

TOSSUPS – BLIND ROUND #3**MOC MASTERS 2004 -- UT-CHATTANOOGA**

Questions by DePauw's Amanda Hartman, Matthew Marjan, and Brett McArthur with help from Ray Luo, Paul Lujan, Jerry Vinokurov, Marcy LaViollette, Kelvin Haire, Tom Bole, Joel Grus, Andrew Lim, and Paul Trevillion

1. The only planet less dense than water, it has a day length less than half that of Earth. The empty Encke Division appears in the bright A region while the particular Cassini Division appears between the A and B rings. FTP name this sixth planet from the sun with the moon Titan that has a Great White Spot and many colorful rings.

Answer: Saturn

2. Born to a missionary family in 1897, she was raised as a Methodist and graduated from Wellesley College in Massachusetts in 1917. She eventually found work as an interpreter and was the head of her nation's air force during WWII before she was forced to leave her home in 1949. She married a prominent military man in 1927, but the union was ended in '75. FTP, name this late lobbyist for the Republic of China and widow of that nation's founder.

Answer: Madame Chiang Kai-shek or Mayling Soong

3. In her first year of college basketball, this native of Los Angeles helped her North Carolina team win the NCAA championship, but this journalism/broadcast major is not known for her basketball career. In June 2003, she returned to competition after giving birth to her first child, having gone undefeated for the first time in her career in the 2002 campaign. Recently under investigation by the U.S. Anti-Doping Agency, this athlete has not been charged with drug use, despite allegations by her ex-husband. A three-time champion in the 2000 Olympics, this is, FTP, what track and field star who withdrew from the 100 meters and the long jump events at a pre-Olympic meet last week?

Answer: Marion Jones

4. During his prolific career he has adapted numerous novels for the stage including McCullers' *Ballad of the Sad Cafe*, and Nabokov's *Lolita*. His original one-act plays including *The Death of Bessie Smith*, *The Sandbox*, *Box*, and *Quotations from Chairman Mao Tse-Tung* established him as a master of theatre of the absurd but his full-length, more famous plays, including the 1966 Pulitzer Prize winning *A Delicate Balance*, deal far more with the real nature of emotional and psychological dysfunction. The winner of an additional two Pulitzers including 1975's *Seascape*, this is, FTP, what American playwright whose most recent Pulitzer was for 1994's *Three Tall Women*?

Answer: Edward Albee

5. Devised by Merrill Flood and Melvin Dresher in 1950 as part of the RAND Corporation's investigations into nuclear strategy, it was given its popular name by Albert Tucker, who wanted to make it more accessible to a group of psychologists. For ten points, name this staple of game theory, which demonstrates that rational self-interest can lead people to suboptimal outcomes.

Answer: Prisoner's Dilemma

6. It had two Democrats and two Republicans; two senators and two representatives; one diplomat; one former executive agency director; one judge; one former director of the World Bank; one future President. It placed great emphasis on one piece of metal and doomed one man all as it wrote several hundred pages. FTP, what was this group, investigators of a 1963 assassination?

Answer: the Warren Commission

7. Though the original resides in Venice, this work of art today can be found in holistic health logos and a Microsoft Windows desktop theme. Each part is a mathematically perfect fraction of the whole, for example, the head measured from the forehead to the chin is exactly one tenth of the total height. Thought to be an attempted solution to the problem of "squaring the circle", the result, sometimes called "the Canon of Proportions", is considered to be the most accurate representation of the human form of its day. Central to Dan Brown's book *The Da Vinci Code*, this is what drawing, named for the Roman architect who wrote the famous treatise 'De Architectura'?

Answer: Vitruvian Man (accept Canon of Proportions until mentioned)

8. The protein dynein undergo changes in tertiary structure, moving one microtubule past another. They rotate in prokaryotes and propagate like waves in eukaryotes. 9 fused doublets form an outer cylinder, in the center of which an unfused pair of microtubules reside. 9 triplets make up their basal bodies. FTP name these whiplike appendages which, in prokaryotes, are assembled from the protein flagellin.

