

Berkeley's WIT 7: Packet by USC

Tossups

1. They were the descendants of Abu Sufyan, a Quraysh merchant, and their reign is divided into a Marwanid and a Sufyanid period. They reached their height under Abd al-Malik, under whom they spread throughout Central Asia and from Sind in India to southern Spain. FTP name this Islamic dynasty, overthrown in 750 at the Battle of the Great Zab River by the Abbasids.

Answer: Umayyads (oo-MY-ad) dynasty (or caliphate)

2. In birds, the bursa of Fabricius, which controls antibody-mediated immunity, is an outpocketing of this organ, and a "kiss" involving this organ is involved in bird reproduction. Present in sharks and monotremes but not in bony fishes or placental mammals, it exists in human embryos prior to the full development of the kidney, after which it subdivides into a urogenital sinus and a rectum. FTP, name this organ, whose name is Latin for "sewer," which serves as an excretory organ in many vertebrates.

Answer: cloaca

3. Robert Lucas critiqued the use of this on the grounds that increases in production costs and prices can offset increases in revenues and wages. It first appeared in a 1958 paper which compared the rates of change in money wages to the unemployment rate in the United Kingdom for the previous 96 years. FTP, name this curve, discredited by the period of stagflation in the 1970's, which predicts an inverse relationship between unemployment and inflation.

Answer: Phillips curve

4. This man was jailed for vagrancy at the age of 17. Later an outspoken socialist, he twice ran for mayor of Oakland. Before his death in 1916 at the age of forty, he had written twenty novels and two hundred short stories including such works as "Revolution", and *The Iron Heel*. His planned Glen Ellen, California home, Wolf House, burned before he could move in in 1913. FTP, name this author of "To Build a Fire," *The Sea Wolf*, and *White Fang*.

Answer: John Griffith "Jack" London

5. This winner of the Prix de Rome had his first piano lesson at the age of nine and studied at the Paris Conservatory by the age of eleven. Born in 1862, his influence on twentieth century music results partly from his rejection of the then popular styles of Mahler and Strauss. Famous more for his "miniatures," he composed 24 piano concertos, such as "Dead Leaves" and "What the West Wind Saw." FTP, name this founder of musical Impressionism, composer of "Clair de Lune."

Answer: Claude Debussy

6. Ernst Kummer's discovery that 37 is not a regular prime invalidated Gabriel Lamé's proof of this result. Over a century later, Gerd Faltings showed that it could be violated only finitely many times, but it was Richard Taylor's work on Hecke algebras and Barry Mazur and Ken Ribet's proof that it is implied by the Taniyama-Shimura conjecture that finally allowed for its proof. FTP, name this result which first appeared in the margin of a book and was finally proved in 1993 by Andrew Wiles.

Answer: Fermat's Last Theorem

7. Consisting of 120 representatives, its procedures, or *takkanoth*, are based on the House of Commons', and laws it approves are published in the *Reshumot*, or Official Gazette. FTP, what legislative body first met on February 16, 1949, when it elected Chaim Weizmann the first president of Israel?

Answer: Knesset

8. Deriving its name from a verb meaning "to conquer," the orders of this religion include Kottiya, Mula-Sangha, and Terapanth. It teaches that Brahma-charya, aparigraha, asteya, satya, and ahimsa are principles which will help rid one's soul of karma. FTP, name this Indian religion tracing its roots to 24 great teachers, the last of which was Mahavira.

Answer: Jainism

9. Founded as an 1899 merger primarily by Minor Keith, it became known in Latin America as *el pulpo* or "the octopus" due to its extensive land holdings in Central America. This reputation was solidified in 1954 when it was implicated in the CIA overthrow of the Guatemalan government in order to reclaim 200,000 acres of socialized land. FTP identify this U.S. corporation whose banana plantations and other holdings were merged into United Brands in 1970.

Answer: United Fruit Company

10. A nameless main character, the traveler, arrives at the titular location, apparently to evaluate the work of the island's chief administrator, known only as the officer. The traveler watches an execution with disinterest, until he is mortified at the officer's cruelty while using a torture machine to literally tattoo the man's crime on him before death. FTP, name this short story by Franz Kafka in which the Harrow is used to punish offensive individuals.

