## 1998 Cardinal Classic <br> Tossups written by Berkeley C (Division II)

1. The more familiar form of this cellular structure consists of pectic material laid down in the cell plate to form a middle lamella; a network of crystalline micelles to form a primary layer; and microfibrils laid down in different directions to form a secondary layer. FTP, name this structure of bacterial and plant cells, whose main molecular component is cellulose and which preserves the rigidity of the cell.

Answer: CELL WALL
2. This novel openis with its young protagonist attending a stag party. It goes on to show him expelled from college and living in New York, where he works in a factory and becomes an active Communist. FTP name this novel featuring Ras the Exhorter and its nameless narrator, written by Ralph Ellison.

## Answer: INVISIBLE MAN

3. This son of a clergyman has a degree in philosophy and is particularly interested in Hegel and Marx. He won his country's presidential election on May 23, 1997, promising liberty, progress, and justice for the people. FTP, name this man, who in a recent interview with Christiane Amanpour advocated people-topeople exchanges between the United States and Iran.

## Answer: Seyed Mohammed KHATAMI

4. This river starts near Mt. Elbert, runs through such cities as Pueblo, Dodge City, Wichita, and Tulsa, and is the sixth longest river in North America. FTP, name this river, which shares its name with the state where it meets the Mississippi after passing through Fort Smith, Pine Bluff, and North Little Rock.

## Answer: ARKANSAS River

5. The winning teams in this event have included Banesto, Telekom, Zed, and PDM. Individual winners have included Maurice Garin, Jacques Anquetil, and Eddie Merckx (MERKS). FTP, name this sporting event, which includes visits to Italy, Belgium, Spain, Germany and Switzerland, -- won in 1997 by Jan Ullich.

## Answer: TOUR DE FRANCE

6. When he died in 1887, many of his compositions were completed by Aleksandr Glazunov and Nikolai Rimsky-Korsakov. FTP, name this professor of Chemistry and member of The Five, who composed the tone poem "In the Steppes of Central Asia," and the opera, "Prince Igor," which contains the oft-played "Polovstian Dances."

## Answer: Alexander Porfiryevich BORODIN

7. This goddess was famous for her affairs with mortal men and enjoyed one of them, Tithonus, so much that she asked Zeus to grant him immortality. Unfortunately, she forgot to ask for his eternal youth, and had to turn him into a cicada when he became a senile, paralyzed old man. FTP, name this wife of Astraeus and goddess of the dawn.

Answer: EOS
8. Albite, beryl, cryolite, tourmaline, orthoclase, and topaz all contain this element. Garnet contains it only sometimes, and, barring impurities, quartz never does. The element is also found in corundum and bauxite. FTP, identify this element, the third most abundant in the Earth's crust.

Answer: ALUMINUM
9. According to the first paragraph of this novel, its protagonist could never have been expected to be a "heroine." A satire of contemporary Gothic novels, its characters include Henry Tilney and Catherine Morland. FTP, name this Jane Austen work.

Answer: NORTHANGER ABBEY
10. Recent reforms in this country include the opening of a new bank and the development of four freetrade zones in two of its cities. In early 1996, two planes piloted by U.S. residents were shot down for entering this country's airspace. FTP, name this country, which in 1997 celebrated Christmas for the first time since the 1960 s, and which was recently visited by the Pope.

Answer: CUBA
11. His family was so poor that his parents considered selling him to the doctor that delivered him for 26 dollars. Apprenticed at the age of seven to a Beijing Opera Troupe, he later became a stuntman and was discovered by Chinese director Lo Wei. FTP, name this Asian superstar of "Drunken Master" and "Rumble in the Bronx."

Answer: Jackie CHAN
12. When he met Henri Saint-Simon, he developed his concept of the need for a unifying order based on a spiritual power. FTP, name this man whose division of social development into theological, metaphysical, and positive stages was outlined in his Course on Positive Philosophy.

