

Quesadilla I 1998 Tossups by Caltech Also-Rans (Chris Nolte, Albert Chiu, and Jay Catherwood)

1. [Science: biochemistry]

They are a group of 20-carbon fatty acid derivatives containing a 5-carbon ring, and have diverse hormonelike effects in animals. Bergstrom, Samuelsson, and Vane were awarded the Nobel Prize for their work with these compounds, including Vane's explanation that aspirin alleviates pain and inflammation by inhibiting their formation. Although first isolated in semen, they are found throughout the body. For 10 points, name this class of compounds, not all of which are secreted by the prostate gland.

Answer: prostaglandins

2. [History: India]

When his father became ill, he fought with and defeated Dara Shikoh, his eldest brother and his father's designated successor, at Samugarh in 1658. Then when his father recovered he confined him to his own palace in Agra and had several other family members executed. Originally a Muslim ruler of a mixed Hindu-Muslim empire, he later became more intolerant toward the Hindus, finally causing the Mahrattas to rebel against him. For ten points, name this third son of Shah Jahan, the last of the great Mughal emperors of India.

Answer: Aurangzeb

3. [We shamelessly call this literature]

While attending this year's Consumer Electronics Show in Las Vegas, Albert noticed an ad for an adult video company. It featured the adult stars Serenity and Jenna Jameson with a catchy and appropriate five-word slogan taken from a line in Act IV, scene I of Macbeth. For 10 points, name this phrase, that is also the title of a 1983 novel by Ray Bradbury.

Answer: Something wicked this way comes (Note: the film company is Wicked Pictures.)

4. [Religion/philosophy: philosophy of science]

It was first coined by William Whewell to describe the seeking of principles with as wide an explanatory reach as possible. The term has been revived by a noted Harvard biologist, who argues for the integration of the physical and the social sciences and presents the thesis that all knowledge is unified. For 10 points, give the word and you've named the controversial 1998 philosophy of science work by Edward O. Wilson.

Answer: Consilience: The Unity of Knowledge

5. [Science: physics]

A toroidal magnetic field is produced by coils that surround the vacuum chamber containing the plasma, and a poloidal field is generated by a toroidal electric current within the conducting plasma, confining the plasma in a stable equilibrium. For 10 points, name this device important in fusion research whose name is an acronym derived from the Russian for toroidal magnetic confinement.

Answer: tokamak

6. [Literature: 20th c. british]

The action takes place in revolutionary Mexico at a time when all but one of the state's priests have been executed by a hostile government. For 10 points, what 1940 Graham Greene novel concerns the martyrdom of an unnamed whiskey priest?

Answer: The Power and the Glory

7. [Fine Art: Opera]

At the beginning of this opera, the main character is acquitted from charges that he killed his first apprentice. Later, it is revealed that he found the dripping corpse in his fishing net. When his second apprentice slips off a cliff and drowns in the sea, the tormented fisherman wonders, "What harbour shelters peace?" For ten points, name this opera composed by Benjamin Britten.

Answer: Peter Grimes

8. [History: 20th c. Europe]

Although he had the support of the northern bajraktars plus a vast bureaucracy, efficient police force and lots of Italian money, he took away freedoms and left peasants poorer, leading to periodic revolts against the regime. For ten points, who became president in 1925 and king in 1928, and, in the face of Enver Hoxha's communist republic, abdicated the throne of Albania in 1946?

Answer: King Zog I or Ahmed Bey Zogu

9. [Pop culture: recent film]

When you consider that his punishment as a child was to be placed in a burlap bag and beaten with reeds, it is not surprising to see that he turned out the way that he did. It didn't help that his mother was a French prostitute and that his Belgian father made outrageous claims like inventing the question mark. For ten points, name this man who is better known as the nemesis of Austin Powers.

Answer: Dr. Evil

10. [Science: biology/entomology]

They are principally characterized by their elytra, which are modified forewings that lie protectively over a second pair of functional wings. With over 250,000 species, they comprise approximately one fourth of the total living species in the animal kingdom. For 10 points, give the common name for this largest group of animals, members of the order Coleoptera.