Answer: "In the Penal Colony" ("In der Strafkolonie")

11. This complex mixture of mostly aromatic hydrocarbons, with smaller amounts of oxygen-, nitrogen-, and sulfur-containing compounds is a rich source of alkanes. To prepare this substance for commercial use, it is first separated by distillation according to the volatility of the different hydrocarbons. Next, alkanes with 12 or more carbon atoms are broken into smaller ones by heating, a process known as cracking. FTP, identify this compound, commercially used to make gasoline.

Answer: petroleum (accept crude oil)

12. The one with Savoy recognized Victor Amadeus II as king of Sicily. The one with Portugal recognized its sovereignty in the Amazon mouth area. The one with Britain ceded St. Kitts, Newfoundland, and Nova Scotia and promised the destruction of the fort at Dunkirk. FTP identify this series of agreements signed by France in 1713 that also put Bourbon Philip V on the Spanish throne.

Answer: Treaties (or Peace) of Utrecht

13. After spending two years in the U.S. at Williams College in the 1860s he returned to his homeland where he served two terms in the legislature and was appointed to the Supreme Court in 1887. Six years later, however, he agreed to chair a committee to overthrow the government and he became president in 1893 and territorial governor in 1900. FTP identify this cousin of a fruit magnate who replaced Queen Liliuokalani as leader of Hawaii.

Answer: Sanford Ballard Dole

14. "I don't want to paint for the few who can see a canvas in a museum, for I believe that in a democracy art belongs to the people. I want my pictures to be published." These are the words of an American artist who during his 84 years was married three times, twice judged the Miss America beauty pageant and became famous as an illustrator for Judge, Look, McCall's and Ladies' Home Journal. FTP, name this one time art editor for Boys' Life and perhaps the most famous illustrator of the Saturday Evening Post.

Answer: Norman Rockwell

15. This work's six books represent Holiness, Temperance, Chastity, Friendship, Justice, and Courtesy, and many of its characters, such as Florimell, Marinell and Scudamore all represent specific English personalities. FTP, give the title of this story about the search for Arthegall, the fated lover of Britomart; the most important work by Edmund Spenser.

Answer: The Faerie Queene

16. It was used as early as 1936 in "Anthony Adverse," but it was Orson Welles in 1941 with the release of "Citizen Kane" that made this technique a staple of Classical Hollywood in the forties. Because of the required amount of light, it virtually eliminated the soft, gauzy quality of many earlier films. Revived by Spielberg and De Palma in films like "Jaws" and "Blow-Out", the technique retains a strong presence today. FTP, name this technique which, by using large amounts of light, effectively lengthens a camera's depth-of-field and allows objects in several planes to be sharp.

Answer: Deep Focus

17. Composed of specialized muscle tissue, in humans, this group of cells is located near the point where the superior vena cava enters the heart. Generating electric impulses much like those produced by nerve cells, it sets the rate at which all cardiac muscle cells contract. FTP, name this structure in the wall of the right atrium which functions as the primary pacemaker of the heart.

Answer: Sinoatrial node or SA node (prompt on pacemaker early)

18. It burned down three times in its first hundred years and was almost abandoned in its second year before Thomas West, Lord De La Warr, arrived with supplies. Though its site is now an island it was then a peninsula jutting into the local river which, like this colony, was named for the king who reigned at the time of its founding. FTP identify this settlement, established in 1607 as the first permanent British North American colony.

Answer: Jamestown

19. She first appeared in films as Meredith Neal in *Flashfire*, but she started as a model in Europe. While there, she landed a role on the TV series *Dark Justice*, and has continued with TV roles, earning a Gemini Award nomination for her guest appearance on *Due South*. She has also appeared on *Silk Stalkings* and *Baywatch*, and she had a recurring role on *Models, Inc.* But after she appeared in a movie this April which made 171 million dollars her career has skyrocketed, and she has three movies set to release next year. FTP, name the skin-tight-leather clad heroine who played Trinity in *The Matrix*.