Answer: Auguste COMTE
13. In this uprising, frustrations about high property taxes, poll taxes, the unfairness of the judicial system, and the lack of a stable currency inspired the rebels to mob court buildings in Northampton and Springfield, Massachusetts. FTP, identify this 1786 rebellion.

Answer: SHAYS' Rebellion
14. Moses Gomberg first discovered that some of these are stable when he obtained a triphenylmethyl compound which readily combined with oxygen. In the stratosphere, when ultraviolet rays strike molecules of chlorofluorocarbons, some of these are produced and each is capable of cleaving thousands of ozone molecules by itself. FTP, give the term for an atom with an unpaired valence electron.

## Answer: FREE RADICAL

15. Born in what is now Kyrgyzstan, this man was an accomplished poet of the shih verse. Exiled twice by his emperor, FTP name this poet of the T'ang Dynasty, author of "Bringing in the Wine," "Drinking Alone with the Moon," and "To Tu Fu from Shantung."

Answer: LI PO (or LI BO, or LI T'AI-PO)
16. Two answers required. These two former politicians recently released a statement signed by 189 former lawmakers urging Congress to enact campaign finance reforms that would at the very least place restrictions on soft money. FTP, name these reform-minded retirees, one a former Vice President and the other a former Senator from Kansas.

## Answer: Walter MONDALE and Nancy KASSEBAUM Baker

17. This country, home to the Nurek Dam, one of the world's highest, is slightly smaller than Wisconsin and has a strong cement industry and large uranium reserves. It has been ruled by Uzbeks, Afghans, and Russians, but is now led by its native son, Emomali Rahmonov. FTP, name this republic, which borders China, Afghanistan, Uzbekistan, and Kyrgyzstan, and has its capital at Dushanbe.

## Answer: TAJIKISTAN

18. This cartoon premiered in the United States in 1967, and was successful even though many of its more violent scenes had been edited out. The main character was originally named Go Mifune, after Japanese actor Toshiro Mifune. FTP, name this cartoon about a driver and his car, the Mach 5.

## Answer: SPEED RACER

19. During the Crimean War, he worked on the problem of high gas pressures causing guns to explode. He is the inventor of a typesetting machine, gold paint, and machinery for refining sugar. FTP name this engineer who developed a method for converting molten pig iron into steel.

Answer: Henry BESSEMER
20. When this form of theater developed in the 17 th century, its large ensemble dances were performed by women. But when the government banned women from the stage, female roles were played by onnagata, that is, men transformed into women by make-up. FTP, identify this Japanese theatric form, somewhat coarser and more unrestrained than the No theater.

## Answer: KABUKI

21. Like polyethylene, this polymer is linearly structured, but instead of CH 2 its repeating unit is CF 2 . Its full name is polytetrafluoroethylene, and since it retains its properties up to 500 degrees Fahrenheit it is sometimes used for insulation for wires, cables, motors, and generators. FTP, identify this non-adhesive plastic, sometimes replaced by Silver Stone in frying pans.

Answer: TEFLON (accept POLYTETRAFLUOROETHYLENE on an early buzz; prompt on PTFE)
22. This man began serving the Soviet Communist Party in 1939. He was ambassador to Hungary during that country's uprising in 1956 and was appointed head of the KGB in 1967, a position he held for fifteen years. FTP, identify this man, one of Time's Men of the Year in 1983, who succeeded Leonid Brezhnev as Soviet Premier.

## Answer: Yury Vladimirovich ANDROPOV

23. Written in the 6th Century, B.C.E., this book of the Old Testament begins, "How doth the city sit solitary, that was full of people." Written by Jeremiah, its main theme is the wrath of God, who destroyed the city of Jerusalem as judgment for its people's sins. FTP, name this book, whose name is a synonym for "obsequies."