Answer: beetles (accept Coleoptera before ``order")

11. [History: World War I]

In an effort to trap Beatty's squadron of battle cruisers at Rosyth and destroy it before reinforcements from Scapa Flow could reach it, Reinhard Scheer sent five battle cruisers from Wilhelmshaven to the North Sea. However, the signal for the operation was decoded, and John Jellicoe led the whole British Grand Fleet to the Skagerrak, where, for ten points, what 1916 naval battle took place?

Answer: Battle of Jutland

12. [Geography: US]

This city with a population of 30000 is adjacent to the largest National Marine Sanctuary in the U.S. and a new state college at the site of the recently decommissioned Fort Ord. With a name similar to the capital of Nuevo Leon, it is the setting for several novels by John Steinbeck, including Tortilla Flat and Cannery Row. For 10 points, name this city founded in 1770 by Gaspar de Portola, which in 1775 was proclaimed the capital of Alta California.

Answer: Monterey ~~Bay~~

13. [Popular Culture: Recent Film]

It is ``the oldest confidence game on the books." A man claims to be a wealthy refugee, but he needs financial assistance retrieving his fortune from his home country and rescuing his beautiful sister, who is being held in captivity. In this modern version, Joe Ross has developed a valuable Process, but it is stolen from him and he is framed for murder. For 10 points, name this 1998 film written and directed by David Mamet.

Answer: The Spanish Prisoner

14. [Fine art: painting]

At the right, wearing a boatman's hat, is the Impressionist painter Gustave Caillebotte, who chats with the actress Ellen Andree. The man who gathered the group together, Baron Barbier, is shown in the background wearing a top hat. A model Angele sits drinking, while the painter's future wife, Aline Charigot, plays with a dog in the foreground. For ten points, name this 1881 painting by Renoir.

Answer: Luncheon of the Boating Party (Le Dejeuner des canotiers)

15. [Religion/mythology/general Knowledge]

A small, irregularly shaped satellite of Saturn between Titan and Iapetus; according to Hesiod's Theogony, Theia's mate and the father of Helios, Eos, and Selene; a romantic epic poem by Keats about the supersession of the Titans by the Olympians; and the 1990 Hugo Award-winning novel by Dan Simmons. For 10 points, give the common name.

Answer: Hyperion

16. [Literature: medieval scholasticism]

Born in 1079 in Brittany, this son of a knight sacrificed his inheritance and a possible military career in order to study philosophy and logic. He became famous in the world of medieval scholasticism for his solution to the problem of universals, use of dialectics, and poetry. For 10 points, identify this author of *Historia calamitatum* and *Sic et Non*, most famous for the unfortunate outcome of his ill-advised love affair with Heloise.

Answer: Peter Abelard

17. [General knowledge]

Carter was a conservative senator who opposed the New Deal and FDR's attempt to pack the Supreme Court. Ron played Detective Harris on "Barney Miller." Stephen was recently fired from The New Republic for embellishing his articles with entirely fictional anecdotes. Philip is known for "Einstein on the Beach," while Seymour is an important figure in stories by J.D. Salinger. For 10 points, give the common surname.

Answer: Glass

18. [History: 19th c.]

Its major provisions included the cession of five ports to the British for trade and residence, allowing British citizens to be tried in British courts, and payment of a large indemnity by China. For 10 points, identify this first of the "Unequal Treaties," signed August 29, 1842, which ended the first Opium War between Britain and China.

Answer: Treaty of Nanking

19. [Current events]

His archenemy David Viderius, a.k.a. Dr. D. Vider, was cast out from the financial world for unprofessional conduct. His team, which includes Europa, Erik, Helen, Marcus, Lupo, and Pythagoras I, a computer who projects himself as the ancient Greek philosopher dipped in blue chrome, hold their headquarters at The Atomium. For ten points, name this hero who was created to promote European unity and the common currency.

Answer: Captain Euro (a.k.a. Ben Major)

20. [Science: biology/medicine]

The medical writings of Celsus around 25 A.D. detail their removal with sophisticated needle syringes. Nowadays they are removed by phacoemulsification, in which sound waves break up clumped proteins, or intracapsular surgery, which involves removal and replacement of the lens. Sometimes caused by galactosemia, rickets or diabetes, they usually simply result from age. For ten points name this term which refers to a partial or total opacity of the lens of the eye.