Answer: flagella; singular flagellum is acceptable; prompt on cilia on the first sentence

9. Founded 10 km north of a major river around 1100 A.D., its placement on major crossroads help it rise to power. Twice annexed by larger empires, it became a major center of Muslim learning with its university, the Sankore. Caravans of camels departed daily with loads of gold, slaves, and Saharan salt. However, its prominence in the West-African trade routes couldn't help the city during the fall of the Songhai Empire. FTP, name this city in modern-day Mali, once ruled by Mansa Musa, and whose name is often synonymous with "an inaccessible place."

Answer: Timbuktu

10. He was known "The Poet of the People," although W.H. Auden declared him the "stupidest" of English poets. Famous poems include "The Lady of Shalott," "The Lotus-Eaters," and *In Memoriam*, whose composition led Queen Victoria to name him Great Britain's poet laureate. For ten points, name this poet who urged quiz bowlers "To strive, to seek, to find, and not to yield" in search of the correct answer in "Ulysses."

Answer: Alfred, Lord Tennyson

11. It began at eight in the morning with 900 Americans moving in columns as they had been trained for years to do. After the opening assault, the eventual victors completed a set of complicated maneuvers that drove the assailants from cover. News of the American victory allowed John Jay to negotiate for the withdrawal of British forces from the frontier, and peace terms with the Indians were laid down in the treaty of Greenville. Thus, FTP, in 1794 occurred what skirmish in Ohio, won by General Anthony Wayne?

Answer: Battle of Fallen Timbers

12. He is the son of Kashyap, a great sage, and Vinata, a daughter of the king Daksha. Once he descended to Patala and asked the serpents to release his mother after she lost a bet. In his attempt to rescue her, he had to defeat Indra first. Forbidden to eat Brahmins, he flies around the universe devouring the evil in the world. He is described as having the head and wings of a bird, but body of a man. The Indonesian National Airlines is named after FTP, what Hindu god, king of the birds and mount for Vishnu?

Answer: Garuda

13. The spectrum generated by this phenomenon can exhibit lines superimposed on the spectrum that result from the ejection of K and L shell electrons, and it also possesses a characteristic energy cutoff which may be found by equating the electron charge times the voltage to Planck's constant times the speed of light over the minimum wavelength. It is especially important for light particles, since the energy loss from it is proportional to the inverse of the mass squared, and for relativistic particles, this effect is peaked in a cone with a half angle of one over gamma. FTP, identify this form of electromagnetic radiation which results from the abrupt slowdown of particles.

Answer: **bremsstrahlung** (accept **braking radiation**)

14. The titular "poet, thinker, problem drinker" was based on the author's friend Delmore Schwartz, a talented poet and writer who spent his latter years overcome by alcoholism. The protagonist Charles Citrine, a writer himself, finds himself lacking passion for his work and falls into the world of the title character and the dissolute Rinaldo Cantabile. A tale of a man's attempt to justify his conflicting desires to pursue art for art's sake and to achieve great power and success this is, FTP, what 1975 Pulitzer Prize winning novel by Saul Bellow?

Answer: Humboldt's Gift

15. Currently residing at 47 degrees 9 minutes south and 126 degrees 43 minutes west, Gustaf Johansen of the schooner *Emma* is the only person known to have seen it face to face and survive. Other people who have indirectly encountered it include Henry Wilcox, who made a bas-relief of it after encountering it in his dreams, and Inspector Legrasse, who discovered a statue of this beast while investigating what he thought was a voodoo cult. The narrator first hears of it when he opens a box of newspaper clippings and related paraphernalia inherited from his great uncle. Dead yet dreaming under the Pacific Ocean in the ancient city of R'lyeh this is, FTP, what squid-headed high priest of the Old Ones, the most famous creation of H.P. Lovecraft?

Answer: Cthulhu (accept any reasonable pronunciation)

16. This property is responsible for the touch response in Venus flytrap caused by release of potassium ions and a loss of turgor. Proportional to the gas constant times temperature times the van't Hoff factor, which measures the solute's dissociation potential, it is responsible for the shrinking of cells in hypertonic solutions. FTP name this colligative property measuring the force needed to resist water movement, given in pascals.