## Answer: LAMENTATIONS

24. Although this value also depends on such factors as polarizability and frequency, for substances with little or no polarity it is equal to the square root of the dielectric constant. Its variation with the frequency of incident light, called dispersion, is responsible for the splitting of light into colors in a prism. FTP, name this quantity, which appears in Snell's Law.

## Answer: INDEX OF REFRACTION (accept dielectric constant)

25. The last name's the same: one wrote "When I am Dead, my Dearest," and "Goblin Market,"; the other wrote "The Blessed Damozel" and painted Beata Beatrix. FTP, give the last name of this Victorian era brother-sister tandem.
26. Although the Rig Veda is generally thought to have been written a millennium after the fall of this city, the text contains two references to a place with a similar name. Excavated in 1921 by Sir John Marshall, this city was the first evidence of the ancient Indus Valley civilization which bears its name. FTP, name this ancient city on the Ravi River, northeast of Mohenjo Daro.

Answer: HARAPPA
an operation
27. In mathematics, it is a certain integral which measures the overlap of two functions, and is invariant under the Fourier transformation. Referring to language or reasoning, it is the quality of being intricate and complicated. In biology, it refers to a convex fold in the surface of the brain. FTP, give this 11-letter word.

## Answer: CONVOLUTION

28. Because of the success of this agricultural movement in the 1960's and '70's, I.K. Gujral and many others have recently supported initiating a new one. The movement led to a tenfold decrease in famine through the use of improved farming technologies and strategies, including the introduction of new strains of wheat and rice into developing countries. FTP, identify this colorfully-named agricultural movement.

## Answer: The GREEN REVOLUTION

29. One branch of this group of human languages includes Ostyak and Vogul, while the other includes Mordvinian and Permian. Closely related to the Samoyedic languages, the group is likely descended from a proto-language spoken 6000 years ago in the northern Eurasian forests. FTP, identify this subset of the Uralic and Altaic languages, most of whose 25 million speakers live in Estonia, Hungary, or Finland.

Answer: The FINNO-UGRIC languages (Prompt on Finno-Ugrian, which is slightly broader.)
30. This athletic team has now existed for 100 years, and its roster boasts such names as Zinedine Zidane, Antonio Conte, Didier Deschamps, Angelo Di Livio, Filippo Inzaghi, and Alessandro Del Piero. It has won 24 titles in Italy's Serie (SAIR-ee-ay) A, including the 1996-97 title, when it finished two points ahead of Parma. FTP, name this soccer team, which plays its home games in Turin.

## Answer: JUVENTUS FC

## Extras (Do NOT use)

. After a man died of this disease, doctors suspected that a fluid given to hospital patients in Hong Kong before lung and stomach scans may be contaminated. FTP, name this disease, which first gained international attention in March 1996, and whose human form is Creutzfeldt-Jakob disease.

## Answer: MAD COW disease (accept BOVINE SPONGIFORM ENCEPHALOPATHY; also accept CREUTZFELDT-JAKOB disease on an early buzz.)

. Take the number of US Presidents who preceded Benjamin Harrison; add the number of popes who have been named Pius; subtract the number of Pulitzer Prizes won by Robert Frost; finally, divide by the number of winners of the 1997 Nobel Prize in Physics. FTP, what number do you get?

Answer: $10((22+12-4) / 3)$
. Two answers required. In 1543, two men published books which would revolutionize thinking in their respective fields. One book was De Humani Corporis Fabrica Libri Septum, a guide to human anatomy written by a Flemish physician. The other was De Revolutionibus Orbium Coelestium, a book written by a Polish astronomer describing a stationary sun. FTP, name these two men, who shared the spotlight in 1543.

Answer: Andreas VESALIUS and Nicolaus COPERNICUS

## 1998 Cardinal Classic

Bonus Questions by Berkeley C

1. Name the author from works, $30-20-10$ :

30: State of Siege
20: Caligula
10: The Plague

## Answer: Albert CAMUS

2. Answer the following questions about the trial of Theodore Kaczynski:
a) FFP, name the judge who presided over the case.
b) FTP, name the San Francisco lawyer who specializes in political show trials with whom Kaczynski wanted to replace his defense team.
c) FFP for one and 15 points for both, name the two Sacramento men whom Kaczynski pled guilty to killing.