Answer: cataracts

21. [Geography: Russia]

It was incorporated into the principality of Moscow in 1392, and over the next two centuries it was a center for Ivan III's and Ivan IV's campaigns against the Tatars. Situated 400 km east of Moscow at the confluence of the Volga and the Oka rivers, it is one of the largest cities of Russia. The birthplace of the writer Maxim Gorky, the Soviet regime renamed the city after him in 1932, though its original name was restored in 1990. For 10 points, name this city.

Answer: Nizhny Novgorod prompt on Gorky, but do not accept and do not prompt on Novgorod

22. [Social science: economics]

He defined the concepts of quasi-rent, dimensionless elasticity of demand, and consumer's surplus in his 1890 magnum opus *Principles of Economics*, which also popularized the use of supply and demand curves. For 10 points, name this influential Neoclassical economist, who was a professor of political economy at Cambridge from 1885-1908.

Answer: Alfred Marshall

23. [Literature: 19th c. American]

“Wise Uncle Venner, passing slowly from the ruinous porch, seemed to hear a strain of music, and fancied that sweet Alice Pyncheon--after witnessing these deeds, this by-gone woe, and this present happiness, of her kindred mortals--had given one farewell touch of a spirit's joy upon her harpsichord, as she floated heavenward from,” for 10 points, what title structure in an 1851 novel by Nathaniel Hawthorne?

Answer: The House of the Seven Gables

24. [Pop culture/current events]

“I don't feel any shame. I feel stupid and I feel reckless and weak for having allowed my sexuality to be exposed this way. But I don't feel any shame whatsoever,” he told CNN, after being arrested in Will Rogers State Park in Beverly Hills in April, 1998. He was fined \$810 and ordered to perform 80 hours of community service after pleading no contest to committing a lewd act while alone in a public restroom. For 10 points, name this man, who evidently no longer wants your sex.

Answer: George Michael or Georgios Panayiotou

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Bonuses by Caltech Also-Rans (Chris Nolte, Albert Chiu, and Jay Catherwood)

1. [Science: minerals]

Identify the mineral from the description, for 10 points each.

A. This transparent calcium phosphate (sometimes containing fluorine, chlorine, hydroxyl or carbonate groups) is a major component of vertebrate teeth but is not good to eat.

Answer: apatite

B. A form of mica, this potassium aluminum silicate has "star" and "fuchsite" varieties and was used in Russia for window panes.

Answer: muscovite

C. This widespread calcium carbonate mineral is harder and more dense than calcite. It is found in shells and pearls throughout the world, not just in Spain.

Answer: aragonite

2. [Social science: feminist studies]

Identify the authors of these recent feminist works, for 5 points each and a 5 point bonus for all correct.

A. The Beauty Myth (1982)

Answer: Naomi Wolf

B. Against Our Will (1986)

Answer: Susan Brownmiller

C. Intercourse (1988)

Answer: Andrea Dworkin

D. Toward a Feminist Theory of the State (1989)

Answer: Catherine MacKinnon

E. Backlash (1991)

Answer: Susan Faludi

3. [History: Europe/Africa]

Answer these questions about the conflict between Italy and Ethiopia, for 10 points each.

A. A dispute over this 1889 treaty, in which Italy was granted territory in northern Ethiopia, led to conflict when Italy proclaimed the entire country of Ethiopia an Italian protectorate.

Answer: Treaty of Uccialli (or Wichale)

B. After Menelik II repudiated the Treaty of Uccialli, the Italians invaded. After a few minor victories, the Italians were humiliatingly routed at this 1896 battle and forced to recognize Ethiopian independence.

Answer: Battle of Adowa (or Adwa)

C. This general led the Italian forces when they again invaded Ethiopia in 1935, and he briefly ruled the country as viceroy. Succeeding Mussolini as prime minister in July 1943, he negotiated the armistice with the Allies two months later.

Answer: Pietro Badoglio

4. [Literature: 19th c. French]

Answer these questions about Madame Bovary for the stated number of points each.