Answer: osmotic pressure

17. This man's lesser-known works include a verse translation of *Eugene Onegin*, as well as *Le Ton beau de Marot*, a book about the difficulty of translation. In 1981 he took over a *Scientific American* column from Martin Gardner called Mathematical Games, and later anagrammed that into the title of the book of those columns collected, *Metamagical Themas*. He is most famous for another book that contains numerous dialogues, including one concerning the modus ponens between Achilles and the Tortoise. Currently professor of computer science and cognitive science at the University of Indiana, Bloomington, FTP, name the author of *Godel, Escher, Bach: An Eternal Golden Braid*.

Answer: Douglas Richard Hofstadter

17. The term for which this is most often called comes from a poem by Jean Lefevre entitled *Respit de la Mort*. The first known instance of this being depicted is from 1424 at Cimetière des Innocents in Paris. The wall itself was destroyed, but sketches of the depiction survive. Frescoes depicting this event also exist in London, Basel, and Lübeck, as well as in works of art by artists such as Hans Holbein the Younger. Often taking the form of a farandole, usually a skeleton or emaciated human figure is shown in juxtaposition with a man or woman whose social class is obvious. Thought to have been acted out for holidays, this is, FTP, what "lively" choreography, also the title of a musical piece by Camille Saint-Saëns?

Answer: Danse Macabre or Dance of Death (prompt on Tötentanz)

18. Many scholars and readers compare the internet-impacted society of today to this novel. As the novel explains, in the future, science and the arts will no longer advance. Instead, the ideas that mankind has already put together will be re-arranged by an elite force of intelligent beings. Several internet sites claim this is, "an Age Old metaphor for what has been called, the "Divine Lila", divine game or the Jeweled Net of Indra." FTP, what pastime, the title of a Herman Hesse novel where Joseph Knecht was the Magister Ludi?

Answer: The Glass Bead Game or Glasperlenspiel (Accept Magister Ludi before mentioned)

20. Consisting of about 130 units, detailed descriptions of it were printed to intimidate its creator's enemies. Built to settle economic, religious and political differences, it was assigned escort duty for Alessandro Farnese, Duke of Parma. Unfortunately, its size, maneuverability, and armaments all proved less than its intended foe. These shortcomings, along with a September storm off of Scotland nearly decimated the assembly. Returning home in 1588, FTP this was what venture of King Phillip II of Spain against Elizabeth Tudor?

Answer: The Spanish Armada (accept Invincible Armada)

21. In act one a painter relights a neighbor's candle. In act two, Musetta sings a waltz about her own popularity. In act three, we learn that the leading lady is dying, and in act four, Mimi dies. For ten points, name this opera by Puccini that was later adapted as the 1996 Pulitzer Prize-winning drama *Rent*.

Answer: La Boheme

22. First introduced by a graduate student in 1924 to explain observed facts, in the matrix formulation, its partition function is related to the largest eigenvalue of the matrix. It was cited by Heisenberg in a 1928 paper that used the exchange model to explain ferromagnetism and the Curie temperature can be calculated by using it in two dimensions. It has no non-trivial critical points in one dimension, and in two dimensions, it can be solved completely through the Onsager relations. Also applicable to neighboring heart cells or neural networks, FTP, what is this model of statistical mechanics, in which the behavior of an element is influenced only by its nearest neighbors?

Answer: Ising model (after Ernst Ising)

23. Following this battle, the losing side repudiated the Convention of Akkerman, which had given Russia a virtual protectorate over Serbia, Moldavia, and Wallachia. Immediately before this battle, an attempt to contact the losing commander failed because his men claimed not to know where he was, and it was sparked by a raid under the command of Captain Frank Hastings, which had destroyed several vessels in Salona Bay. Constrained from operating at sea by a combined British, French, and Russian fleet under the command of Edward Codrington, the Turkish army retaliated by razing Greek villages on Pylos, prompting the allies to enter the bay from which this battle takes its name. Precipitating the Russo-Turkish war of 1828, FTP, identify this October 2, 1827, naval engagement which resulted in the destruction of the Turkish and Egyptian fleet under Ibrahim Pasha.

