

TOSSUPS – VANDERBILT**SWORD BOWL 2005 -- UT-CHATTANOOGA**

Questions by Matt Keller, Paul Gauthier, Tim Hildebrand, Katy Peters, and Sarah Tiggelaar

1. It opens with a line from the *Satyricon* of Petronius describing the Cumaean Sybil and is dedicated to Ezra Pound. It is divided into five sections: The Burial of the Dead, A Game of Chess, The Fire Sermon, Death by Water, and What the Thunder Said. Its second line refers to Lilacs out of the dead land. FTP identify this T.S. Eliot poem that opens with the line "April is the cruellest month."

Answer: The Waste Land

2. His first stint into politics was on the Sanibel City Council in 1974, and he was elected to Congress out of Florida in 1988, where he had been serving ever since until the end of last year. He was the chairman of the House Intelligence Committee for eight years and joined with Bob Graham to lead the inquiry into the intelligence failings surrounding 9/11. Although he admitted in a deleted scene from *Fahrenheit 9/11* that he didn't have the skills needed for his new job, FTP name this man who was nominated last August by President Bush to head the CIA.

Answer: Porter Goss

3. Its impossibility in real situations is a basis for evolutionary change in natural populations. Its four conditions include the absence of natural selection, gene flow, and mutations, and very large populations in order to eliminate chance. FTP name this principle, which states that allelic frequencies and genotypic ratios will remain constant from generation to generation in sexually reproducing populations, often expressed as $p^2 + 2pq + q^2 = 1$.

Answer: Hardy-Weinberg Principle or Equilibrium

4. Their first incarnation, Kara's Flowers, included Jesse Carmichael, Mickey Madden, Ryan Dussick, and Adam Levine, but their only album flopped. After going to college and picking up James Valentine, their debut album under their current name has gone nearly double platinum, and they were recently nominated for two Grammys. "Sunday Morning" is the latest single off *Songs About Jane* by, FTP, what group whose hits have included "She Will Be Loved", "This Love", and "Harder to Breathe"?

Answer: Maroon 5

5. This Thracean philosopher eventually left his home for Athens, where he befriended Pericles and became renowned for his teaching. The first to refer to himself as a sophist and collect payment for his work, his lessons included rhetoric, grammar, and poetry. However, he is most known for *Truth* and *On the Gods*, which espoused the nonexistence of absolute good or evil. FTP, name this philosopher who, after his exile, died en route to Sicily and has a Platonic dialogue named for him.

Answer: Protagoras

6. Stemming from suggestions made by Nevil Sidgwick and Herbert Powell in 1940, this theory predicts that sigma bonding and non-bonding electron pairs in a molecule will adopt a geometry in which the distance between the electron pairs is maximized from one another. In addition to correctly predicting geometries with the lowest possible energies, it also allows us to predict atomic hybridization. FTP, name this chemical theory, a natural extension of Lewis structures, which might classify a molecule as having bent or tetrahedral geometries.

Answer: VSEPR Theory [can be pronounced "Vesper"], or Valence Shell Electron Pair Repulsion

7. At 22 feet long, the artist had a hard time seeing the whole thing at once. Most of the townspeople in the center and right are fairly nondescript except for the mayor, who stands next to a perplexed dog. On the left, two men in bright red outfits stand out, as does the crucifix reaching to the top of the canvas. A priest reads from the Office of the Dead in front of altar boys, pall bearers, and a draped casket while standing just to the left of a large hole and a grave-digger. FTP name this realist work by Gustave Courbet.

Answer: A Burial at Ornans

8. Characters in this play include William Roper, Thomas Cromwell, the duke of Norfolk, Cardinal Woolsey, Henry VIII, and Richard Rich, whose falsified testimony leads to the main character's execution. Much of the dialogue in the main character's trial for refusing to swear to the Act of Supremacy comes verbatim from the transcript of the trial. Made into the Best Picture Oscar winner for 1966, FTP identify this Robert Bolt play about the trial of Sir Thomas More.

Answer: A Man for All Seasons

9. This Puritan land-owner and lawyer sold his estate and emigrated to America in 1630. While on board his ship, he wrote a treatise called "A Model of Christian Charity" in which he posited that the colony would be "a city on a hill," with a special covenant with God. His zeal for maintaining that covenant was especially apparent when he presided over the trial of Ann Hutchinson. FTP, name this founding governor of the Massachusetts Bay Colony to whom John Kerry can trace his ancestry.

