

Yale A tossups
1997 Questions on the Crum

1. They can be high-field or low-field; pi electron donors, pi electron acceptors, or both; and they can be hard or soft. Some are able to bridge, while others have high hapticity [hap-TIH-suh-tee]. FTP, name these monodentate or polydentate atoms or groups of atoms that bind to metals to form complex ions.

ANSWER: LIGANDS [prompt on "chelates" or "chelating agents"]

2. A tactical blunder, this amphibious assault was conceived by Winston Churchill to open up shipping to and from Russia. The combined Anglo-French landing took place between April 1915 and January 1916, and failed utterly. FTP, name the battle which cost Churchill his job for failing to take the Dardanelles.

ANSWER: GALLIPOLI

3. This American artist began his career in Minnesota as a sign painter, and he served in World War I. Known for his neo-realistic style, most of his paintings have uniquely American subjects, most notably the Midwest. FTP, name this painter of the oft-parodied "American Gothic".

ANSWER: Grant WOOD

4. He's a wrestler at a New England private school. He writes several novels and befriends a transsexual football player. In the end, one of his sons dies and the other loses an eye. He is killed by the sister of the first girl with whom he slept. FTP, these strange adventures all happen to what character in a novel by John Irving?

ANSWER: GARP

5. It began with just six men near Jerusalem, but, led by a visionary preacher, soon led to the slaughter of some 50 people in Southampton County, Virginia. It ended just three days later, but its consequences included the banning of education for blacks. FTP, name revolt that rocked the South in August, 1831.

ANSWER: NAT TURNER's Rebellion

6. Flu-ni-tro-ze-pam can be used as a sedative, but in the proper dose, can render people unconscious. FTP, give either the prescription or street name for this drug, which the state of Florida, among others, wants to treat in the same class with heroin, because of its use to lower resistance to sexual advances.

ANSWER: ROHYPNOL or ROOFIES [prompt on "date rape pill" or equiv.]

7. The last name's the same. One wrote the lyrics for "Can You Feel the Love Tonight?", while the other, under a pseudonym, published the novel "Exit to Eden". FTP, give the common last name, which is also shared with a murdered Texas millionaire whose endowment was used to found a university. ANSWER: RICE [Tim, Ann, and William Marsh, respectively]

8. Born in Worcester, MA, in 1947, this composer's works include "Phrygian Gates" and "El Dorado". His choral works include "Harmonium". FTP, name this post-Minimalist composer of "Short Ride in a Fast Machine" and "Nixon in China".

ANSWER: John ADAMS

9. This poet died in Venice in 1889 at age 77. His novel "The Ring and the Book" was published in 1869; his first work was "Pauline: A Fragment of a Confession", published anonymously in 1833. FTP, name this poet who wrote "Fra Lippo Lippi" and "My Last Duchess".

ANSWER: ROBERT BROWNING

10. Pursued by Apollo, this daughter of a river god begged her father to turn her into a tree while she was running away from the amorous sun god. FTP, name this woman, whose name is familiar to fans of Scooby Doo.

ANSWER: DAPHNE [DNA: "Daphnis"]

11. This actor donned women's clothing and ate dog food and dog biscuits at the reception in honor of his "Man of the Year" award from Harvard's Hasty Pudding theater club. FTP, name this star of "Bird on a Wire," "Forever Young," and "The Road Warrior".

ANSWER: Mel GIBSON

12. The son of missionary parents, he graduated from Yale in 1927; his marital troubles have been the subject of at least one book. One of America's most outspoken internationalists, he spoke out strongly in favor of American involvement in World War II. FTP, name this man, who founded "Time,"

"Life," and "Sports Illustrated".

ANSWER: Henry Robinson LUCE

13. "Hope is the thing with feathers." But according to this author, the thing with feathers is his brother, who's being examined by specialists at a zoo in Vienna. FTP, name this author, who wrote the books "Side Effects" and "Getting Even", but who is best known for directing and acting in movies like "Annie Hall".

ANSWER: WOODY ALLEN

14. There are two main classification systems in use: Schoenflies and Hermann-Mauguin [MO-gan]. A grand total of 130 exist, divided into several classes, including octahedral, tetrahedral, and icosahedral. FTP, give the term for these special sets of symmetry operations about a single point in space.

ANSWER: (crystallographic) POINT GROUPS

15. He was born circa 1034 in Lombardy, and canonized around 1163. Noted for his phrase, "Faith seeking understanding," he served as archbishop of Canterbury. FTP, name this man, who originated the ontological argument for the existence of God.