Answer: Carrie-Anne Moss

20. This lake, whose first European visitors were Richard Burton and John Speke, is home to many crocodiles and hippopotamuses, and rice and oil palms grow on its shores. It is fed by the Ruzizi, Malagarasi, and Kalambo rivers, its outlet is the Lukuga, and its major ports include Kalemi, Kigoma, Ujiji, and Bujumbura. FTP, name this lake which forms the boundary between the Democratic Republic of the Congo and Tanzania, and, after Lake Victoria, is the second largest lake in East Africa.

Answer: Lake Tanganyika

21. Born circa 1505 in the village of Painalla, she was the daughter of a noble Aztec family, but was sold into slavery and proclaimed dead after her father's death and mother's remarriage. As a slave she learned Mayan dialects, but continued to speak her native tongue Nahuatl which made her useful as a translator for Cortes. FTP, give the Aztec name for this woman instrumental in the conquest of Mexico and baptized Doña Marina

Answer: La Malinche (accept Doña Marina on early buzz)

22. This project, which has been dubbed by some the greatest engineering effort of all time, has had a checkered past. Bad press led it to be rejected multiple times before 1992, when the People's Congress declared that only positive reporting about the project would be allowed. FTP, name this \$76 billion structure that, when complete, will divert China's Yangtze River.

Answer: Three Gorges Dam

23. The general motion of an extended body, or system of bodies, can be considered as the sum of the translational motion of this position on the body, plus rotational, vibrational, or other types of motion about this point. It is the point where all the mass of an object can be considered to be concentrated. FTP, identify this position, which for almost all objects is at the same point as the center of gravity.

Answer: Center of Mass (Do not accept center of gravity)

24. Originally described as hysteria, this disorder produces sensory and motor symptoms suggestive of neurological damage although no evidence of illness can be found. FTP, name the disorder considered by Freud to be caused by diversion of energy from repressed instincts to sensory-motor channels.

Answer: conversion disorder

25. It extends through Senegal, Mauritania, Burkina Faso, Niger, and Nigeria. Reforestation has been started within it to counteract the desertification that is occurring. FTP, name this semi-arid geographical region separating the Sahara from tropical West Africa.

Answer: Sahel

26. It may be the oldest book in the world. It evolved from the Tortoise Oracle and associates images of reality with 64 numbers. FTP, name this Chinese Book of Changes.

Answer: I Ching

Bonus Questions

1. Name the Artist 30-20-10

- a) (30) This Briton, although popular in France during his career did not gain popularity in his native land until long after his death. His paintings were the focus of a mystery story by Ngaio (pron. Ny-oh) Marsh.
b) (20) He painted some portraits and topical works, such as "the Opening of London Bridge." His work was so popular in the Louvre that it was given a place of honor, and the King of France awarded him a medal.
c) (10) Known for his landscapes, his works, such as "Dedham Vale" and "The Hay Wain", were based on locations in Suffolk, Brighton, Dorset and Salisbury. Overall, you might say he has an "arresting" body of work.

Answer: John Constable

2. FTP each, Identify these authors of slave narratives.

- a) (10) This editor of *The North Star* published his "Life and Times" in 1845 to counter accusations that he was too articulate to have once been a slave.

Answer: Frederick Douglass

- b) (10) Most likely born in the area that is now Nigeria about 1745, this slave lived in Philadelphia with his owner Robert King. Later, he worked as a free servant in London, a musician on the French horn, and as a barber. His "interesting narrative" was published for the first time in 1789.

Answer: Olaudah Equiano or Gustavus Vassa

- c) (10) This woman was bought by Nathaniel Parker Willis, a popular writer of the time, who freed her before she wrote her memoirs, "Incidents in the Life of a Slave Girl".

Answer: Harriet Jacobs.

3. Identify the following about a Russian czar FTP each.

- a) (10) A member of a notable Tatar family, he ruled from 1598-1605, was not related to the previous czar, and was not succeeded by a family member.

Answer: Boris Gudonov

- b) (10) Boris had been virtual ruler of Muscovy since 1584 when he became chief adviser to this czar, the dim-witted heir of Ivan the Terrible.