Answer: John Winthrop

10. The center of his cult was Uppsala in southeastern Sweden. His ship Skidbladnir always sails directly to its target and can shrink to fit in his pocket. His chariot is pulled by the golden boar Gullinbursti, and he is called upon to grant a fertile marriage. Since he gave his sword to his servant Skirnir as a reward for getting Gert as his wife, he will be the first one killed at Ragnarok by the fire-giant Surt. The patron of bountiful harvests and god of sun and rain, FTP name this Norse deity who was actually a member of the Vanir, and whose sister is Freya.

Answer: Frey or Freyr

11. Its efficiency sets the limiting value on the fraction of heat which can be used to do work while still complying with the 2nd law of thermodynamics. Consisting of two isothermal processes and two adiabatic processes, this cycle is the most efficient heat engine allowed by physical laws. FTP, name this idealized heat engine cycle named for a French scientist and military engineer.

Answer: Carnot cycle or engine

12. This city of nearly 700,000 people sits at the foot of the Franklin Mountains at an elevation of 3800 feet. Juan de Onate first recognized the site in 1598, and Spanish survivors of the Pueblo Revolt built missions nearby, including one at Ysleta. Its major university was founded in 1913 as the Texas State School of Mines and Metallurgy, and it hosts the annual Sun Bowl on New Year's Eve. Home to Fort Bliss and White Sands Missile Range, FTP name this city across the Rio Grande from Juarez, Mexico in extreme western Texas.

Answer: El Paso

13. His first *Mass*, 1864's in D minor, was heavily inspired by Otto Kitzler's production of Wagner's *Tannhauser*. His later choral-orchestral works include *Psalm 150* and *Helgoland*, and earlier motets indicative of his strong spiritual nature include *Locus iste* and *Ecce sacerdos magnus*. His first work to gain widespread fame at the time was his 7th *Symphony*, and he left a 9th *Symphony* uncompleted at his 1894 death. FTP name this Austrian Romantic composer and organist whose most famous symphony today is his 4th, or "Romantic."

Answer: Anton Bruckner

14. This poem is the subject of a one-act opera by William Schuman. Its author first published it in an 1888 issue of *The Examiner* under the pseudonym Phin. The second stanza opens, "A straggling few got up to go in deep despair. The rest / Clung to that hope which springs eternal in the human breast." This was after "Cooney died at first, and Barrows did the same... A pall-like silence fell upon the patrons of the game" FTP identify this poem by Ernest Thayer that describes a 4-2 loss for the Mudville baseball team.

Answer: Casey at the Bat

15. Some of the issues were a prevalence of mines, numerous islands and shoal waters, and wide tidal variance. After a day of naval gun and aerial attacks, the key defensive site of Wolmi Island was captured by the 1st Marine Division. That division, along with the 7th division of the Eighth Army and other support troops, were dubbed the X Corps under the command of General Edward Almond, MacArthur's Chief of Staff. FTP name this Korean War battle at a major port city that paved the way for recapturing Seoul 10 days later.

Answer: Battle of (or Landing at) Inchon

16. Early works include *The Clinical Treatment of the Problem Child* while at the University of Rochester, and *Counseling and Psychotherapy* while at Ohio State. At the University of Wisconsin he wrote *On Becoming a Person*, and he helped found the Center for the Study of the Person in La Jolla. Emphasizing the nondirective approach with a more personal relationship between the therapist and patient, FTP name this psychologist who developed his titular concept in his work *Client-Centered Therapy*.

Answer: Carl Rogers

17. The philosophers Voltaire and Rousseau can be found in the main room, while the literary giants Alexandre Dumas, Emile Zola and Victor Hugo share a space nearby. Pierre and Marie Curie are together and accompanied by such other greats as Jean Jaurès, Jean Monnet, and Louis Braille. At the far end is a monument containing Léon Gambetta's heart while above, Foucault's Pendulum counts the hours. Name, FTP, the only place mentioned in the French Constitution, which shares its name with a more famous building in Rome featuring an oculus.

Answer: The Pantheon

18. This novel's protagonist is a fictional composer with remarkable similarities to Arnold Schoenberg, whose life parallels Germany during the rise of Nazism. Its narrator, Serenus Zeitblom, chronicles the life of his friend, the composer Adrian Leverkühn. Frau von Tolna fills a role loosely analogous to Helen. FTP identify this novel by Thomas Mann that treats the same subject as previous works by Goethe and Marlowe.