ANSWER: St. ANSELM

16. He broke the school record by finding a four-hole outhouse to burn at the annual bonfire rally during his years at Whittier College. FTP, name this former US President, whose memoir is entitled "Six Crises", and whose Presidential library is located in Yorba Linda, CA.

ANSWER: Richard Milhous NIXON

17. According to the Red Cross, this nation has more land mines than any other. This nation has had only three Presidents in its history, and its inhabitants refer to themselves as masr'een [MUS-ruh-eeen]. FTP, name this country, formerly half of the United Arab Republic.

ANSWER: EGYPT

18. This feminist helped change the mindsets of women with her book "Sex and the Single Girl" and her magazine. FTP, name this woman, who has just stepped down from the post of Cosmopolitan's editor in chief.

ANSWER: Helen Gurley BROWN

19. Like Dante, his father was exiled from Florence for political reasons. Forty years younger than Dante, he focused much more on his own personal drama. On April 8, 1341 he was crowned with laurels on the Capitoline Hill in Rome. FTP, name this "first writer of the Renaissance," whose sonnets often describe his fascination with Laura.

Answer: Francis Petrarch

20. In the eight-kingdom classification scheme, this kingdom includes protozoans, euglenoids, and slime molds. In three-kingdom systems, it also includes all bacteria. FTP, name this kingdom, whose name comes from the Greek for "first", which might have been called the Miscellaneous kingdom. ANSWER: PROTISTA or PROTOCTISTA [ACC: PROTISTS]

21. Generally unpopular in England, perhaps because she had six fingers on each hand, she was later killed by her husband. FTP, name this woman, a lady in waiting to Catherine of Aragon, mother of Queen Elizabeth the First, and Henry VIII's second wife.

ANSWER: ANNE BOLEYN

22. Before Wilt Chamberlain. Before Kareem Abdul-Jabbar. Even before Shaquille O'Neal. FTP, name the former Minneapolis Lakers center, known for his effective two-hand set shot, considered the best basketball player of the first half of the century.

ANSWER: George MIKAN

23. Her works have included "Acts of Light" and "Maple Leaf Rag", as well as works based on Greek myths, such as "Elektra". FTP, name this choreographer, who died at the age of 96, who made herself famous through "El Penitente", but is perhaps best known for choreographing "Appalachian Spring".

ANSWER: Martha GRAHAM

24. Though he has nothing to do with the soporific rock group Mazzy, this man was skewered in Doonesbury after he announced that he was resigning his post and accepting the deanship to Pepperdine Law School. He then retracted his statement four days later. FTP, name this man, the Independent Council for the Whitewater investigation.

ANSWER: Kenneth STARR

25. The oddly-named Spectral Theorem of linear algebra states that if a selfadjoint linear transformation maps a vector space V onto itself, then V has an orthonormal basis of vectors composed of, FTP, what class of vectors, that when acted on by T , give a scalar multiple of that vector? ANS: EIGENVECTORS [ACC: CHARACTERISTIC or PROPER VECTORS]

26. Drawing upon the research of numerous MIT theorists, this book has chapters like, "Chatterboxes," and "Words, words, words," and mocks pundits like Richard Lederer. Synthesizing recent research in linguistics, it attempts to prove that speech perception is innate. FTP, name this influential 1992 book by Steven Pinker.

Answer: THE LANGUAGE INSTINCT

27. WARNING: TWO ANSWERS REQUIRED. The Rio de la Plata is a 150 mile wide estuary that drains the Parana River in Brazil. On it, there are two capital cities opposite each other, neither of which is the capital of Brazil. FAQTP, name them both.

ANSWER: BUENOS AIRES AND MONTEVIDEO

28. Several people find themselves trapped on a remote island; one by one, they are dispatched, and as they die, cryptic rhymes appear. There is no detective. FTP, name this Agatha Christie mystery that shares its title with a famous nursery rhyme.
ANSWER: TEN LITTLE INDIANS or AND THEN THERE WERE NONE

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All bonuses 30 points.

1. [30] Pencil and paper ready. Consider the set of data points 1, 2, 3, and 4.

5: What is the mean?

ANSWER: 2.5

10: What is the median?

ANSWER: 2.5

15: For 15 points, within 10%, what is the standard deviation of this set of data?

ANSWER: 1.16 to 1.41 (real answer 1.29)

2. [30] 30-20-10. Identify the poet from opening lines.

