results from the fact that the lowest energy state is not always the same in two reference frames related by a Bogoliubov transformation. Consequently, the vacuum in one reference frame can correspond to a state with a particle and an anti-particle in another, and this results in the emission of a tiny amount of radiation from black holes. FTP, name this effect proposed in 1974 by the current Lucasian professor at Cambridge.

Answer: Hawking effect (or Hawking radiation)
13. Of German and Chippewa descent, this American author is a member of the Turtle Mountain Band of Ojibwa. She wrote such books as The Bingo Palace, Tracks, and Tales of Burning Love. In a series of vignettes, she tells the story of the Kashpaw and Lamartine families in the novel Love Medicine. FTP, who is this contemporary author of The Antelope Wife and The Beet Queen?

Answer: Louise Erdrich
14. Built on an octagonal plan, this shrine was surmounted by a gilded wooden copula. Completed in 691 CE on Mount Moriah, it is, according to tradition, where Abraham prepared to sacrifice Isaac and Mohammed ascended to heaven. FTP, what is this holy edifice in Jerusalem, sacred to both Islam and Christianity?

Answer: Dome of the Rock
15. This country's strategic geographical position led its people to call it "a shrimp among whales." From 1392 until 1910, it was ruled by the Chosôn dynasty under the Yi family. The 1876 Treaty of Kanghwa brought it out of the exclusive sphere of Chinese influence. Poor social conditions and discontent over foreign influence led to its Tonghak Rebellion in 1894. Ruled by Japan from 1910 to 1945, FTP, what is this now-divided peninsular country?

Answer: Korea
16. Studies indicate that 4 out of 5 sufferers of this disorder are women. Fortunately, this medical condition is normally benign and lessens in severity and frequency with age. It can be accompanied by vomiting and a disturbance of vision by bright streaks of light. Lasting for a few hours at a time, it is caused by ingested substances that constrict blood vessels. FTP, the difference between the constriction and dilatation of arterioles in the brain causes what recurrent, usually one-sided condition?

Answer: migraine headaches
17. "If all bodies were embalmed every man might be his own statue." So wrote this philosopher in AutoIcon, or the Uses of the Dead to the Living. Indeed, as a firm believer in the doctrine of usefulness, he
bequeathed his own dead body to University College for medical research. His body is now preserved and placed in a glass case. FTP, identify this British philosopher who believed that good consists in creating "The greatest happiness for the greatest number of people."

## Answer: Jeremy Bentham

18. When he was 14 , his mother sent him to study at the theological academy in Tiflis. A scholarship recipient, he left the academy five years later due to ill health, but he would always claim that he was expelled for preaching Marxism. Nicknamed "The Red Priest," FTP, who was this revolutionary with an image-making alias meaning "man of steel"?

Answer: Joseph Stalin or Joseph Vissarionovich Dzhugashvili
19. "Hang on, Voltaire." "This party's dead, anyway." "Anaheim..." "He's the guy, behind the guy, behind the guy." These are some of the memorable lines from a movie about two Los Angeles buddiesMike and Trent-taking a trip to Las Vegas and roaming about the Hollywood night scene in an effort to score babes-not "skanks." Directed by Doug Liman, FTP, what is this, 1996 movie, whose most enduring lines are "You are so money" and "Vegas baby, Vegas!"?

Answer: Swingers
20. This leader called on the U.S. and Great Britain for support both during the "Black September" Civil War of 1970 and in 1958, after his cousin, Faisal II, was killed. During the Gulf War, an air and sea blockade on his country resulted from his choice to support Iraq. FTP, name this man who, after 45 years on the throne, died on February 7 in Amman.

Answer: King ibn Talal Hussein
21. It got its special name after Jack McCall shot and killed a man in a saloon at Deadwood in the Dakota Territory. Consisting of the Queen of Hearts, the two black eights, and the two black aces, FTP, what name is given to the last poker hand played by Wild Bill Hickok?

Answer: Dead Man's Hand
22. According to AE Housman's poem, "Terence, This Is Stupid Stuff," this person "died old." In 63 BCE, he was trying to avoid capture by the Romans. When he was surrounded, he tried to kill himself by taking poison, but failed, so he was forced to order a slave to kill him with a sword. FTP, identify this King of Asia Minor who acquired an immunity to poison by taking small doses of poison throughout his life.

Answer: King Mithridates VI of Pontus
23. In nature, this phenomenon serves many functions, such as signaling during courtship rituals, deterring predators, or locating prey. It is displayed by some bacteria, fungi, algae, and animals like deep-sea fishes and squid. FTP, what is this biological characteristic of certain organisms, most notably, the firefly?