Answer: Fyodor I

- c) (10) Gudonov's reign and the eight years that followed are collectively given what generic nickname describing these chaotic years between the Rurik and Romanov dynasties.

Answer: Time of Troubles (*Smutnoye Vremya*)

4. Signal processing, the branch of electrical engineering that deals with the manipulation of waveforms, is a science that has developed greatly in the past century. FTP each, name these contributors to signal processing.

- a) His transform is the basis of signal processing and is used in everything from radios to image reconstruction. He developed his theory of the decomposition of functions into an infinite sum of cosines while working on problems of heat transfer in the 19th century.

Answer: Joseph Fourier

- b) This mathematician's transformation of a function from the time domain to the frequency domain encapsulated the Fourier transform and greatly simplified working with periodic waveforms.

Answer: Pierre Simon Marquis de Laplace

- c) In addition to his work in simplifying Maxwell's equations, this physicist and engineer, after whom a step function is named, was a pioneer in applying the Laplace transform to circuit analysis.

Answer: Oliver Heaviside

5. A peasant-born Illyrian, he rose to the Byzantine emperorship due largely to an uncle's influence. For the stated number of points:

- a) (5) First, identify this emperor who reigned from 527-565 and is best remembered for his legal code.

Answer: Flavius Justinianus I (accept: Petrus Sabbatius)

- b) (10) Justinian directed the building of this cathedral in Constantinople, designed by Anthemius of Tralles and Isidore of Miletus and finished in 537.

Answer: Hagia Sophia or Church of Holy Wisdom or Ayasofya

c) (15) Justinian's reign is well-documented thanks to the writings of this contemporary whose works translate as "Wars", "Buildings", and "Secret History"

Answer: Procopius

6. Identify these idealistic 19th-century America communities FTP each:

a) Located 22 miles northwest of present-day Evansville, Indiana, it was founded by George Rapp but most famously run by Robert Owen as a socialistic commune.

Answer: New Harmony, Indiana

b) This off-shoot of the German Dunkers was established near Lancaster, Pennsylvania, in 1732 as a pietistic, celibate, and mostly vegetarian community.

Answer: Ephrata, Pennsylvania

c) Founded in 1825 by Fanny Wright under the patronage of Owen and the Marquis de Lafayette, this community near Memphis was to be an Owenite socialist haven for freed slaves who worked off their manumission price, but it failed within four years.

Answer: Nashoba, Tennessee

7. Name the follower of Jesus for ten points each.

a) The sister of Lazarus and Martha, she washed Jesus's feet with her tears and dried them with hair.

Answer: Mary (do not accept Mary Magdalene)

b) He was the disciple that Jesus loved.

Answer: John

c) This tax collector had to climb a sycamore tree to see over the crowd.

Answer: Zacchaeus

8. Answer these questions about a musical group, FTP.

(10) This group's first performance was on July 11, 1885. Led by Adolf Neuendorff, their first program included a novelty number titled An Evening with Bilse, which humorously tossed together scraps of Beethoven and Strauss, Wagner and Weber.

Answer: The Boston Pops prompt on Pops

(10) This man, the longest conductor of the Boston Pops, broadened their repertoire to include "symphonic jazz", and led the Pops to a recording label with RCA. He also inaugurated "Evening at Pops".

Answer: Arthur Fiedler

(10) The current conductor of the Pops, this man was 35 when appointed as conductor, the same age as Fiedler. His recordings with the Pops include "Runnin' Wild," "American Visions," and the Grammy-nominated "The Celtic Album."

Answer: Keith Lockhart

9. Nobody likes me, everybody hates me, might as well go eat worms. FTP each, given the type of worm, identify the phylum to which it belongs.

a) flatworms

Answer: Platyhelminthes

b) ribbon worms

Answer: Nemertea

c) segmented worms

Answer: Annelida

10. 30-20-10, name the country from its geographical features.

a) (30) Cordillera Occidental as well as Cordillera Central and Cordillera Oriental.

b) (20) 52 rivers including the Napo, Tigre, and Putumayo.

c) (10) Mount Huascarán, Lake Titicaca

Answer: Peru

11. FTP apiece, answer these questions about modern British novels, which were all on the New York Times Best-Seller list.

a) (10) This allegorical 1972 modern classic by Richard Adams features Hazel as the unlikely leader of a small group of rabbits against the tyrannical General Woundwort.