Answers: a) Garland BURRELL, Jr.
b) Tony SERRA
c) Gilbert MURRAY and Hugh SCRUTTON
3. Given the organic compound, state how many carbon atoms it has, FSNOP:
a) FFP, ribose
b) FTP, naphthalene
c) F15P, caffeine

Answers: a) FIVE
b) TEN
c) EIGHT
4. Given a city, identify the body of water on which the city lies, FTPE:
a) Muscat
b) Vladivostok
c) Veracruz

Answers: a) GULF OF OMAN
b) ZOLOTOY ROG, GOLDEN HORN BAY, or SEA OF JAPAN (prompt on Pacific Ocean)
c) BAY OF CAMPECHE or GULF OF MEXICO
5. Answer the following about the Cold War, FTPE:
a) Name the United States aid program to Middle Eastern nations aimed at guarding them from Communist threats.
b) Name the German-born Soviet spy who worked on the Manhattan project and was arrested in Britain in March, 1950.
c) Name the Polish Communist leader from 1956-1970 whose confrontation with Khrushchev in October, 1956, sparked the uprising in Hungary.

## Answers: a) EISENHOWER DOCTRINE

## b) Klaus FUCHS

c) Wladislaw GOMULKA
6. A plan was recently announced to develop technology for World Wide Web use which will use ordinary phone lines but will be considerably faster than today's fastest modems.
a) FFPE and a five point bonus, name the three computer companies which have formed a consortium to develop this technology.
b) FTP, name the technology company which announced similar plans separately from the Intel-CompaqMicrosoft consortium.

Answers: a) INTEL, COMPAQ, MICROSOFT
b) LUCENT;
7. Name the American author from a novel, for the stated number of points:
a) for 5 points, Riders of the Purple Sage
b) for 10 points, Ship of Fools
c) for 15 points, Dred: A Tale of the Great Dismal Swamp

Answers: a) Zane GREY;
b) Katherine Anne PORTER;
c) Harriet Beecher STOWE
8. Given the basketball player, identify the college he or she attended, FTPE:
a) Sheryl Swoopes
b) Tom Gugliotta
c) Dennis Rodman

Answers: a) TEXAS TECH
b) NORTH CAROLINA STATE
c) SOUTHEASTERN OKLAHOMA STATE
9. Name the Egyptian deity from descriptions, FTPE:
a) The jackal-headed god who conducted the souls of the dead to their judgment.
b) The son of Isis and Osiris who castrated his uncle Set and served as the divine prototype for the Pharaoh.
c) The goddess of the sky and mother of Isis and Osiris, often depicted as a woman with blue skin.

Answers: a) ANUBIS (accept Anpu)
b) HORUS (accept Hor or Har)
c) NUT (accept Nuit)
10. Name the following characters from the Fox series "King of the Hill," for the stated number of points:
a) FFP, Hank's wife.
b) FTP, Hank and Peggy's niece, who is a permanent guest at the Hill home.
c) "Guns don't kill people, the government does," according to this friend of Hank's. F15P, name the show's resident conspiracy theorist.

Answers: a) PEGGY Hill
b) LUANN Platter
11. Answer the following about ellipsoids, FTPE:
a) What is the one-word term for an ellipsoid in which two of the principal axes are equal and different from the third?
b) What kind of spheroid is obtained by rotating an ellipse about its major axis?
c) What kind of spheroid is obtained by rotating an ellipse about its minor axis?