Answer: Battle of Navarino Bay

BONI – BLIND ROUND #3

TOURNAMENT NAME -- UT-CHATTANOOGA

Questions by DePauw's Amanda Hartman, Matthew Marjan, and Brett McArthur with help from Ray Luo, Paul Lujan, Jerry Vinokurov, Marcy LaViollette, Kelvin Haire, Tom Bole, Joel Grus, Andrew Lim, and Paul Trevillion

1. On a 5-10-20-30 basis, name the US President from women with whom they allegedly had an extramarital affair.

a) Judith Campbell Exner

Answer: **John F. Kennedy**

b) Lucy Mercer

Answer: **Franklin Roosevelt**

c) Carrie Phillips and Nan Britton

Answer: **Warren G. Harding**

d) Jennifer Fitzgerald

Answer: **George H.W. Bush** [accept "41" or anything to distinguish him from Dubya, even "Bush Sr.," which is technically wrong]

2. Gas laws. FTPE

(10) Volume of a given amount of gas at constant temperature is inversely proportional to its pressure.

Answer: **Boyle's** law

(10) Equal volumes of gases at the same temperature and pressure contain the same number of molecules.

Answer: **Avogadro's** law

(10) The total pressure in a system containing two or more different gases equals the sum of individual pressures that each gas would exert if it were alone and occupied the same volume.

Answer: **Dalton's** law of partial pressures

3. For five points each and a bonus five for all correct, given the name of a movie that only exists within another movie and the year, name the real movie.

A. (5) 1991, "Wings of Honor"

Answer: **The Rocketeer**

B. (5) 2000, "The Old Mill"

Answer: **State and Main**

C. (5) 2001, "Time Over Time"

Answer: **America's Sweethearts**

D. (5) 1997, "Snowball In Hell"

Answer: **In & Out**

E. (5) 1997 'Brock Landers: Angels Live In My Town'

Answer: **Boogie Nights**

4. FFPE given a capital of a South Pacific nation, name the country.

A. Suva

Answer: **Fiji**

B. Honiara

Answer: **Solomon** Islands

C. Port Vila

Answer: **Vanuatu**

D. Tarawa

Answer: **Kiribati**

E. Nuku'Alofa

Answer: **Tonga**

F. Funafuti

Answer: **Tuvalu**

5. FTPE, given the pattern of accented syllables, name the poetic metric foot.

A. Two syllables, first unaccented second accented

Answer: iamb or iambic

B. Three syllables, first accented, second and third unaccented

Answer: dactyl or dactylic

C. Two syllables, both accented.

Answer: spondee

6. FTPE, name the *losing* commander of each battle.

A. Chancellorsville (1863)

Answer: Joseph Hooker

B. Battle of Bannockburn (1314)

Answer: King Edward II of England

C. Marathon (490 BC)

Answer: King Darius I

7. Given some characters, name the Shakespearean comedy FTPE.

A. Thurio, Julia, Silvia, Valentine, and Proteus

Answer: Two Gentlemen of Verona

B. Vincentio, Lucio, Froth, Angelo, and Claudio

Answer: Measure for Measure

C. Don Pedro, Don John, Beatrice, Benedick, and Dogberry

Answer: Much Ado About Nothing

8. Answer the following questions about spontaneous symmetry breaking FTPE.

10) The most well-known example of spontaneous symmetry breaking produces this massive boson, which interacts with other particles to give them their mass.

Answer: Higgs boson

10) Spontaneous symmetry breaking also pops up in this theory to produce the photon and W and Z bosons.

Answer: electroweak or GWS (Glashow-Weinberg-Salam) theory

10) In the Higgs mechanism, this massless scalar boson interacts with a vector field to produce a massive boson.

