

2000 Terrapin Invitational Tournament - Division 1
Playoff #2 - Round 13
Questions by Shaun Hayeslip

Toss-Ups

1. The black activist Alton Scales persuades the title character to support the candidacy of Wally O'Hara, a corrupt local politician. Focusing on the rivalry between Iris and the model-turned-prostitute Gloria, the wife leaves the title character to act in TV commercials. However, they are later reconciled after the suicide of Gloria. FTP, name this 1964 drama in 3 acts by Lorraine Hansberry.

Ans: *The Sign in Sidney Brustein's Window*

2. During the eight years he spent in Germany, he was a pupil of Karl Klingler, and Albert Einstein served as his guardian. Born in Nagoya, Japan, he was so inspired by the violinist Misha Elman that he began to teach himself to play the same instrument. John Kendall is widely credited for introducing his work to America, the main component of which is the Mother-Tongue approach, which is also known as Talent Education. FTP, name this Japanese concert violinist and innovator of a method for teaching young children through repetitive listening.

Ans: Shinichi Suzuki

3. Robert K. Merton studied its causes, finding it most severe in those who do not have acceptable means for achieving their goals. The only regulations thus come from the desire for personal advantage and the fear of punishment, which can lead to delinquency, crime, and possible suicide. FTP, name this sociological term referring to a condition of instability resulting from a lack of standards, coined by Emile Durkheim.

Ans: anomie

4. Russ Snyder was tagged out in the first inning on July 30, 1968; 43 years earlier, Rogers Hornsby had been tagged out to end a game against the Pirates. The Waner brothers were also involved in one against the Cubs, as Paul lined to shortstop Jim Cooney and brother Lloyd was doubled off of second base. FTP, these players were all involved in what baseball play, first performed by shortstop Neal Ball in 1909 and most recently by Randy Velarde on May 29, 2000 against the New York Yankees.

Ans: unassisted triple play

5. A man named Francis relates a story about his best friend Alan, who is murdered shortly after being told he would only live until dawn. The somnambulist Cesare is a primary suspect, but after he abducts Alan's fiancée Jane the title character is tricked into entering a mental asylum. FTP, this is the plot of what 1920 flick starring Werner Krauss and directed by Robert Wiene.

Ans: *The Cabinet of Dr. Caligari*

6. Word did not reach the public until journalist Seymour Hersh published a story detailing his conversations with ex-G.I. Ron Ridenhour. The lieutenant in charge was an unemployed college dropout who testified during his trial that he had only been acting on orders from his superior Captain Ernst Medina. FTP, name this "search and destroy" mission involving the Charlie Company 11th Brigade, Lieutenant William Calley, and 300 dead civilians in the Son My district of Vietnam.

Ans: My Lai

7. This one-time haberdasher visited Peter the Great in Russia and showed him the circulation involved in the tail of an eel. He was prone to examining his own feces when they were "looser than ordinary", but he also described microscopic bacteria and protozoa which he termed "animalcules". FTP, name this Dutchman who was able to improve the quality of microscopy by grinding his own lenses.

Ans: Anton von Leeuwenhoek

8. Discovered in 1786 by the namesake Russian navigator, they are now controlled by the US Department of the Interior. St. Paul, St. George, Otter, and Walrus islands are the largest of the group, and the native Aleuts have been restricted in their hunting of the most prevalent animals. FTP, name this island chain in southwestern Alaska also known as the Fur Seal islands.

Ans: Pribilof Islands

9. Their Techno-Trousers thwart the efforts of the Penguin, aka Feathers McGraw, and in 1990 they travelled to the moon in *A Grand Day Out*. Both residents of 62 West Wallaby Street, in *A Close Shave* their fickle creation the Knit-o-Matic sheers Shaun the sheep while the malfunctioning porridge cannon is used to stop the nefarious Preston. FTP, name this human-dog combo, the creation of British claymation expert Nick Park.

Ans: Wallace and Gromit

10. The broad provisions came under attack in 1984 in *U.S. v. Leon*, and the Supreme Court ruled that anything obtained "in good faith" was ok due to the unacceptable social cost. The "security of one's privacy against arbitrary intrusion by police" was maintained in *Wolf v. Colorado*, and later it was applied to all criminal proceedings in *Mapp v. Ohio*. FTP, name this principle in which any evidence obtained by police in violation of the Fourth Amendment could not be used in trial.

Ans: exclusionary rule

11. Awarded the Pulitzer Prize for fiction in 1938, it was later dramatized by the author and George S. Kaufman. Detailing the life of a conventional, pathetic Boston resident, it is told by the polished annotator Horatio Willing. FTP, identify this word-subtitled "A Novel in the Form of a Memoir", by John P. Marquand.