Answers: a) SPHEROID
b) OBLATE spheroid
c) PROLATE spheroid
12. Identify the ancient Greeks from descriptions, FTPE:
a) An Athenian, he wrote a history of Greece called the Hellenica, and an account of the failed conquest of Persia, called the Anabasis.
b) His reputation as an orator derives from his speeches opposing Phillip II.
c) A contemporary of Demosthenes, this man's tight control of Athenian finances allowed for the improvement of the military and the reconstruction of the theater of Dionysus.

Answers: a) XENOPHON
b) DEMOSTHENES
c) LYCURGUS
13. Identify the following seemingly unrelated things, FTPE:
a) This French city is the capital of the Rhone department and the major French educational center outside of Paris.
b) This river is referred to as Hiddekil in the Bible, and on its banks stood such cities as Ktesiphon, Seleucia, and Nineveh.
c) President Clinton's first nominee for Attorney General, who withdrew after admitting she hired an illegal alien.

Answers: a) LYONS
b) TIGRIS
c) Zoe BAIRD
14. Given a letter of the alphabet, identify the largest country in the world in area whose name starts with that letter, FTPE:
a) N
b) $P$
c) S

Answers: a) NIGER
b) PERU
c) SUDAN
15. Name the scientist, 30-20-10:

30: He discovered the cause of astigmatism in 1801.
20: In his most famous experiment, he passed light through two pinholes onto a screen and saw alternating light and dark bands.
10: The constant that describes the elastic properties of a solid undergoing tension or compression in only one direction is named in honor of him.

Answer: Thomas YOUNG
16. Name the author, 30-20-10.

30: He first achieved fame with the poem, "The True-Born Englishman."
20: He is sometimes called the father of modern journalism, and he published the journal, The Review, single-handedly from 1704-1713.
10: He wrote The Journal of the Plague Year and Moll Flanders.

## Answer: Daniel DEFOE

17. Answer the following about postwar Italy, FTPE:
a) Name the leader of the Christian Democrats who served as premier of Italy five times before being murdered in May, 1978.
b) Name the political party headed by Umberto Bossi which seeks autonomy for the region it calls Padania. c) Name the leader of the Forza Italia, who lost his position as Prime Minister in 1994 after the Lega Nord pulled out of a coalition.

Answers: a) Aldo MORO
b) LEGA NORD (accept Northern League; do not accept Lombard League)

## c) Silvio BERLUSCONI

18. FTP each Answer the following about recent developments in cloning:
a) Name the scientist whose recent announcement of his plans to clone infertile humans rekindled international concerns about the prospect of human cloning.
b) At a research farm in Texas, two calves were recently born who had been cloned from fetal cells, into which an extra gene had been spliced. FTPE, name the calves.

Answers: a) G. Richard SEED
b) GEORGE and CHARLIE
19. Name the artist from works, FTPE:
a) "Young Woman with a Water Jug"
b) "Vulcan Surprising Venus and Mars," and "The Last Supper"
c) "The Tempest"

Answers: a) Jan VERMEER
b) TINTORETTO (accept Jacopo Robusti)
c) GIORGIONE
20. Answer the following about psychoanalysts, FTPE:
a) first, identify the associate of Freud who founded the school of individual psychology and introduced the idea of the "inferiority complex."
b) next, identify the female psychologist who believed that environmental and social conditions, rather than biological drives, are the chief causes of personality disorders.
c) last, name the American psychoanalyst who wrote that there are eight stages of psychosocial development from birth to old age.

Answers: a) Alfred ADLER
b) Karen HORNEY
c) Erik ERIKSON
21. Given an event in the Bible, state the book in which it is found, FTPE:
a) The birth of John the Baptist
b) David's fight with Goliath
c) The sun stands still

Answers: a) LUKE
b) 1 SAMUEL (prompt for more if "Samuel" is answered)
c) JOSHUA
22. Answer the following about compounds involved in photosynthesis, FSNOP:
a) FTP, Identify the compound which combines with carbon dioxide at the start of the Calvin-Benson cycle to form 3-phosphoglyceric acid.
b) FFP per word, what does NADP stand for?