Answer: bioluminescence (prompt on similar answers)
24. A crowd cheers in anticipation of the leader, who finally enters the stage without a head in this author's short play, The Leader, and a professor uses an absurdly logical language as an instrument to rape and kill his student in The Lesson. FTP, who was this author of the short story collection, "The Colonel's Photograph," a proponent of Theater of the Absurd whose best works are Rhinoceros and The Bald Soprano?

Answer: Eugene Ionesco (accept The Leader on an early buzz)
25. This popular beverage requires an unusual, extra-large straw. Its preparation begins by cooking tapioca balls over slow heat with lots of sugar. Then, the tapioca is chilled and served with ice-cold red or green tea. Milk is often added. Originated in Taiwan, FTP, what is this beverage, quickly sweeping Asian communities across America?

Answer: Buo-Bah Nai-Cha or BB Tea or Buo-Bah Tea or Pearl Milk (accept "Tapioca Pearl Tea" or equivalents")

## Bonus Questions

1. FTPE, answer the following questions on Norse mythology:
a) (10) Name the golden palace outside Valhalla in which Odin lives.

Answer: Gladsheim
b) (10) Name the day of doom on which heaven and earth will be destroyed and the gods are destined to perish.

Answer: Ragnarok
c) (10) Name the watchman of the gods and guardian of the Rainbow Bridge who will fight Loki to the death on Ragnarok.

Answer: Heimdall
2. 30-20-10. Identify the author from clues:
a) (30) His literature reflects his life, including his deep sense of inferiority to his father and a prolonged engagement that never led to marriage. His later short stories can be found in The Great Wall of China.
b) (20) He asked his friend Max Brod to burn all of his remaining manuscripts when he died. Brod didn't obey his wish and, instead, published them, many of which are unfinished.
c) (10) Once working for an insurance company, he created such characters as Joseph K and Gregor Samsa. This writer of Jewish ancestry also wrote the short story collection In the Penal Colony.

Answer: Franz Kafka
3. FTPE, name these political terms:
a) (10) The term originated in 1879 when Ohio senator John Sherman made a trip home. It is what politicians do when they visit their electoral districts to explain an unpopular action.

Answer: "Fence Mending"
b) (10) It is a legislative act that inflicts punishment upon a particular person or group without a court trial, as in the internment of Japanese-Americans during WWII.

Answer: "Bill of Attainder"
c) (10) Often abused and punishable by law if used illegally, it is a Congressman's unlimited privilege to mail letters for free.

Answer: "Franking"
4. FTPE, answer the following questions about short-term climate variability in the Pacific:
a) (10) Originally named by fishermen for a warm ocean current, it has come to mean a major shift in the oceanic circulation that occurs near the Peruvian/Ecuadorian coast every 2 to 10 years.

Answer: El Niño
b) (10) This index is a measure of the pressure difference between the western and central eastern parts of the tropical Pacific Ocean.

Answer: Southern Oscillation Index
c) (10) An extreme phase of the Southern Oscillation, it is a stronger version of the "normal" circulation in the tropical Pacific. The sea-surface temperatures in the central and eastern Pacific are colder than normal.

Answer: La Niña
5. Know thy Greek. FTPE, identify these similar-sounding literary terms of Greek origin:
a) (10) From the Greek for "the passions," "suffering," or "deep feeling," it is a scene that evokes pity, tenderness, or sympathetic sorrow from the audience.

Answer: pathos
b) (10) From the Greek for "depth," it is a form of anticlimax in which pathos becomes-either intentionally or unintentionally-humorous.

Answer: bathos
c) (10) From the Greek for "custom," it is the disposition, fundamental values, and overall character of a person.

Answer: ethos
6. 30-20-10. Identify this philosophical work from clues:
a) (30) Divided into 25 sections, it touches on such topics as the Greek satyr chorus, operas, and the
primordial unity. The author wrote an "Attempt at a Self-Criticism" 15 years later.
b) (20) This book, its author's first, contains a Preface to Richard Wagner. The author later wrote an entire treatise on Wagner and his operas.
c) (10) Written by Friedrich Nietzsche, it deals with the duality of the Apollonian and the Dionysian found in many forms of art, starting with ancient Greek theater.

Answer: The Birth of Tragedy out of the Spirit of Music or Die Geburt der Tragödie aus dem Geiste der Musik
7. FTPE, answer the following questions on American History in the summer of 1866:
a) (10) In June, this Amendment was passed. Among its four main provisions was the repudiation of the Confederate debts and guarantee of Federal debts. It also contains a provision of dual citizenship.

