

2000 Terrapin Invitational Tournament - Division 1

Round 5

Questions by Swarthmore A

*Toss-Ups*

1. In 1927 this man led the popular uprising in Shanghai that paved the way for the advancing Nationalist army, and riots following his 1976 death were blamed on Deng Xiaoping, whom he had helped rehabilitate. The longest serving Communist politburo member ever, his moderating influence was instrumental in both putting down Lin Biao's attempted coup and in creating detente with the United States. FTP, name this longtime Chinese premier from 1949-1976.

Ans: Zhou Enlai

2. He has a brother named Cooter, and, although his father's name is Bill his patronymic is Andreievich. He briefly wore a wig to resemble Davy Jones of the Monkees and in 1986 was mistaken for a Soviet spy aboard the naval carrier U.S.S. Enterprise. He was once turned into a dodecahedron, but survived. FTP, name this TV character, created in response to a complaint by Pravda about the lack of Russians in Gene Roddenberry's future.

Ans: Pavel Andreievich Chekov

3. It is bordered on the north by the Babuyan Channel and on the southeast by the San Bernardino Strait. It contains the Cagayan River, its country's longest, and two lakes: Lake Taal and Laguna de Bay. Cities include Lucena, Aparria, and Baguio, and Mindoro in the southwest, but the second-largest city on it is Quezon City. FTP, name the largest island in the Philippines, on which lies the capital Manila.

Ans: Luzon

4. Originally stated in 1742, it is one of Landau's four unattackable problems, and whoever proves it will get a million dollars. If it is true, then every integer is half the sum of the totient functions of two primes. Proven variations of it claim that every even number is the sum of, at most, 300,000 primes, and that every sufficiently large odd number is the sum of, at most, 3 primes. FTP, name this conjecture, the strong version of which says that every even number is the sum of at most two primes.

Ans: Goldbach Conjecture

5. In 1895, he co-wrote *Hero Tales from American History* with Theodore Roosevelt, and he chaired the Republican National Conventions of 1900, 1908, and 1920. Educated at Harvard, he represented Massachusetts in the Senate from 1893 until his 1924 death, and was majority leader and chair of the Foreign Relations committee after 1919. FTP, name this man who led the opposition to the Treaty of Versailles and the League of Nations.

Ans: Henry Cabot Lodge

6. It was produced after two roommates posted a classified ad looking for business ideas, and Martin Scorsese was a crewmember for the film of it. Originally planned for an industrial park in Walkill, the final site became the title of a song by Mountain. Its poster, designed by Arnold Skolnick, billed it as an Aquarian Exhibition, and it featured such groups as the Incredible String Band, Melanie, and Quill. FTP, name this August 1969 event in Bethel, New York.

Ans: Woodstock Festival of Music and Art

7. Commissioned for the Boston Symphony Orchestra, the first movement of this work begins with an andante introduction with rising fourths leading to an allegro vivace folk tune in the brass. The second movement, a scherzo, is described as "games for two people," and the fourth parodies the Nazi march from Shostakovich's 7th symphony. FTP, name this 1945 work written in F acoustic, modeled after the concerto grosso form, by Bela Bartok.

Ans: Concerto for Orchestra

8. After several years teaching in girls' schools in California she moved to New York City, only to find herself jobless for several years. In 1919, she enrolled in the New School for Social Research, and her 1923 Ph.D. thesis from Columbia was entitled *The Concept of the Guardian Spirit in North America*. FTP, name a student of Franz Boas who did her most famous works studying Native Americans, the author of *The*

*Chrysanthemum and the Sword.*

Ans: Ruth Benedict

9. The first exhibition was in a lamp factory, but the group later moved to Berlin before disbanding in 1913 because of disagreements over its purpose. Its violent style was influenced by Jugendstil and Van Gogh, and the displays produced were often brutally deformed, boldly colored subjects in a reaction against Impressionism and Realism. FTP, name this artistic movement founded in 1905 in Dresden by Ernst Ludwig Kirchner and Erich Heckel.

Ans: Die Brücke

10. It began with a bombing of enemy air bases by three US-made planes. Two days later the invasion force, who had been trained in the US, landed at several sites. However, 4 days later, their last stronghold was captured, along with 1100 men. These men would later be returned to the US in exchange for 53 million dollars worth of food and medicine. FTP, name this failed, April, 1961, Kennedy-approved invasion of Cuba.