A. Madame Bovary has two lovers over the course of the novel. One is a shy law clerk and one is a wealthy landowner. Name them both for 10 points each.

Answer: Leon Dupuis and Rodolphe Boulanger

B. You don't need to read the book to know that Madame Bovary must come to a sordid demise. For a final 10 points, how does Madame Bovary die?

Answer: she poisons herself with arsenic (accept equivalents, but prompt on suicide)

5. [Fine arts: painting]

Here's a question that will test your knowledge of history--art history that is. Given a painting, name the artist for five points each.

A. The 3rd of May 1808: The Execution of the Defenders of Madrid

Answer: Francisco Goya

B. Washington Crossing the Delaware

Answer: Emanuel Leutze

C. Liberty Leading the People (La Libert guidant le peuple)

Answer: Eugene Delacroix

For the final fifteen points, all or nothing, arrange the paintings according to the year in which they were painted from earliest to latest.

Answer: The 3rd of May 1808: The Execution of the Defenders of Madrid 1814

Liberty Leading the People (La Libert guidant le peuple) 1830

Washington Crossing the Delaware 1851

6. [Science: astronomy]

Identify the astronomically related space craft from descriptions, for 15 points each:

A. It was launched February 17, 1996 aboard a Delta-II rocket and was designed by Johns Hopkins University for NASA as one of the first low-cost spacecraft through the Discovery Program. In July, 1997, it passed by Mathilde on its way to a rendezvous with Eros, one of the largest of the study objects.

Answer: NEAR (Near Earth Asteroid Rendezvous)

B. This orbiter was launched in November, 1989, carrying three instruments: a Far Infrared Absolute Spectrophotometer (FIRAS), a Differential Microwave Radiometer (DMR), and a Diffuse Infrared Background Experiment (DIRBE). These instruments compared the spectrum of the microwave background to a pure blackbody spectrum and measured the cosmic microwave background to a precision of 0.005%, lending much support to the Big Bang theory.

Answer: COBE (Cosmic Microwave Background Explorer)

7. [History: 20th c. Hungary]

Name these Hungarian leaders of the twentieth century, none of whom are Imre Nagy, for 10 points each.

A. A friend of Lenin's, he used Soviet funds to install a short-lived Communist state in Hungary in 1919.

Answer: Bela Kun

B. Under his rule Hungary became a Soviet satellite immediately after World War II.

Answer: Matyas Rakosi

C. In 1990, his Hungarian Democratic Forum soundly defeated the Hungarian Socialist Workers' Party in Hungary's first free elections since World War II.

Answer: Jozsef Antall

8. [Literature: American]

Identify these owners of Uncle Tom from Harriet Beecher Stowe's novel Uncle Tom's Cabin for 10 points each.

A. This Kentucky gentleman, Tom's original master, is forced to sell him to pay off a debt to a slave trader, who takes Tom south.

Answer: Mr. Shelby

B. Uncle Tom is next sold to a New Orleans gentleman who employs Tom as a driver. This owner is so impressed by Tom that he decides to set him free, but is killed before getting a chance to do so.

Answer: Augustine St. Clare

C. Upon St. Clare's death, Tom is finally sold as a field hand to this brutish master, who eventually whips and beats him to death.

Answer: Simon Legree

9. [Pop culture: recent film]

Recognizing a huge potential market, Hollywood film studios are beginning to try to appeal to the Hispanic community. Identify these Latina actresses for 10 points each.

A. She played the title role in the biopic "Selena" and stars opposite George Clooney in the 1998 movie "Out of Sight."

Answer: Jennifer Lopez

B. This Welsh-born actress stars as Elena Montero in the 1998 film "The Mask of Zorro," her first major Hollywood role.

Answer: Catherine Zeta-Jones (prompt on partial name)

C. She played the love interest in John Sayles' 1996 film "Lone Star," and will appear with Jackie Chan in "Rush Hour," to be released later in 1998.

Answer: Elizabeth Peña

10. [Fine arts: comic opera]

Name the following Gilbert and Sullivan operas from brief descriptions for ten points each.



A. One of the two newly married title characters is the King of Barataria, but since no one knows which one, they leave their wives to rule Barataria jointly.