Answer: Goldstone or Nambu-Goldstone boson

9. FTPE, identify these famous beekeepers:

A. This man followed his father Percival into the beekeeping trade, but after his most famous feat he gave it up to advocate for the community of his friend Tensing Norgay.

Answer: Edmond Hillary

B. Although they weren't always accurate, this man's observations of his own insects behavior formed part of his text A History of Animals, which influenced Western thought on the animal kingdom for years.

Answer: Aristotle

C. Although practicing the craft since the 1970's, this beekeeper may not be doing so anytime soon. However, she does suggest keeping the hives in the back yard and away from children, and that's a good thing.

Answer: Martha Stewart

10. Identify the philosophical people and things starting with P from a description, FTPE:

A. The founder of Neo-Platonism, he developed a complex spiritual cosmology involving three hypostases: the One, the Intelligence, and the Soul. His ideas have come down to us in a collection called the Enneads.

Answer: Plotinus

B. This is a moral obligation that is initially binding until a stronger and overriding obligation emerges. The term is associated with W.D. Ross in his work, *The Right and the Good*. According to him, there are seven foundational parts to this term: promise keeping, reparation for harm done, gratitude, justice, beneficence, self-improvement, and non-maleficence.

Answer: A prima facie duty

C. Named after its author, this theory states, that, even under the assumption that God's existence is unlikely, the potential benefits of believing are so vast as to make betting on theism rational.

Answer: Pascal's Wager

11. For ten points each, name the following monarchs who abdicated.

10: He was forced to abdicate the throne of Egypt in 1952, after a coup d'etat.

Answer: Farouk I

10: He abdicated the British throne in 1936 to marry American divorcee Wallis Warfield Simpson.

Answer: Edward VIII

10: In 1980, she signed the "Act of Abdication", and her daughter Beatrix became Queen of the Netherlands.

Answer: Juliana

12. Given lyrics from a song on Billboard's top 10 singles charts for this past week, name the song, FTPE:

A. "I'm sorry that I hurt you / It's something I must live with everyday / And all the pain I put you through / I wish that I could take it all away / And be the one who catches all your tears"

Answer: The Reason by Hoobastank

B. "We gangsta, and gangstas don't dance with boogies / So never mind how we got in here with burners and hoodies / Listen we don't pay admission and the bouncers don't check us / And we - walk around the metal detectors"

Answer: Lean Back by Terror Squad

C. "Some people search for a fountain / Promises forever young / Some people need three dozen roses / And thats the only way to prove you love them

Answer: If I Ain't Got You by Alicia Keys

13. A 1984 bonus? Doubleplus good!! Given a short definition, give the Oceania Newspeak word used in George Orwell's 1984

A. An individual that is executed by the government for breaking the law and subsequently erased from history. All records of their existence are destroyed and all party members are expected to remove all memories of the deceased.

Answer: unperson

B. Doubting any of the principals of the Big Brother, the Inner Party, and IngSoc or to question, even for a brief, internal moment any official state policies. Winston Smith described it as death even when it didn't entail physical death.

Answer: thoughtcrime or crimethink

C. The ability to accept whatever "truth" the party puts out no matter how false that fact might be. It requires that one not only say that the party's obviously false statement is the truth, but to actually completely believe it.

Answer: blackwhite

14. Name these parts of a plant. FTPE.

(10) This is the seed leaf that stores food reserves for dicot seeds. Following germination, it is either carried to the surface above the hypocotyl or remain below surface and the epicotyl.

Answer: cotyledon

(10) Important in the study of phototropism, this is a pointed leaf sheath in a monocot that protects the shoot before it emerges from the soil.

Answer: coleoptile

(10) These slender, coiling structures support the plant as it climbs upward to gain access to sun light.