Answer: Dr. Faustus

19. In a series of 53 campaigns he consolidated his empire, fighting off the Avars, Slavs, and Moors, and even converting the Saxons to Christianity. He invaded Spain at the request of Ibn al-Araba, and in a later campaign received the allegiance of Navare and Asturias. This man had assumed sole power after the death of his brother Carloman II in 771. FTP identify this king, who from his capital of Aachen ruled the Franks, and was crowned Holy Roman Emperor in 800 C.E.

Answer: Charlemagne, or Charles the Great

20. Stumbled upon in 1884 by a Danish doctor working in Berlin, this technique is based on the cell walls of the studied organisms. In the negative type, the outer membrane prevents the first dye from reaching the periplasm, but after treatment with acetone, the peptidoglycan layer traps the pink safranin. In the positive type, a layer of peptidoglycan traps the first dye, which is crystal violet. FTP, what is this procedure that forms a basis for the identification of bacteria?

Answer: Gram staining

21. Built on a triangular peninsula covered with low hills, it was founded around 814 BCE and destroyed in the same year as Corinth, although unlike Corinth it was later rebuilt and continued to be a major city in the region. Its government was headed by two elected suffetes and a council of elders, though its mother city of Tyre had a king. FTP, name this Phoenician colony which fought in the Punic wars against Rome and whose most famous general was Hannibal.

Answer: Carthage

22. This man stated that the only two true English synonyms were furze and gorse. He declared that 1600 to 3 was the ratio of an Englishman to a Frenchman and once observed that the great natural wonders of Scotland were worth seeing, but not worth going to see. His literary works like *Raselas*, *Prince of Abyssinia* have not enjoyed lasting fame. FTP identify this 18th century lexicographer, the subject of a famous biography by Boswell.

Answer: Dr. Samuel Johnson

23. As a collegian, he won the national scoring title three times, led his Bearcats to the Final Four twice, and held the career scoring record until Pete Maravich broke it. After being co-captain on the 1960 US gold medal-winning team, he became rookie of the year in 1961 for the Cincinnati Royals and went to his first of 12 straight All-Star games. Averaging a triple-double for his career, FTP name this basketball great who led the Milwaukee Bucks to the 1971 NBA Championship, nicknamed "The Big O."

Answer: Oscar Robertson

24. He seemed somewhat paradoxical because while he joined a coalition with Denmark, Sweden, & Prussia to prevent France & Britain from hampering free trade, he prohibited foreign travel & the importation of Western culture. He reversed Peter the Great's decree allowing each monarch to choose a successor, and in 1801, his limiting of the nobles' powers led to his murder, allowing for the succession of Alexander I. FTP, name this Russian czar who took power in 1796 upon the death of his mother, Catherine the Great.

Answer: Paul I

1. Answer the following about plant growth FTPE.

[10] When a plant grows toward sunlight, it is exhibiting this.

Answer: phototropism

[10] This class of plant phytohormones is responsible for phototropism, and also for plant growth in general when paired with cytokinins.

Answer: auxins

[10] This is the term for the perpetually undifferentiated tissue found at the top of a plant, enabling it to grow upward when conditions are right.

Answer: apical meristem

2. Given a line spoken by a Shakespearean female, name her FTPE.

[10] "How beauteous mankind is ! O brave new world | That has such people in it."

Answer: Miranda

[10] "I am sure, my love's more richer than my tongue."

Answer: Cordelia

[10] "I would rather hear my dog bark at a crow than a man swear he loves me."

Answer: Beatrice

3. Franz Boas had a lot of perceptive female students. Given works by one of them, name her FTPE.

[10] *Coming of Age in Samoa*

Answer: Margaret Mead

[10] *Tell My Horse; Mules and Men*

Answer: Zora Neale Hurston

[10] *Patterns of Culture; The Chrysanthemum and the Sword*

Answer: Ruth Benedict

4. The Mediterranean Sea has numerous subdivisions into smaller seas. Given some ports, name the sea on which they lie. FTP each.

[10] Palermo & Naples

Answer: Tyrrhenian Sea

[10] Venice & Dubrovnik

Answer: Adriatic Sea

[10] Corfu & Perama

Answer: Ionian Sea

5. Given a description, name the battle from the Hundred Years War FTPE.

[10] This 1415 battle saw the English rout a larger French force because English archers outmatched the massed French cavalry that was trapped in muddy battle below.

Answer: Agincourt

[10] This 1346 battle led by Edward III was the first major encounter of the war, and was Edward's second invasion. French king Philip VI lost his brother at the battle.