Answer: the Fourteenth Amendment
b) (10) This is the sardonic nickname given to a series of speeches in which Andrew Johnson bombarded opposing Republicans with sharp retorts in a stump-speaking style.

Answer: "Swing(ing) around the circle"
c) (10) This Supreme Court case outlawed military tribunals from trying civilians at any time because it would signify a military dictatorship.

Answer: Ex parte Milligan
8. FTPE, identify the following subatomic particles:
a) (10) It is a heavy meson that appears at high energies. Produced by the charm quark, this particle was discovered independently by two investigators in 1974, who each designated it by a different letter.

Answer: $\mathrm{J} / \mathrm{Psi}$ particle (accept either $\underline{\underline{J}}$ or psi by itself)
b) (10) The first particle to be accurately identified as a meson, it carries the strong force that holds the nucleus of atoms together.

Answer: pion
c) (10) Predicted in 1964, this gauge boson is the main undetected particle of the standard model. Its mass is thought to be very great, perhaps even greater than the top quark's mass.

Answer: [Peter] Higgs particle (or Higgs boson)
9. FSNOP, identify these musical terms:
a) (5) Of Italian origin, it is a full-length comic opera sung throughout.

Answer: opera buffa
b) (10) It is an improvisatory passage, usually played just before the end of a piece or section, in which the performer can display spectacular technique.

Answer: cadenza
c) (15) Developed in the fourteenth century, it is the swapping of musical phrases between parts. It's name is German for "voice exchange."

Answer: Stimmtausch
10. Identify the following female American poets, FTP each:
a) This poet's noted collections include Colossus and Ariel, and she wrote a novel under the pseudonym Victoria Lucas.

Answer: Sylvia Plath
b) This author of "All my Pretty Ones" and the collections The Death Notebooks and The Awful Rowing toward God committed suicide in 1974.

Answer: Anne Sexton
c) This Native-American poet of "In Cold Storm Night" is best known novel Ceremony, which deals with the return of a Vietnam War veteran to the reservation he grew up on.

Answer: Leslie Marmon Silko
11. FTPE, identify the geometric shape of the following expanded octets:
a) (10) With 6 electron pairs surrounding the central atom, it has a general formula XY5E1.

Answer: square pyramidal
b) (10) With 5 electron pairs surrounding the central atom, it has a general formula XY5.

Answer: triangular bypyramidal
c) (10) With 5 electron pairs surrounding the central atom, it has a general formula XY4E1. Answer: distorted tetrahedron(-hedral) (do not prompt on "tetrahedron")
12. FTPE, answer the following questions about a European dynasty:
a) (10) This ruling house included such monarchs as Leopold I and Charles VI of the Holy Roman Empire. Answer: Habsburgs
b) (10) Because Charles VI had no son to be his heir, he secured the right of his daughter Maria Theresa to take over the throne. What was the shrewd legal document making this possible?

Answer: Pragmatic Sanction
c) (10) This son of Maria Theresa was known as the Enlightened Absolutist for his extension of religious freedom and social reforms.

Answer: Joseph II
13. FTPE, identify the following African nations:
a) (10) Formerly known as Gold Coast, this is the first British African colony to gain independence.

Answer: Ghana
b) (10) This country gained independence from France on August 5, 1960 and changed its name to a phrase which translates to "Land of Upright Men" in 1984.

Answer: Burkina Faso
c) (10) Ever since this island group's independence in 1975, the country, located between Madagascar and East Africa, has been politically unstable.

Answer: Comoros
14. On a 10-5 basis, identify the NBA rookie of the year given the year of his rookie season or his team:
a) (10) 1992-1993
(5) Orlando Magic

Answer: Shaquille O'Neal
b) (10) $1979-1980$
(5) Boston Celtics

Answer: Larry Bird
c) (10) 1996-1997
(5) Philadelphia 76ers

Answer: Allen Iverson
15. Identify the following figures important in the development of the branch of mathematics known as topology:
a) (5) Name the accomplished 18th century mathematician who solved the Königsberg bridge problem, regarded as the first problem in topology, and whose name is also attached to a formula relating the number of vertices, edges, and faces on a polyhedron.

Answer: Leonhard Euler
b) (10) Name the early algebraic topologist whose name is attached to the unresolved conjecture that every simply connected closed 3-dimensional manifold is a sphere and who is considered one of the two greatest turn of the century mathematicians, along with David Hilbert.