Ans: *The Late George Apley*

12. Drawn up hastily due to pressures from land developers, the inconsistencies between the English and native versions lay at the heart of later disputes. The three articles include full governance by the queen and full possession of the native lands, and despite the refusal of a few chiefs to sign, representative William Hobson proclaimed full British sovereignty in 1840. FTP, name this New Zealand treaty which defined future European - Maori relations.

Ans: Treaty of Waitangi

13. The main proponents drew strength from closeness with nature and the importance of ancestry in the context of cultural heritage. Begun as a protest against the assimilation of non-Western societies during WWII and French colonial rule, important members included Aime Césaire (ay-MAY SA-zare), Léon Damas (duh-MAH), and the first president of Senegal, Léopold Senghor. FTP, identify this post-war literary movement that concentrated on African and Caribbean writers.

Ans: Négritude

14. The original book was discovered at the beginning of the 18th century by Francisco Jimenez, a parish priest in the highlands of Guatemala. Chronicling the events of 7-Jaguar Deer and the events at the ball court, it relates the creation of man, the actions of the gods, and the origin and history of the Quiché (KEE-chay) people. FTP, name this source of knowledge about the ancient Mayan mythology and culture.

Ans: Popol Vuh

15. If the mass of the solute is known, the number-average molecular weight can be calculated by dividing the mass of the solute by the number of particles present. Of course, this only holds for solution properties such as freezing point, boiling point, osmotic pressure, and solvent vapor pressure. FTP, name this term used to describe such a property, that is dependent on the number of solute particles present but not the chemical properties.

Ans: colligative properties

16. It was commissioned by the merchant Gabrielle Vendramin, who owned it when it was first documented in 1530. Adam, dressed in contemporary Venetian clothes, has a relaxed posture, and Eve suckles her first-born Cain, while broken columns and a barely-visible snake reflect the presence of Original Sin. FTP, identify this painting by Giorgione in which a foreboding thunderstorm is present over the garden of Eden.

Ans: The Tempest

17. As a child he overcame a serpent threatening his friends, thus earning the name meaning "great hero". Living circa 500 BC, he taught that the individual soul was free to make its own escape through an act of self-renunciation, and in contrast to the Buddha, he saw the soul as bound by karmic matter. FTP, name this non-violent religious figure, the last savior of Jainism.

Ans: Mahavira

18. It is equal to the activity for a gas, as the standard state is chosen such that it is equal to 1. For a liquid or solid it is equal to that of the vapor with which it is in equilibrium, and for a component of a mixture, the derivative of the natural log of this is equal to $d\mu/RT$, where μ is the chemical potential. FTP, name this thermodynamic function used in place of partial pressure for reactions involving real gases and mixtures, represented by the symbol f .

Ans: fugacity

19. He served under a Thracian prince in Bulgaria and under Spartan command in Asia Minor where he met the king Agesilaus II. Present at the Battle of Coronea, he wrote *Ways and Means* to advocate a policy of peace for Athens and the Greek states. FTP, name this Greek author of the *Anabasis*, who served under the Persian prince Cyrus and had to lead a force of Ten Thousand to the Black Sea in 400 BC.

Ans: Xenophon

20. This scientist showed that the spectrum of beta particles emitted by radioactive elements was continuous and discovered deviation from the r^{-2} law for deep Rutherford scattering. With Goldhaber, he determined the structure of the deuteron, but he won the Nobel Prize by repeating the earlier experiments Frédéric and Irène Joliot-Curie by exposing beryllium to alpha particles. FTP, name this man who won the prize in 1935 for discovering the neutron.

Ans: James Chadwick

21. His heroes typify decadence of the turn of the century and have qualities of the ubermensch, such as in his 1889 *The Child of Pleasure*. His *The Flame of Life* is based on his liaison with the actress Eleonora Duse, but he is probably better known for the plays *Francesca da Rimini* and *La Gioconda*. FTP, name this writer and Italian nationalist who captured the port city of Fiume in 1919 in defiance of the Treaty of Versailles.

Ans: Gabrielle D'Annunzio

Bonuses

1. Identify these things from fluid mechanics FTPE.

a. This law relates that the pressure acting perpendicular to all planes in the fluid is the same irrespective of their orientation.

Ans: Pascal's law

b. This value is related as the inverse of the density of the fluid times the partial pressure of the density with respect to the local pressure at constant temperature.

Ans: isothermal compressibility

c. For an incompressible fluid at a speed significantly less than the speed of sound, the behavior of the fluid can be represented by these equations; they were first proposed by Euler before the term for the shear viscosity was later added.