Answer: The Gondoliers, or The King of Barataria

B. Like all the other village lads, Robin Oakapple loves Rose Maybud, but upon receiving the title of Baronet of the title castle, he must commit one major crime a day or die in agony.

Answer: Ruddigore, or The Witch's Curse

C. Most of the music for this 1871 opera has been lost. In it, the Gods are old and tired of ruling Olympus and leave for vacation while a group of travelling actors take their place.

Answer: Thespis or The Gods Grown Old

11. [Philosophy: 19th century]

Identify the authors of these philosophical tracts, for 5 points each plus a 5 point bonus for all correct.

A. Logical Investigations

Answer: Edmund Husserl

B. Being and Time

Answer: Martin Heidegger

C. Being and Nothingness

Answer: Jean-Paul Sartre

D. Phenomenology of Mind

Answer: Georg Wilhelm Friedrich Hegel

E. Phenomenology of Spirit

Answer: Georg Wilhelm Friedrich Hegel

12. [Current events: Nigerian politics]

Indonesia isn't the only country that has had a long-entrenched military ruler fall from power in 1998. For 10 points each, answer these questions about the recent political developments in Nigeria.

A. This general seized power in a 1993 coup and ruled Nigeria ruthlessly until unexpectedly dying in his sleep in June.

Answer: Sani Abacha

B. He was jailed for treason in 1994 after apparently winning Nigeria's presidential election. His suspicious death in captivity days before his expected release sparked rioting throughout the country, though a team of international doctors has concluded he died of natural causes.

Answer: Moshood Abiola

C. This former chief of defense staff had never held high political office before coming to power upon Abacha's death.

Answer: Abdulsalaam Abubakar

13. [Sports: soccer]



The goalkeeper in soccer can be either the hero or the goat. Identify these goalkeepers from the 1998 World Cup, for 10 points each.

A. Though considered one of the best in the world, this Spanish goalkeeper took the blame when he gave up two late goals to give Nigeria the 3-2 victory. As a result, Spain failed to advance out of the first round.

Answer: Andoni Zubizarreta

B. Though he did not score a much-anticipated first World Cup goal by a keeper, this flamboyant goalie for Paraguay led his team into the Round of 16, finally losing to France on Laurent Blanc's ``golden goal" minutes before the end of the second overtime period.

Answer: Jose Luis Chilavert

C. Though often criticized as the weak link on Brazil's all-star team, he came up with two huge saves in the penalty kick shootout against the Netherlands in the semifinals, and was the hero in 1994 when Brazil won the final against Italy in a shootout.

Answer: Taffarel

14. [History: European aristocracy]

How well do you know the aristocracy of Europe? Identify these aristocratic groups for 10 points each.

A. They were the nobles of Russia, against whom the Czars traditionally struggled for power. They were hunted down by the secret police of Ivan the Terrible and tortured by Peter the Great.

Answer: boyars

B. They were the conservative militaristic nobles of early modern Germany, exemplified by Bismarck, who shared their names with a group of Luftwaffe airplanes.

Answer: junkers

C. All the aristocracy of Poland, including the king, belonged to this single non-hierarchical rank of knights.

Answer: szlachta

15. [Geography: Iberian rivers]

Identify these rivers of the Iberian peninsula for 10 points each.

A. Rising in eastern Spain 150 km from the Mediterranean coast, it flows over 1000 km west/southwest across Spain and Portugal before emptying into the Atlantic near Lisbon.

Answer: Tagus or Tajo or Tejo

B. This second longest river rises in the Cantabrian mountains in northern Spain and flows southeasterly to the Mediterranean coast between Barcelona and Valencia. Its name is related to that of the peninsula.

Answer: Ebro (prompt on: Iberus)

C. The major river of southern Spain, it flows past Cordoba and Seville before emptying into the Gulf of Cadiz.

Answer: Guadalquivir

16. [Science: chemistry]

Identify the elements from the description, for 10 points each.

A. The lightest metal on the periodic table to exist in nature in its pure form, it was named after an island in the Mediterranean.

Answer: copper

B. It is the active metal in the protein chlorophyll.

Answer: magnesium

C. It is the active ingredient in some shampoos; but this element plays a more crucial role in electronics, due to its photoconductive property that when exposed to light, its resistivity decreases.