Ans: Bay of Pigs or Bahia de los Cochinos

11. Born in 1940, this writer cites Brecht, Artaud, and Beckett as his major inspirations. Some of his early dramas such as *Signal Alarm* and *Wild Man* were condemned by his country's government, and *The Other Shore* was banned, causing him to leave his home country for France, where he has lived and worked since. FTP, name this author of *Bus Stop* and *Soul Mountain*, a Chinese expatriate who won the 2000 Nobel prize in literature.

Ans: Gao Xingjian

12. Viruses like the tobacco mosaic virus break this principle because their genetic material is RNA rather than DNA. Retroviruses violate it by using reverse transcriptase to transcribe DNA from RNA. All cellular life, however, has information flow from DNA to RNA and then to proteins, via transcription and translation combined in sequence. FTP, name this principle first stated by Francis Crick, the primary basis of molecular biology.

Ans: central dogma of molecular biology

13. He reigned 67 years, and upon ascending to the throne his first action was to visit Thebes for the great religious festival of Opet. At first a co-regent with his father Seti I, his reign marked a sharp decline in the quality of Egyptian art, as his construction programs placed a premium on speed. Militarily, he waged several campaigns against the Hittites, including a minor victory at Kadesh. FTP, name this pharaoh of the 19th dynasty, builder of Abu Simel and Karnak.

Ans: Ramses II

14. Rather than allowing his private empire to be invaded by the government, the father blows up his mine, wife, son, and the invaders, much to the horror of his daughters. Also present is the Massachusetts prep school student John T. Unger, who had befriended the son Percy Washington and was invited to spend the summer at his family's home in the Montana Rockies. FTP, such is the plot of what short story about lost illusions by F. Scott Fitzgerald.

Ans: The Diamond as Big as the Ritz

15. She is seen as Loko-mata, "the mother of the world", and Jaladhi-ja, or "ocean born". Also associated with good fortune, at the beginning of every universal renewal she is represented by a thousand-petal lotus of pure gold which gives birth to Brahma the Creator. FTP, identify this symbol of creative energy and wife of Vishnu.

Ans: Lakshmi

16. Originally proposed in 1870, anti-Markovnikov forms when hydrogen bromide and peroxides are mixed in a free radical reaction. In other instances such as in the reaction of 1-butene with hydrogen chloride, there will be one product that will be favored, especially during electrophilic addition. FTP, name this rule, which states that the main product in an organic reaction will be the one in which the atom of smallest

molecular weight will add to the carbon with the largest number of hydrogens attached.

Ans: Markovnikoff's rule

17. In *Boating for Beginners*, God is a Frankenstein-esque creation born of a malfunctioning refrigerator. *The Passion* chronicles the adventures of Villanelle, a Venetian slave who is rescued by Henri, a cook from Napoleon's army. Her latest work is entitled *The Powerbook* and explores the relationship between literature and technology. FTP, name this contemporary British author, best known for her first novel *Oranges Are Not the Only Fruit*.

Ans: Jeanette Winterson

18. Born in the town of Birch Tree, his father served as a representative for 14 years before being appointed the 1st US ambassador to Sierra Leone under JFK. Elected a municipal court judge in Rolla, he and his chief aide Chris Sifford were running for the senate seat held by freshman senator John Ashcroft before he was abruptly succeeded by Roger Wilson. FTP, identify this Missouri governor killed in an October 2000 plane crash.

Ans: Mel Carnahan

19. Since the native field in which it lies is scalar, it must have an intrinsic angular momentum, equal to zero. An explanation for why the W and Z particles are heavy in mass while the electromagnetic carrier, or photon, is of zero mass, there is little idea of its mass except that it probably cannot be more than 1 tera electron volt. FTP, name this theoretical particle involved in endowing mass on other elementary particles.

Ans: Higgs boson

20. While leading a free life in the Latin Quarter he contracted a venereal disease from Squint-Eyed Sarah which would later kill him. De Quincey's *Confessions of an English Opium-Eater* inspired his self-analytical work *The Artificial Paradise*; he became famous in the 1840's for his two booklets of art criticism and the works *Fireworks* and *My Heart Laid Bare*. FTP, name this translator of Edgar Allan Poe who also wrote *The Flowers of Evil*. Ans: Charles Pierre Baudelaire

21. Destination of the Operation Pedestal Convoy, the entire population won the George Cross during WWII, twenty years before George Olivier became prime minister. A stop on Paul's journey to Rome, it was originally a Greek colony before in 1522, the Knights of Saint John resettled here and beat off the Ottomans. FTP, name this island in the central Mediterranean with capital at Valletta.