Ans: Navier-Stokes equations

2. Given two notes of a chord and its type, identify the third note.

a. Major: D, A

Ans: F-sharp

b. Minor: F, A-flat

Ans: C

e. Diminished: B, D

Ans: E

3. Identify these civil rights activists on a 15-5 basis.

(15) Graduating from Alcorn State University, he and his brother Charles settled in Philadelphia, Mississippi as local affiliates of the NAACP.

(5) His 1963 murder by Byron de la Beckwith made him a martyr for the civil rights movement.

Ans: Medgar Evers

(15) He graduated with a B.S. in mathematics from Alabama State University; his autobiography *And the Walls Came Tumbling Down* appeared in 1989.

(5) A chief associate for Martin Luther King, Jr., he succeeded King as president of the SCLC and served in that capacity until 1977.

Ans: Ralph Abernathy

4. Identify these early psychological perspectives FTPE.

a. Emphasizing introspection via self-observation, this perspective led by Wilhelm Wundt and Edward Titchener analyzed consciousness as its constituent components.

Ans: structuralism

b. An offshoot of functionalism, this school of thought involving William James and John Dewey looked at the practical uses of consciousness and the relationship between an organism and its environment.

Ans: pragmatism

c. Led by Hermann Ebbinghaus and Edward Lee Thorndike, this school of thought analyzed learning via mental connections between two events or two ideas.

Ans: associationism

5. In 1962, a British scientist working at the University of British Columbia reasoned that it would be possible to react xenon, which has a low ionization energy, with highly reactive chemicals to generate compounds using previously inert gases.

a. Name the scientist involved in this experiment.

Ans: Neil Bartlett

b. Neil Bartlett reacted xenon with this highly reactive compound, which includes element #78, to generate the xenon containing compound.

Ans: PtF_6 or platinum hexafluoride

c. Since xenon has been used in conjunction with platinum hexafluoride to form complex compounds, one other supposedly inert gas has been used in combination with fluoride ions. Name it.

Ans: krypton

6. Identify these types of weaponry FTPE.

a. With the capability of firing up to 3000 rounds per minute if externally powered, it was the first hand driven machine gun to solve the problems of loading, reliability, and the firing of sustained bursts.

Ans: Gatling gun

b. Constructed by adding a tube to the barrels of 380 mm naval guns, these long-range cannons were produced by Krupp and the Germans during WWI.

Ans: Paris gun [NOTE: Big Berthas were 420 mm]

c. Adopted by the US Army during WWII, these M9A1 Rocket Launchers received their current name after a crude horn used by radio comedian Bob Burns.

Ans: bazooka

7. Answer the following related questions FTPE.

a. The villain Manfred inhabits the title abode before his son is crushed to death by a giant helmet in this Gothic novel.

Ans: The Castle of Otranto

b. Also known as the Duke of Otranto, this French minister of police and master of political intrigue was known for his design of the espionage system in France in the 18th and early 19th centuries.

Ans: Joseph Fouche (foo-SHAY)

c. In addition to his biographical study of Joseph Fouche, this Austrian biographer wrote *Romain Rolland*, *Maria Stuart*, and *Jeremias* before his suicide in 1942.

Ans: Stefan Zweig

8. Identify these techniques used in the sequencing and analysis of DNA FTPE.

a. Fragments of DNA, when cut by restriction enzymes, will separate by size due to their negative charge when subjected to an electric field.

Ans: gel electrophoresis

b. This method for sequencing DNA, named after the [1980 Nobel prize winner in physiology or medicine], involves the use of dideoxynucleotides to terminate the chain of DNA by interfering with normal synthesis.

Ans: Sanger method

c. In opposition to the Sanger method, this method of sequencing DNA involves the use of nonprotein chemicals to cleave normal DNA at each of the specific bases present.

Ans: Maxam-Gilbert method

9. Identify these Henry James works FTPE.

a. The old school friend of Maggie, Charlotte Stant, marries her millionaire father Adam. It is generally considered to be James' most difficult work.

Ans: The Golden Bowl

b. Set in a fashionable district of NYC, it was dramatized as *The Heiress* and filmed in 1949. It concerns the courtship of Catherine Sloper by Morris Townsend.

Ans: Washington Square

c. Based on a story concerning Byron's mistress, it concerns the refusal of a former mistress to allow access to her lover's literary work.

Ans: The Aspern Papers

10. Answer these questions that have something to do with Albania FTPE.

a. In this Mozart opera, Alfonso bribes Despina to help introduce his Albanian friends, who are actually Ferrando and Guglielmo, to the sisters Dorabella and Fiordiligi.

Ans: Così fan tutte

b. An Albanian military officer, he was sent to Egypt with a Turkish force where he supported the

Egyptians in their struggle with the Mamelukes.

Ans: Muhammed Ali

c. The by-name of George Kastrioti, this national hero of the Albanians staved off 13 Turkish invasions in the mid-1400s.