30: "Word over all, beautiful as the sky" and "Behold, the sea itself!" 20: "When lilacs last in the dooryard bloom'd"

10: "I sing the song of myself"

ANSWER: Walt WHITMAN

3. [30] For 10 points, on May 8, 1429, who defeated an English army at Orleans [or-LAY-ohn]?

ANSWER: JOAN OF ARC or JEANNE D'ARC [zhahn dahrk]

For 10 more points, in which French city was she burned at the stake? ANSWER: Rouen [rue-AHN]

And for a final 10 points, who wrote the play "Saint Joan"?

ANSWER: George Bernard SHAW

4. [30] Given a state motto (translated into English), name the state, 10 points each.

a. He who has transplanted, sustains

ANSWER: CONNECTICUT

b. If you seek pleasant peninsulas, look about you

ANSWER: MICHIGAN

c. I direct

ANSWER: MAINE

5. [30] Given the English translation of the title of a play written in French, identify the playwright, 10 points each.

a. "The Chairs" ANSWER: Eugene IONESCO b. "Orpheus"

ANSWER: Jean COCTEAU

c. "The Breasts of Tiresias" ANSWER: Guillaume APOLLINAIRE

6. [30] For fifteen points each, give the Arabic terms applied to the life story of the Prophet Muhammad, and to his sayings and teachings.

ANSWER: SEERAH, HADITH

7. [30] For five points each, and five more for all correct, name the three American delegates involved in the "XYZ" affair.

ANSWER: Elbridge GERRY, Charles C. PINCKNEY, John JAY

For 10 more points, name the French foreign minister who insinuated the need for American bribes.

ANSWER: Charles Maurice de TALLEYRAND

8. [30] Name these members of the 3,000-hit club, 10 points each.

a. This Pittsburgh Pirates center fielder just barely reached 3,000 hits before an untimely death.

ANSWER: Roberto _CLEMENTE_

b. He is the most recent addition to the 3,000 hit club.

ANSWER: Paul _MOLITOR_

c. He broke into the majors in 1974, and retired in the early 90s with 3,154 hits, after spending his entire career with the Royals.

ANSWER: George _BRETT_

9. [30] "Nature abhors a naked singularity." For 10 points each, name the scientist who made the above conjecture, and the name he gave that principle.

ANSWER: Roger _PENROSE_ _COSMIC CENSORSHIP_ principle

And for another 10 points, who recently lost a bet to two Caltech scientists over the existence of such naked singularities?

ANSWER: Stephen _HAWKING_

10. [30] Expand these Vietnam War abbreviations FTP each.

10: Viet Cong ANSWER: _VIETNAMESE COMMUNISTS_

10: ARVN ANSWER: _ARMY OF THE REPUBLIC OF VIETNAM_

10: PAVN ANSWER: _PEOPLE S ARMY OF VIETNAM_

11. [30] Ecuador had three presidents during February 1997. For 10 points each, name the elected president ousted by the legislature for mental incompetence, the vice-president who claimed the job as his successor, and the leader of the legislature whose swearing-in ended most of the controversy.

Answer: Abdala Bucaram, Rosalia Arteaga, Fabian Alarcon

12. [30] 30-20-10. Identify the title.

30: The 1892 premiere of this Antonin Dvorak work was the first after his arrival in the United States.

20: Other composers of works of this title include Haydn, Bruckner, Verdi, and Vaughan Williams.

10: The title is the first words of the Latin hymn whose English translation starts We praise thee, God.

ANSWER: _TE DEUM_ laudamus [tay DAY-oom] [ACC: _LAUDAMUS TE DEUM_]

13. [30] For 10 points each, given a language, give the number of characters used in that language. For example, English has 26.

a. Hawaiian ANSWER: _12_

b. Russian ANSWER: _33_

c. Russian, in 1900 ANSWER: _37_

14. Answer these questions about "Don Quixote", for the stated number of points.

10: This sturdy farm girl is the object of Don Quixote's desire.

ANSWER: Lady _DULCINEA_ of El Toboso or ALDONSA

20: These two neighbors of Don Quixote hatch a plot to bring him back to reality; 10 points each.

ANSWER: The _BARBER_ and the _CURATE_

15. [30] Given an unusual property of an element, name the element, 10 points each.

a. This is the only element found in a stable 8+ oxidation state.

ANSWER: _OSMIUM_

b. Every fusion reaction involving this element is endothermic, so nucleosynthesis in normal stars stops at this element.

ANSWER: IRON

c. This nonmetal is the rarest naturally-occurring element on earth.