Answer: Crecy

[10] In May 1429 the siege of this city was lifted by forces led by the saintly and/or schizophrenic Joan of Arc

Answer: Orleans

6. Identify the follow about *A Farewell to Arms* FTPE.

[10] For an easy 10 points, who wrote the novel?

Answer: Ernest Hemingway

[10] Frederick Henry becomes romantically involved with this English nurse.

Answer: Catherine Barkley (accept either)

[10] This Italian surgeon and alcoholic womanizer is Frederick's roommate.

Answer: Lieutenant Rinaldi

7. Answer the following about some off-season dealings in Major League Baseball FTSNOP.

[5,5] The Braves picked up these two pitchers, one a starter from Oakland, and the other the former Milwaukee closer, the latter of which will allow John Smoltz to be a starter again.

Answer: Tim **Hudson** and Dan **Kolb**

[10] The Angels cut David Eckstein to make room for this shortstop who played for Montreal and then Boston at the end of last year.

Answer: Orlando **Cabrera**

[10] This catcher, who was key to the St. Louis pitching and defensive successes last season, was signed by the Giants to a 3-year contract.

Answer: Mike **Matheny**

8. Identify the architects associated with various parts of St. Peter's Cathedral FTPE.

[10] He designed the towering *Baldachin*, or *Tabernacle*, over Peter's supposed resting place.

Answer: Gianlorenzo **Bernini**

[10] He was commissioned by Pope Paul V to extend the Greek-cross plan, but his façade dwarfs Michelangelo's dome when the viewer gets close to it.

Answer: Carlo **Maderno**

[10] He was the original architect of the cathedral chosen by Julius II.

Answer: Donato **Bramante**

9. 5-10-20-30, given a star, name the constellation which serves as its celestial home.

[5] Betelgeuse

Answer: **Orion**

[5] Sirius

Answer: **Canis Major**

[X] Procyon

Answer: **Canis Minor**

[X] Aldebaran

Answer: **Taurus**

10. Identify the following about the 1848 Women's Rights Convention in the US, for the stated number of points.

[10] The convention was held in this New York town.

Answer: **Seneca Falls**

[5,5] These two activists organized the Seneca Falls convention.

Answers: Lucretia Coffin **Mott** and Elizabeth Cady **Stanton**

[10] Based on the Declaration of Independence, this speech was written by Stanton to include women in political processes and to demand equality.

Answer: **Declaration of Sentiments**

11. Identify the following scholastic writers FTPE.

[10] The founder of Scholasticism, this Englishman wrote *Prosoglion*, and is famous for his ontological proof of the existence of God.

Answer: St. **Anselm** of Canterbury

[10] Known to history as the Angelic Doctor and to his fellow students as "the Dumb Ox", he penned the *Summa Contra Gentiles* and another more famous unfinished *Summa Theologica*.

Answer: St. **Thomas Aquinas**

[10] Known as the Doctorus Universalis because of his wide scientific knowledge, he had Aquinas as a pupil, and along with Roger Bacon pioneered empiricism, though he came to be associated with Alchemy.

Answer: **Albertus Magnus** or **Albert the Great**

12. Answer the following about Maxwell's Equations FTPE.

[10] Maxwell's second equation says that the net magnetic flux out of any closed surface is equal to this.

Answer: zero

[10] According to the third equation, the line integral of the electric field around a closed loop is equal to the negative of the rate of change of this through the area enclosed by the loop.

Answer: magnetic flux

[10] The fourth equation, which states that the line integral of the magnetic field around a closed loop is proportional to the electric current flowing through the loop, is better known as this law.

Answer: Ampere's law

13. Answer the following about *Crime and Punishment* FTPE.

[10] For an easy 10 points, who wrote the novel?

Answer: Fyodor Dostoevsky

[10] This is the main character, the former student who kills an old pawn broker.

Answer: Rodion Romanovich Raskolnikov

[10] This is Raskolnikov's close friend who tries to take care of him and eventually falls for his sister.

Answer: Dmitri Prokofich Razumikin; accept Dmitri

14. Answer the following about the critically acclaimed movie *Garden State* FTPE.

[10] This star of the show *Scrubs* wrote, directed, and starred in the movie as Andrew Largeman.

Answer: Zach Braff

[10] Natalie Portman's character Sam is supposed to wear a padded helmet at work because she suffers from this disorder.

Answer: epilepsy

[10] Andrew's friend Jesse just parties all day because he made a fortune inventing this product.