Ans: Malta

## Bonuses

1. FTPE, name these people who got electoral votes for vice president in the 20th century.

a. One of Harry Byrd's electors in 1960 voted for Barry Goldwater for vice president, but the other 14 electors picked this man for vp.

Ans: J. Strom Thurmond

b. This man received 39 vice-presidential votes from the South when he ran alongside Strom Thurmond in 1948.

Ans: Fielding L. Wright

c. One West Virginia elector voted for Lloyd Bentsen for president and this man for vice president in 1988. Ans: Michael Dukakis

2. Identify these authors of colonial Africa from works on a 10-5 basis. (10) *The Fall*, *The Rebel*

(5) *The Stranger*

Ans: Albert Camus

(10) *The Good Terrorist*

(5) *The Golden Notebook*

Ans: Doris Lessing

(10) *Seven Gothic Tales*

(5) *Out of Africa*

Ans: Isak Dinesen (accept Baroness Karen Blixen)

3. Name the Pre-Raphaelite painter from works FTPE.

a. *Proserpine*, *Sappho*, *Flaming June*

Ans: Dante Gabriel Rosetti

b. *The Lady of Shallott* (3 versions), *Miranda*, *La Belle Dame Sans Merci*

Ans: John Waterhouse

c. *The Last Sleep of Arthur in Avalon*, *The Golden Stairs*, *Love and the Pilgrim*

Ans: Edward Burne-Jones

4. FTPE, given the astronomical feature, name the constellation in which it is located.

a. The first discovered black hole.

Ans: Cygnus

b. The first discovered extrasolar planet.

Ans: Pegasus

c. The Sun at the present time.

Ans: Scorpius

5. Given a European capital, name the river that flows through it, FTPE.

a. Budapest

Ans: Danube River

b. Riga.

Ans: Daugava River or Western Dvina River

c. Berlin.

Ans: Spree River

6. FTPE, name these people whose birthdays are October 28th.

a. This creator of ER and two-time Edgar-winner once received a B for submitting a George Orwell essay in a Harvard English class, but is best known for such books and movies as *The Andromeda Strain* and *Jurassic Park*.

Ans: Michael Crichton

b. This American, born in 1965, took a leave from law school to figureskate for awhile and ended up winning a silver medal in Albertville.

Ans: Paul Wylie

c. She has received more Oscars than any other woman. In addition to doing movies with Hitchcock and De Mille, she designed the U.S. Coast Guard's female uniforms.

Ans: Edith Head

7. FTPE, name these algorithms.

a. Because this algorithm uses a pivot element to partition an array, it sorts array in "n squared" time in the worst case, but "n log n" time on average.

Ans: quicksort

b. This algorithm was the first to improve matrix multiplication, running in less than "n to the 2.81 power" time.

Ans: Strassen's algorithm

c. Although this single-source shortest path algorithm is slower than Dijkstra's algorithm, it can handle graphs with negative weights.

Ans: Bellman-Ford algorithm

8. FTPE, name the following cities from Indian history.

a. Capital of a Muslim Empire in the 13th and 14th centuries, it was destroyed by Tamerlane before being rebuilt by Shah Jahan as the capital of the Mogul Empire.

Ans: Delhi

b. Now the capital of Bihar state, it was the capital of both the Maurya and Gupta empires.

Ans: Pataliputra or Patna

c. In northwestern Bihar, it was the birthplace of Mahavira and was the capital of the Licchavi Republic. A center of trade in the 6th century BC, it was probably frequented by the Buddha.

Ans: Vaishali

9. Identify the economist from works, 30-20-10.

(30) *An Inquiry into the Nature of Peace and the Terms of Its Perpetuation, Imperial Germany and the Industrial Revolution*

(20) *The Instinct of Workmanship and the State of the Industrial Arts, The Theory of Business Enterprise*

(10) *The Theory of the Leisure Class*

Ans: Thorstein Veblen

10. FTPE, name the youngest children of these biblical couples.

a. Adam and Eve.

Ans: Seth or Shet

b. Jacob and Leah.

Ans: Dinah

c) Jacob and Rachel.

Ans: Benjamin or Benyamin

11. Aldous Huxley works FTPE.

a. It concerns the conversation of the Wimbush couple, Mr. Scogan, and the ineffectual young poet Denis Stone.