Answers: a) RIBULOSE-1,5-BIPHOSPHATE (accept RuBP or RuDP; also, accept
*di* instead of *bi*)
b) NICOTINAMIDE ADENINE DINUCLEOTIDE PHOSPHATE (do not accept Nicotine for Nicotineamide)
23. F15P each Answer the following about the history of women's rights.
a) FTP, in 1848, Elizabeth Cady Stanton and Lucretia Mott held the first major convention on women's rights in what city?
b) FTP, name the first female candidate for the U.S. presidency, who ran under the Equal Rights party in 1872.

Answers: a) SENECA FALLS, New York
b) Victoria Claflin WOODHULL
24. Name the period of western music from a description, FTPE:
a) The term for this era originally meant bizarre, degenerate, or abnormal. It is distinguished from preceding periods mainly by its use of concertato and basso continuo.
b) This period, corresponding to periods of the same name in painting and in literature, was characterized by amorphous rhythmic patterns, as seen in the works of Debussy and Ravel.
c) This period bridged the gap between the Baroque and Classical periods, and was fostered by the court of Louis XV.

Answers: a) BAROQUE
b) IMPRESSIONIST
c) ROCOCO
25. Give the anthropological term from a definition, for the stated number of points:
a) FFP, a descent system in which kinship is determined entirely through the female line.
b) FTP, from the French for "half," one of two complementary parts of a society, usually characterized by exogamy and unilineal descent.
c) F15P, a residence pattern in which adolescent boys leave their childhood home to live with one of their mother's brothers.

Answers: a) MATRILINEAL
b) MOIETY
c) AVUNCULOCAL
26. Identify the oceanographic feature from a description, FTPE:
a) Also called a tablemount, this is a seamount with a flat top, generally thought to be a drowned ancient island.
b) A fault which displaces newly formed oceanic crust, generally running perpendicular to a mid-ocean ridge.
c) A layer of oceanic water in which temperature decreases rapidly with increasing depth.

Answers: a) GUYOT
b) TRANSFORM fault
c) THERMOCLINE
27. Name the work from quotes, $30-20-10$ :

30: "To no one shall we sell, to no one will we refuse or delay, right or justice."
20: "A freeman shall not be amerced for a slight offense, except in accordance with the degree of his offense."
10: "John, by the grace of God, king of England, lord of Ireland, duke of Normandy and Aquitaine, and Count of Anjou"
Answer: The MAGNA CARTA
28. Name the literary work from a quote, FTPE:
a) "The easy ungrudged praise: / Comes now, to search your manhood / Through all the thankless years, / Cold, edged with dear-bought wisdom, / The judgment of your peers."
b) "Okonkwo was well known throughout the nine villages and even beyond."
c) "Stately, plump Buck Mulligan came from the stairhead, bearing a bowl of lather on which a mirror and a razor lay crossed."

Answers: a) WHITE MAN'S BURDEN
b) THINGS FALL APART
c) ULYSSES
29. Identify the following people related to President Clinton's latest sex scandal:
a) FFP, the 24 year-old intern with whom Clinton allegedly had an affair.
b) FTP, the man to whom Clinton supposedly referred Lewinsky when she sought his advice about what to say in her deposition for the Paula Jones case. This man allegedly counseled Lewinsky to deny the affair. c) F15P, the confidant of Lewinsky who secretly made a dozen tape recordings of Lewinsky's story.

Answers: a) Monica LEWINSKY
b) Vernon JORDAN
c) Linda TRIPP
30. Identify the musical group from a song title, for the stated number of points:
a) FFP, "Meet James Ensor"
b) FTP, " $3 / 5$ of a Mile in 10 Seconds"
c) F15P, "Fly, Robin, Fly"

Answers: a) THEY MIGHT BE GIANTS
b) JEFFERSON AIRPLANE (do not accept Starship or Jefferson Starship)
c) The SILVER CONVENTION