Answer: silent velcro (accept obvious equivalents)

15. Answer the following about the political history of Chile FTPE.

[10] This centrist reform party was founded in 1957 with the fusion of the National Falange and Social Christian Party. They put Frei Montalva in power in 1964 and Patricio Aylwin in 1989.

Answer: Christian Democratic Party

[10] After the Christian Democrats made some unpopular reforms, the Popular Unity coalition put this Socialist in power in 1970.

Answer: Salvador Allende Gossens

[10] The coup that ousted Allende installed this General as dictator. While he was in London in 1998, this country Spain sought his extradition in connection with torture of some of its citizens during his reign.

Answer: Augusto Pinochet Ugarte

16. FTPE name the Latin American author from works:

[10] *Love in the Time of Cholera*, *The General in His Labyrinth*

Answer: Gabriel Garcia Marquez [prompt on Marquez or Garcia]

[10] *The Double Flame: Love and Eroticism*, *The Labyrinth of Solitude*

Answer: Octavio Paz

[10] *Dreamtigers*, *The Book of Imaginary Beings*, and the collection *Labyrinths*

Answer: Jorge Luis Borges [pronounced BOAR-hayss, but accept anything phonetically plausible]

17. Answer the following about the reign of Holy Roman Emperor Henry IV, FTP each.

[10] In 1076, in a dispute over investiture, he was excommunicated by this pope.

Answer: Gregory VII

[10] Henry spent three days barefoot in the snow & fasting, doing penance for Gregory outside a castle here in the Italian Alps.

Answer: Canossa

[10] The dispute between Henry IV & Gregory VII was cleared up after Henry's death in this 1122 agreement.

Answer: Concordat of Worms

18. Answer the following about the chemistry of ethers FTPE.

[10] This reaction, in which an alkoxide reacts with an alkyl halide, is the most common method for synthesizing ethers.

Answer: Williamson ether synthesis

[10] The Williamson ether synthesis occurs via this general reaction mechanism.

Answer: SN2 or Bimolecular nucleophilic substitution (Prompt on nucleophilic substitution)

[10] These ether-like compounds can be synthesized from peroxyacids and alkenes.

Answer: epoxides

19. Identify the Platonic dialogue from a description FTP each.

[10] Socrates makes no pretense that he does not know. He knows & wants to teach, arguing with Callicles, Polus, & the titular aging Sophist rhetorician.

Answer: Gorgias

[10] Socrates, Hermogenes, & the title interlocutor discuss the origins of language.

Answer: Cratylus

[10] Socrates probably lets this interlocutor speak more than any other while the two discuss the creation of the universe & of eternity & light.

Answer: Timaeus

20. For FFPE and five points for the correct order, list the five geologic periods in the Paleozoic Era after the Cambrian from earliest to latest.

Answer: Ordovician, Silurian, Devonian, Carboniferous, Permian

21. Identify the composers of the following modern pieces of music FTPE.

[10] *Black Angels, Ancient Voices of Children*

Answer: George Crumb

[10] *Fontana Mix, Imaginary Landscape No. 4*

Answer: John Cage

[10] *Four Organs, Drumming, The Desert Music*

Answer: Steve Reich

22. Answer the following about Texas Hold 'Em lingo FTPE.

[10] This is the name given to having an ace and a king as your two hole cards.

Answer: Big Slick

[10] This hand, a straight from ace to five, can be very frustrating to lose to.

Answer: Wheel or Bicycle

[10] This is the nickname given to having two sevens as your hole cards.

Answer: Walking Sticks

22. Between 1919 and 1933, the Bauhaus school attempted to redefine German art. FTPE, answer the following:

[10] Name the founder of the school and author of the Bauhaus manifesto:

Answer: Walter Gropius

[10] This Russian artist known for his *Improvisations* wrote *Point, Line and Plane* and taught one of the introductory courses from 1923-1933:

Answer: Wassily Kandinsky

[10] This Bauhaus professor created a "Light and Space Modulator" as one of his studies in balance and founded the New Bauhaus in Chicago after the closing of the German school:

Answer: László Moholy-Nagy

23. Answer the following about the recent African Union summit FTPE.

[10] It was held beginning January 10 in this city, the capital of Gabon.

Answer: Libreville

[10] Laurent Gbagbo, the president of this country immersed in a civil war, was a surprise attendee to the event.

Answer: Cote d'Ivoire or probably still accept Ivory Coast

[10] This man, South Africa's current president, proposed a peace initiative for the struggles in Cote d'Ivoire.

Answer: Thato Mbeki