Ans: Skanderbeg

11. Identify these writers 5-10-15.

(5) *The Mint, Seven Pillars of Wisdom*

Ans: T.E. Lawrence "of Arabia"

(10) *A Sentimental Journey, Tristram Shandy*

Ans: Laurence Sterne

(15) The poem collections *Pictures of the Gone World, A Coney Island of the Mind*

Ans: Lawrence Ferlinghetti

12. Identify these alchemists FTPE.

a. Also known as "the Theban", this 3rd century AD alchemist discovered that sulfuric acid is a solvent of metals and liberated oxygen from mercuric oxide.

Ans: Zosimus

b. This Roman emperor, who ruled from AD 37-41, instituted experiments for producing gold from orpiment, a sulfide of arsenic.

Ans: Caligula

c. He established the role of chemistry in medicine in his *The Great Surgery Book*, but he is better known by his real name, Philippus Aureolus Theophrastus Bombastus von Hohenheim.

Ans: Paracelsus

13. Answer these questions concerning the expeditions of Thor Heyerdahl FTPE.

a. In 1947, Heyerdahl and a small crew demonstrated the possibility that Polynesians may have originated from South America by sailing on this primitive raft.

Ans: Kon-Tiki

b. In this Egyptian reed boat facsimile, Heyerdahl crossed the Atlantic Ocean from Morocco to within 600 miles of Central America.

Ans: Ra

c. Late in 1977, Heyerdahl embarked on this expedition from Iraq to Pakistan to the Red Sea in an effort to show the influence of the ancient Sumerians in the Middle East.

Ans: Tigris expedition

14. Stuff from the *Nibelungenlied* FTPE.

a. He is the hero, who sets out to woo the famous beauty Kriemhild.

Ans: Siegfried

b. The queen of Iceland vows to marry whomever can best her at hurling a spear and jumping, but she is duped by a courtier with the help of Siegfried. Name both the queen and her courtier FTPE.

Ans: Brunhilde, Gunther

c. When this last surviving Burgundian refuses to reveal where the treasure is hidden, he is killed by Kriemhild.

Ans: Hagen

15. Name these African leaders FTPE.

a. He established an authoritarian government in the Democratic Republic of Congo, and continued his corrupt rule after unopposed elections in 1970, 1977, and 1984.

Ans: Mobutu Sese Seko

b. He was put under house arrest by General Mobutu, and upon escaping, he was handed over to the Katangan rebels, who promptly murdered him.

Ans: Patrice Lumumba

c. In 1965, he was ousted by Mobutu in a bloodless coup, four years after ousting Patrice Lumumba.

Ans: Joseph Kasavubu

16. Name the architects of these Roman fountains FTPE.

a. Trevi Fountain

Ans: Niccolo Salvi

b. Piazza Navona fountain

Ans: Gianlorenzo Bernini

c. San Carlo alle Quattro Fontane

Ans: Francesco Borromini

17. Identify these geographical features from SE Asia.

(5) Formerly known as Batavia, this capital lies on an alluvial plane where it is easily flooded during the rainy season.

Ans: Jakarta

(10) One of the Lesser Sunda Islands, this island east of Java has a highest point of Mount Agung and reportedly the most beautiful women in the world.

Ans: Bali

(15) Located between the Gulf of Thailand and the Andaman Sea, this narrow neck of southern Myanmar and Thailand connects the Malay Peninsula to the Asian mainland.

Ans: Isthmus of Kra

18. 30-20-10 name the writer from works.

(30) *Hello and Goodbye, The Island*

(20) *Sizwe Banzi is Dead, Blood Knot*

(10) *Master Harold...and the Boys*

Ans: Athol Fugard

19. Answer these questions about the K-T boundary FSNP.

a. Since the early 1980s, scientists have focused on the asteroid theory of mass extinction put forward by this physicist and his son Walter.

Ans: Luis Alvarez

b. In the 1970s, two rare metals were discovered to have a spike in concentration at the stratigraphic layer marking the end of the Cretaceous period. For five points each name the metals, and for additional points name the Italian site the data from which Walter Alvarez used to support the asteroid extinction theory.

Ans: iridium, osmium
Gubbio, Italy

20. Founded in 1916, it was a revolutionary socialist group derived from an offshoot of the Social Democratic Party.

a. FTP, name this group led by Karl Liebknecht.

Ans: Spartacus League

b. For another ten points, Karl Liebknecht help lead the Spartacus League with the help of this other revolutionary.

Ans: Rosa Luxemburg

c. Finally, Luxemburg and Liebknecht were arrested in Berlin and murdered by members of this conservative group, who had seized control of the city's police headquarters.

Ans: Freikorps