Answer: selenium

17. [Social science: anthropology]

Identify these terms related to European megalithic sites, for 10 points each.

A. From the French, it is a prehistoric monument consisting of a single tall upright stone.

Answer: menhir

B. A structure made up of three stones: two uprights and a horizontal lintel, such as those found within the sarsen horseshoe at Stonehenge.

Answer: trilithon

C. A simple burial chamber with two or more upright stones and one or more capstones.

Answer: dolmen or cromlech

18. [Literature: British]

Identify the author from works (30-20-10):

30: Poems "Cities and Thrones and Powers", and "For All We Have and Are."

20: Stories "Stalky & Co." and "Baa Baa, Black Sheep"

10: Novels Kim and Captains Courageous

Answer: Joseph Rudyard Kipling

19. [History: U.S. Civil War]

Identify these battles of the U.S. Civil War, for 15 points each. A. From December 11-15, 1862, Federal troops under Ambrose Burnside crossed the Rappahannock River and assaulted Marye's Heights near what city?

Answer: Fredericksburg

B. Following the disaster at Fredericksburg, Burnside was replaced by Joe Hooker, who continued the assault on the Fredericksburg area with a flanking attack farther north on the Rappahannock. What following battle, fought from May 1-5, 1863, resulted in the death of Stonewall Jackson?

Answer: Chancellorsville

20. [Sports: golf]

By winning this year's Senior US Open, Hale Irwin joins an elite group of golfers who have won both the regular US Open and the Senior US Open. For five points each, name the other six legendary golfers.

Answer: Jack Nicklaus, Arnold Palmer, Lee Trevino, Gary Player, Billy Casper, Orville Moody

21. [General knowledge/current events]

In June 1998, the U.S. National Institutes of Health adopted guidelines established by the World Health Organization defining obesity.

A. An individual is considered overweight or obese if a parameter defined as the ratio of their weight in kilograms to the square of their height in meters is greater than or equal to a threshold value. For ten points, what is this parameter called?

Answer: body mass index or BMI

B. According to a recent (1998) report by researchers at the Centers for Disease Control\*, the proportions of overweight and obese Americans have increased dramatically in the past two decades. For 5 points each, state the threshold BMI for being overweight and the percentage of the American population that falls into this category.

Answer: overweight BMI = 25, 54% (accept 49-59)

C. For 5 points each, give the threshold BMI that constitutes obesity, and state what percentage of the American population is now considered obese.

Answer: obese BMI = 30, 22% (accept 17-27)

\* K.M. Flegal et al., Int. J. Obes. 22(39), 1998.

22. [Literature: American short stories]

Identify the short story from the opening or closing lines for 15 points each. If you need the author, you'll get 5 points.

A. 15. `` One dollar and eighty-seven cents. That was all. And sixty cents of it was in pennies." 5. O. Henry (William S. Porter)

Answer: The Gift of the Magi

B. 15. `` `It isn't fair, it isn't right,' Mrs. Hutchinson screamed, and then they were upon her." 5. Shirley Jackson

Answer: The Lottery

23. [Science: math]

Identify the fractals created with each of the following algorithms, for 10 points each.

A. For each point  $z$  in the complex plane, iterate the function " $z$  squared plus  $k$ ", where  $k$  is a complex constant characteristic of the fractal.

Answer: Julia set

B. Choose three reference points; Start at an arbitrary point and plot a point halfway between this point and an arbitrary reference point; from this plotted point, repeat.

Answer: Sierpinski triangle (or sieve, or gasket)

C. Recursively subdivide a rectangle, coloring the corners of the created rectangles by averaging the colors of the surrounding points with an arbitrary factor.

Answer: plasma

24. [Religion: New Testament]

Answer these questions about a famous Biblical passage, for 10 points each.

A. This two-word sentence is the shortest verse in the King James Bible.

Answer: Jesus wept.

B. In what book does this passage appear?

Answer: John 11:35

C. For a final 10 points, briefly, why does Jesus weep?

Answer: because Lazarus is dead, and Jesus was not present to save him, and Mary is mourning her dead brother. [accept anything close]