Answer: tendrils

15. Given a list of works, name the American Regionalist FSNOP points.

A. For 15, *Hoover and the Flood*, *Tornado Over Kansas*, *Belgian Stallions*, and *Manhunt*

Answer: John Steuart Curry

B. For 10, *Sorghum Mill*, *W. C. Fields*, *Threshing Wheat*, Missouri State Capitol frescos

Answer: Thomas Hart Benton

C. For 5, *The Ride of Paul Revere*, *In the Spring*, *Daughters of Revolution*, American Gothic

Answer: Grant Wood

16. Given the assassin or assassin wannabe and the weapon, name the target, FTPE.

A. John Hinckley Jr, pistol

Answer: Ronald Reagan

B. Ramon Mercader, ice pick

Answer: Leon Trotsky

C. Colonel Claus von Stauffenberg, explosives

Answer: Adolf Hitler

17. Given information from Malory's *Morte d'Arthur* regarding one of the Knights of the Round table, name him FTPE.
A. The knight who, upon Arthur's dying, throws Excalibur into the lake. He also brought the dead Arthur to the boat that brought the king to Avalon.

Answer: **Bedivere**

B. The knight who sat upon the Siege Perilous, he is the only knight to complete the quest for the Grail. Upon discovering the Grail he asked that God release him from his material existence. He was also the knight who healed the Fisher King.

Answer: **Galahad**

C. He was the third knight to be a part of the quest for the Grail, along with Gallahad and Percivale, and the only one to return from it.

Answer: **Bors**

18. Identify the following neuroimaging techniques, FTPE.

(10) This involves moving an x-ray source around the head and taking angiograms of the patient as it goes along, producing a 2D image of the plane of rotation.

Answer: **C**omputerized **A**xial **T**omography scans; or **C****T** scans

(10) This applies a magnetic field to the brain and measures the change in the field generated by the spin of hydrogen atoms after radio waves have been interrupted.

Answer: **M**agnetic **R**esonance **I**maging

(10) This allows us to obtain functional images of the brain by injecting radioactive chemicals into the blood vessels and detecting their emission in the brain.

Answer: **P**ositron **E**mission **T**omography scans

19. Name these members of the "Mighty Handful", or Russian Five, from works FTPE:

A. String Quartet No.2 in D major, Prince Igor: Polovtsian Dances,

Answer: Alexander **Borodin**

B. Fair at Sorochinsk, Angelo, Mademoiselle Fifi

Answer: Cesar **Cui**

C. *Overture on a Spanish March Theme*, *Symphony No. 2 / Russia*, Islamey

Answer: Mily Alexeyevich **Balakirev**

20. 30-20-10 basis: Name the Pope.

30- He was born during the reign of St. Pius X as Albino Luciani.

20- Although his death was officially a result of heart trouble, his family reported he had a clean bill of health 3 weeks earlier.

10- His reign lasted only 33 days in 1978.

Answer: **John Paul I**

21. Given a description, name the Italian painting term, FTPE.

A. The technique called where a top layer of color is scratched away to reveal a color beneath.

Answer: **sgraffito**

B. The technique where painting is applied in a thick, textured way, with the marks made by the brush or palette knife remaining visible.

Answer: **impasto**

C. The term literally means shaded off; it describes colors that have been blended softly into each other rather than having sharp outlines. Di Vinci was famous for his skill at this.

Answer: **sfumato**

22. Given a book name the year it won the Newbury Award, FTPE. If you are within one year either way, you'll receive 5.

A. *Crispin: The Cross of Lead* by Avi

Answer: **2003** (2002 or 2004 for 5 points)

B. *The Giver* by Lois Lowry

Answer: **1994** (1993 or 1995 for 5 points)

C. *Sarah, Plain and Tall* by Patricia MacLachlan

Answer: **1986** (1985 or 1987 for 5 points)

23. 30-20-10, identify the century given events.

30- Zacharias Janssen invents the compound microscope, Sofinisba Anguissola is the 1st woman artist to become gain prominence as a painter, Akbar ends the pilgrimage tax on Hindus

20- Ivan IV becomes tsar of Russia, the Huguenot Wars are waged in France, Hideyoshi unites Japan.

10- Machiavelli writes The Prince, the 95 theses starts the Protestant Reformation, Sir Walter Raleigh released from the Tower of London

Answer: 16th century (or equivalent)