ANSWER: ASTATINE

16. [30] Now that Deng Xiaoping has died, much attention has been given to his successors. Given the rank, name the party hack, 10 points each.

a. President

ANSWER: JIANG Zemin

b. Premier

ANSWER: Li Peng

c. Vice-Premier

ANSWER: Li Lanqing

17. [30] Identify the artist from the work, 10 points each. a.

"Broadway Boogie-Woogie"

ANSWER: Piet MONDRIAN

"Boulevard of Broken Dreams"

ANSWER: Edward HOPPER

"On the Persistence of Memory"

ANSWER: Salvador DALI

18. [30] Oedipus' family pedigree is possibly the most famous in Greek myth. For five points each, name his parents, and FTP each, name his two sons, who killed each other.

(5 each) LAIUS, IOCASTE or JOCASTA

(10 each) ETEOCLES, POLYNEICES

19. [30] 30-20-10.. Identify the landmark.

30: It was created by Mt. Mazama 7,000 years ago.

20: Wizard Island lies at its center.

10: Located in southern Oregon, it is the centerpiece of an eponymous national park created in 1902.

ANSWER: CRATER LAKE

20. [30] Answer these questions about "Schindler's List", for the stated number of points.

a. For five points, who played the solo violin in the soundtrack? ANSWER: Itzhak PERLMAN

b. Five points for one, and 15 for both, name the two objects in the movie (before Goeth's death) that are *not* in black and white.

ANSWER: a little girl's RED COAT and the FLAMES of two Shabbat candles

c. For 10 points, name the foundation started by Steven Spielberg after he made "Schindler's List".

ANSWER: Survivors of the SHOAH Foundation

21. [30] For ten points, first, identify what is generally considered the first epistolary novel, written by Samuel Richardson.

ANSWER: An Apology for the Life of Miss PAMELA Andrews

Henry Fielding wrote not one, but *two* parodies of "Pamela". Ten points each, name these two novels, one featuring Pamela's brother, another the "real" story of Pamela.

ANSWER: JOSEPH ANDREWS,

An Apology for the Life of Miss SHAMELA Andrews

22. [30] For 10 points, who composed the "Rhapsody on a Theme of Paganini"? ANSWER: Sergei Vasilyevich RACHMANINOFF

And for 10 points, name the Kenneth Branagh film that features the "Paganini Rhapsody".

ANSWER: DEAD AGAIN

For a final 10 points, like many of Rachmaninoff's works, the "Paganini Rhapsody" uses an eight-note phrase related to what text?

ANSWER: DIES IRAE [DEE-ace EE-rye]

23. North Carolina's barrier islands form three capes projecting into the Atlantic. For 10 points each, name them.

Answer: Cape Hatteras, Cape Lookout, Cape Fear

24. FTP each, identify these works by Saul Bellow.

a) This novel is a picaresque story of a poor Jewish youth from Chicago and his attempts to make sense of 20th century life. It won the 1954 National Book Award.

Answer: The Adventures of Augie March

b) This 1956 novella concerns a man whose failures in his marriage and business lead him into a series of shaky investments which themselves fail. Answer: Seize the Day

c) This 1965 National Book Award winning novel includes a series of flashbacks to the sexual and marital past of the title character, a Jewish intellectual.

Answer: Herzog

25. Identify the following chemical cycles for 10 points each.

a) This biological cycle uses ATP and NADPH to add carbon dioxide to ribulose biphosphate, to get products which eventually form 6-carbon sugars.

Answer: C-3 cycle or Calvin cycle

b) This thermochemical cycle is a construct used to determine the lattice energies of solid salts, knowing their energies of vaporization and ionization.

Answer: Born-Haber cycle

c) This thermodynamic cycle features adiabatic compression, followed by isobaric fuel injection and ignition, an adiabatic "power stroke," and finally isovolumetric heat rejection.

Answer: Diesel cycle

26. FTP each, identify these battles from American history.

a) At this 1794 battle in northwest Ohio, the U.S. Army commanded by Anthony Wayne defeated several Native American tribes

Answer: Fallen Timbers

b) This 1813 battle near Chatham, Ontario saw an American force of 3000 defeat 400 British regulars and 1000 Indians and the death of Tecumseh.

Answer: Battle of the Thames

c) At this battle of 1847, American troops under Zachary Taylor were attacked by a Mexican army just south of Saltillo. The Mexicans retreated and left Taylor in control of northern Mexico.

Answer: Buena Vista