Answer: Henri Poincare
c) (15) Name the man, famous in topology for his plane translation theorem and his fixed-point theorems, and probably more famous in the philosophy of mathematics as the founder of intuitionism, which rejects the use of the principle of the excluded middle.

## Answer: Luitzen Egbertus Jan Brouwer

16. FTPE, identify these different stages of the plague, caused by the Gram-negative rod Yersinia pestis: a) (10) When the bacteria enter the lymphatic system and cause swelling of the lymph nodes, what is this stage called?

Answer: bubonic plague
b) (10) When the bacteria enter the blood, what is this condition called?

Answer: septicemic plague
c) (10) When the bacteria enter the lungs, what becomes of this disease?

Answer: pneumonic plague
17. FSNOP, answer the following related questions:
a) (15) Richard John Seddon was the first prime minister of what South Pacific nation? Answer: New Zealand
b) (10) Prime Minister Seddon in 1893 extended voting rights to what group of people, making New Zealand the first country in the world to do so? Answer: women
c) (5) Prime Minister Seddon purchased land from what native people of New Zealand? Answer: Maoris
18. Identify the directors from works:
a) (5) The Seventh Seal, Wild Strawberries

Answer: Ingmar Bergman
b) (5) Mississippi Mermaid, The Story of Adele $H$. Answer: François Truffaut
c) (10) Open City, Germany Year Zero

Answer: Roberto Rossellini
d) (10) My Night With Maude, Chloe in the Afternoon

Answer: Erich Rohmer
19. FTPE, given some large cities, name the country in which they are located:
a) (10) Yazd, Shiraz, and Bakhtaran

Answer: Iran
b) (10) Alice Springs, Kalgorlie, and Darwin

Answer: Australia
c) (10) Campo Grande, Porto Alegre, and Manaus Answer: Brazil
20. FTPE, identify these world languages:
a) (10) 33 million people speak this language, whose variant dialects include Bahasa Indonesia, Bahasa Nalaysia, and Bahasa Melayu.

Answer: Malay-Indonesian
b) (10) It is the official language of 25 countries, but, for religious reasons, many people in India and Indonesia speak it as a second language.

Answer: Arabic
c) (10) Over 4 million citizens of Angola speak this language, its official language. Answer: Portuguese
21. 30-20-10. Name this site:
(30) It contains deposits from just under 2 million years ago down to recent. It is located in the Ngorongoro conservation area.
(20) It provided fossils of early hominids, such as Australopithecus boisei, Homo habilis, and Homo erectus. It also provides evidence of the ecology and behavior of early hominids.
(10) This gorge of the Rift Valley was excavated by Louis and Mary Leakey.

## Answer: Olduvai Gorge, Tanzania

22. For 5 points each, name the monetary unit of:
a) Tuvalu Answer: dollar
b) Ukraine Answer: hryvnia
c) Sudan Answer: pound
d) Seychelles Answer: rupee
e) Russia Answer: ruble
f) Romania Answer: leu
23. For 15 points each, answer the following questions on the Byzantine civilization:
a) (15) Copied from Persian and Central Eurasian troops, the main striking force of the Byzantine army was this heavily armored horse archer. Name it.

Answer: the kataphraktos
b) (15) The core of the Byzantine society was what religion? Answer: Greek Orthodox Church (prompt on "Christianity")
24. 30-20-10. Identify the artist from clues:
a) (30) He studied engineering and architectural drawing before studying art at the Academia San Carlos. His caricature-like art served as a vehicle for his revolutionary socialist ideas, even though he did not paint the famous one containing the figure that resembles Lenin.
b) (20) He decorated public buildings in his native country and the US, including murals at Pomona

College and Dartmouth College, as well as the Palace of Government in Guadalajara.
c) (10) Born in Zapotlán, Mexico, this muralist's most famous work is "Zapatistas."

Answer: José Clemente Orozco
25. FTPE, identify these astronomical numbers:
a) (10) The number one, followed by 27 zeroes.

Answer: octillion
b) (10) The number one, followed by a googol zeroes. Answer: googolplex
c) (10) The number one, followed by 18 zeroes. Answer: quintillion
26. Here is a timed math question: At the end of the question, the moderator will silently count the number of passing seconds. If you can answer within 10 seconds, you get 30 points. 20 seconds- 20 points; 30-seconds-10 points. Pencil and paper might be necessary.
a) Consider a rhombus with a perimeter of 100 meters. If one of the diagonals is 14 meters, then, in terms of squared meters, what is the area of this rhombus? You have 30 seconds.

Answer: 336 squared meters