Ans: *Crome Yellow*

b. Jeremy Pordage discovers an 18th century earl using a rejuvenating system rediscovered by Jo Stoyte; the two go to England, and find the earl living as a 200-year-old ape.

Ans: *After Many a Summer Dies the Swan*

c. This essay describes the effects of the drug mescaline, comparing the ecstatic and depressed states to the two title abodes.

Ans: *Heaven and Hell*

12. FTPE, name these scales for measuring natural disasters.

a) This scale, designed in 1902, measures an earthquake by using observations by witnesses of damage.

Ans: Modified Mercalli Scale

b) This scale ranks hurricanes into five categories, depending on wind speed.

Ans: Saffir-Simpson Scale

c) This scale ranks tornados from an F0 "gale tornado" to an F6 "inconceivable tornado." An F6 would likely never be detected because of surrounding F4's and F5's.

Ans: Fujita Scale

13. Identify the following composers of suites for string orchestra FTPE.

a. His *St. Paul's Suite* was written for the St. Paul's School for girls in London, with the last movement fusing the two folk songs "The Dargason" and "Greensleeves".

Ans: Gustav Holst

b. Also known as Philip Heseltine, this neighbor of Frederick Delius is known almost exclusively for his *Capriol Suite* for string orchestra.

Ans: Peter Warlock

c. Among his works for string orchestra include *Five Variants of Dives and Lazarus* and *Variations on a Theme by Thomas Tallis*.

Ans: Ralph Vaughn Williams

14. Identify these 20th century Austrian leaders FTPE.

a. Involved in questionable activities during WWII including the shooting of Yugoslav partisans, he served as foreign minister of Austria from 1968-70 and as president from 1986-91.

Ans: Kurt Waldheim

b. As chancellor he tried to create an authoritarian state by dismissing Parliament, but he miscalculated and in 1934 was murdered by the Nazis.

Ans: Engelbert Dollfuss

c. His inclusion of Joerg Haider's far-right Freedom Party in his government coalition in 1999 provoked public outcry.

Ans: Wolfgang Schuessel

15. 5-10-15 given the clues, identify the trains.

(5) Its major accomplishment was uninterrupted service across many international frontiers. Begun in 1883, it featured luxurious Wagon-Lits (VAGON-lees) sleeping cars on its journey from Paris to Istanbul.

Ans: Orient Express

(10) Once the longest non-stop service in the world, it ran from London to Edinburgh. Run by the London & North Eastern Railway, a steam train on this route was the first to break 100 miles per hour.

Ans: Flying Scotsman

(15) Coupled with Shasta, this red, orange and black train was Southern Pacific's service from Oakland to Portland, though the more famous trains of the name ran between the Bay Area and Los Angeles.

Ans: Daylight Express

16. Nero wasn't the only ancient to have problems with fire. Identify the following people from a brief description FTPE.

a. Legend says that he disappeared into the flames of Mt. Etna after the volcano threw up one of his bronze slippers.

Ans: Empedocles

b. The citizens of Crotona, Italy set afire the school of this brotherhood leader and teacher of Empedocles.

Ans: Pythagoras

c. In 356 BC, he burned down the great temple of Artemis at Ephesus for the sole purpose of immortalizing himself.

Ans: Herostratus

17. FTPE, given the year, name the World Series MVP pitcher.

a. 1999

Ans: Mariano Rivera

b. 1991

Ans: Jack Morris

c. 1956

Ans: Don Larsen

18. Answer the following related questions about organic chem, FTPE.

a) This is the general name given to a functional group with a carbon-oxygen double bond.

Ans: carbonyl group

b) This is the specific name for a molecule in which the carbon from the carbonyl is singly bounded to two other carbons.

Ans: ketone

c) This is the simplest compound containing a ketone.

Ans: propanone or acetone

19. Given a battle from the War of Northern Aggression, give the opposing generals, Yankee general first, FTPE.

a. Chattanooga.

Ans: William S. Rosecrans and Braxton Bragg

b. Pittsburg Landing.

Ans: Ulysses S. Grant and Albert Sidney Johnston

c. Second Manassas

Ans: John Pope and Robert E. Lee

20. Identify the Shakespeare play from quotes FTPE.

a. "Arise, dissembler: though I with thy death, / I will not be thy executioner."

Ans: *Richard III*

b. "There is a tide in the affairs of me, / Which, taken at the flood, leads on to fortune."

Ans: *Julius Caesar*

c. "The first things we do, let's kill all the lawyers."

Ans: *Henry VI, Part 2*