Answer: Watership Down

b) (10) Brian Jacques (pron. "jakes") created this series about mice who start an abbey in the country of Mossflower. Books in the series include Mattimeo, Martin the Warrior, and The Bellmaker.

Answer: Redwall

c) (10) J.K. Rowling created this title character, a young wizard in training at Hogwarts School for Witchcraft and Wizardry. His newest adventure pits him against the escaped Sirius Black.

Answer: Harry Potter

12. In honor of Rob Hentzel, answer these question about the maker and products by the maker of The Easy-Bake Oven.

(10) Give the maker of the Easy-Bake Oven.

Answer: Hasbro

b) (10) This line of action figures turned 35 this year. It has moved away from its popular 80's line of toys, to more collectible, 12" figurines. New additions this year include "Vietnam Nurse," and "WWII Flame Thrower."

Answer: G.I. Joe

c) (10) The tag line for this new toy is, "Biogenetic engineering has allowed the Transformers to create a perfect cybernetic fusion between ferocious animals and mechanical technology. The result: HeroicMaximals vs. Evil Predacons! Robot warriors disguised as wild animals in an explosive fight to the finish."

Answer: Tigatron

13. Identify the following physical laws discovered in the 17th century from their statements, FTP each:

a) The rate of change of temperature of an object is directly proportional to the difference between its temperature and the temperature of its surroundings.

Answer: Newton's Law of Cooling

b) The path by which light travels between two points will be that path which yields the shortest possible travel time between those two points.

Answer: Fermat's Principle of Least Time (accept Principle of Least Time)

c) The ratio of the squares of the periods of any two planets revolving about the Sun is equal to the ratio of the cubes of their average distances from the Sun.

Answer: Kepler's Third Law (Prompt on third)

14. It was fought between Britain and two Afrikaner republics from 1899-1902.

a) (20) First, F5P each and a 5 point bonus for all correct, name this conflict and those two Afrikaner republics.

Answer: Anglo-Boer War (accept: South African War), Orange Free State, and Transvaal (accept: South African Republic)

b) (10) Now FTP name the president of the Transvaal whose refusal to allow citizenship to the British was the spark, if not the main cause, of the Boer War.

Answer: Paul Kruger

15. How articulate are you? F5P each, name the manner of consonant articulation from a brief description.

a) It is made by completely obstructing the airstream in the oral cavity.

Answer: stop

b) It is made by forming a nearly complete stoppage of the airstream.

Answer: fricative

c) It is essentially a combination between a stop and a fricative.

Answer: affricate

d) It is produced through lowering the velum and completely or partially blocking the oral cavity.

Answer: nasal stop

e) This is produced through an obstruction that is not narrow enough to block the airflow or to cause friction.

Answer: liquid

f) If the airflow were any less restricted than during production of this, a vowel would result instead of a consonant.

Answer: glide

16. Identify the following about the recent history of the European Union FTP each.

a) (10) The name European Union was adopted in 1991 following the signing of a treaty named for this Dutch city in which it was signed.

Answer: Maastricht

b) (5,5) Before that, the EU was known as the EC or Economic Community. F5P each what two bordering nations were the last to join the EC, doing so in 1986.

Answer: Portugal and Spain

c) (10) The only entity ever to secede from the EC was this dependent state that withdrew in 1985.

Answer: Greenland (accept: Kalaallit Nunaat)

17. Answer these questions about the works of Plato, FTP each:

a) Except for his "Laws" this is by far the longest work of Plato, and was originally intended to be part of a trilogy including an ideal history of Athens, as well as a political and physical philosophy. It argues the search for Justice.

Answer: The Republic

b) Occurring shortly before the trial of Socrates, Socrates meets a man about to prosecute his own father on a murder charge and they discuss the question, "what is piety?"

Answer: Euthyphro

c) In this Socratic dialogue, Socrates talks with the titular character, the recent winner of the festival of Asclepius. They discuss inspiration, particularly from the works of Homer.

Answer: Ion

18. Identify the following operators from vector calculus, FTP each:

a) This operator, denoted by an equilateral triangle with the point downward, represents the vector of partial derivatives of a function which takes vectors to scalars.

Answer: gradient operator or del operator

b) This operator, written either as "del squared" or as an equilateral triangle with the point upward, takes a scalar function f to the second derivative of f with respect to x plus the second derivative of f with respect to y plus the second derivative of f with respect to z .

Answer: Laplacian

c) This operator, denoted by a square raised to the second power, is equal to the Laplacian minus 1 divided by the square of the speed of light times the second derivative with respect to time.

Answer: d'Alembertian (da-lam-BAIR-ian)

19. FTP each, identify the following terms from embryology:

a) The stage shortly after fertilization in which the zygote undergoes several successive cell divisions while undergoing little to no growth.

Answer: cleavage

b) The solid of cells resulting from cleavage which later develops into a blastula.

Answer: morula

c) This process involves a change in the curvature of a sheet of cells, often associated with the hyaline bilayer.

Answer: invagination

20. Some people get around more than others. FTP each, name the anthropologist.

a) He made a scientific exploration of Baffin Island, studied Kwakiutl tribe in British Columbia, and was Columbia University's first anthropology professor.

Answer: Franz Boas

b) She focused on adolescents in Samoa.

Answer: Margaret Mead

c) Her 1966 book *Stranger and Friend: The Way of an Anthropologist* compared her field experiences in 1928 Lesu, Ireland; 1932 Indianola, Mississippi; and 1953 Luanshya.

Answer: Hortense Powdermaker

21. Bonus lead-ins are lame. This is a bonus lead-in. This is lame. This syllogism contains precisely three terms. FTP each, I'll give you the example and you tell me what term it is.

This

Answer: minor term

Bonus lead-in

Answer: middle term

Lame

Answer: major term

22. Everyone knows that for ideal gasses, $V=R(Tn/P)$ [V equals R times the quantity T n over P], where V=volume, T=temperature, P=pressure, n=the number of moles of gas particles, and R=the universal gas constant. But can you name the three contributors to the Ideal Gas Law? FTP each, given the gas law, identify the man for whom it was named.

a) $PV=k$ where k is a constant.

Answer: Robert Boyle

b) $V=bT$ where b is a constant.

Answer: Jacques Charles

c) $V=an$ where a is a constant.

Answer: Amadeo Avogadro

23. F5P each and 5 points for all correct, identify the current chair of each of the following Senate committees.

a) (5) Armed Forces

Answer: John Warner

b) (5) Finance

Answer: William Roth

c) (5) Judiciary

Answer: Orrin Hatch

d) (5) Governmental Affairs

Answer: Fred Thompson

e) (5) Indian Affairs

Answer: Ben Nighthorse Campbell

24. It's time for "Name That State." Given a description name the economic state FTP each.

a) It is technically defined in the United States as two consecutive quarterly declines in the gross national product.

Answer: recession

b) It is a persistent and relatively large increase in the general price level of goods and services.

Answer: inflation

c) It refers to a period of simultaneous high inflation and high unemployment.

Answer: stagflation (do not accept stagnation)

25. FTP, name these national cinema movements.

(10) The root of horror, this national cinema employed high contrast lighting, extremely subjective subject matter, sets, and cinematography. "The Cabinet of Doctor Caligari" is the perfect example.

Answer: German Expressionism (prompt on German or Expressionism)

(10) A product of post-WWII Italy, this movement was in response to the "white telephone" films of Mussolini. The primary goal of directors like Roberto Rossellini and Luchino Visconti was to expose contemporary social conditions. The Bicycle Thief is a good example.

Answer: Italian Neorealism (prompt on neorealism)

(10) Characterized by a mad uprising of youthful film makers from working class backgrounds, this movement sought to bring the Labor party to the forefront in England. "The Loneliness of the Long Distance Runner" is an example.

Answer: Angry Young Man cinema or Kitchen Sink cinema