

TOSSUPS – ROUND SEVEN**Dennis Haskins Open High School Quizbowl 2006 -- UT-Chattanooga**

Questions mostly by Jacob Vannucci and John Kilby of UTC with Case Western, Georgia Tech, Illinois, Quentin Roper, Dave Leach, Carol Guthrie, Noah Rahman, Matt Dennis, Ray Luo, John Solter, and Charlie Steinhice

1. (JK) His most recent performance was as Turkey Lurkey in the Disney film *Chicken Little*. He played a mystical TV repairman in the 1998 film *Pleasantville* and had audiences laughing in the early 80's as landlord Ralph Furley on the TV show *Three's Company*. His most famous role was of a man who was fond of wanting to "nip it in the bud" as the deputy sheriff of Mayberry, North Carolina. FTP, identify this man who passed away last week and who will forever be remembered as Deputy Barney Fife from *The Andy Griffith Show*.

Answer: **Don Knotts**

2. (CG) As a young man he was sent to Jerusalem to receive his education at the school of Gamaliel. Born into the tribe of Benjamin, he possessed Roman citizenship, an important factor that contributed to his later work. Originally from Tarsus, he is said to have participated in the stoning of Stephen prior to an event in Syria that changed his outlook and his name. FTP, identify this early Christian missionary who wrote a series of letters, or epistles, which comprise much of the New Testament after his conversion on the road to Damascus.

Answer: **Paul** (accept Saul)

3. (JV) The listric type of these curve into a near-horizontal orientation, while a rift valley bounded by them is called a graben. The side that lies above its plane is called a hanging wall, while the footwall side lies below it. Some of the more common types of them are called thrust, reverse, strike-slip, and normal, each based on the movement that has occurred relative to the surface. These are, FTP, what geologic structures that can be used to show seismic activity with such examples as those named New Madrid and San Andreas?

Answer: **Fault**

4. (QR) Most of the accounts of this event were recorded by a former military surgeon John Howell, who was left the command of Fort William when the rest of the garrison left. According to his writings published in 1758 in the *Annual Register*, 123 of those from the garrison died during a single night in a very small room after their capture by Siraj Ud Daulah, the local Nawab. For ten points, name this now thought to be exaggerated tale of torture in a dungeon in Bengal.

Answer: **Black Hole of Calcutta**

5. (JV) Eighteen years after his death, he won two posthumous Tony Awards in 1983 because the book and lyrics of the musical *Cats* were largely taken from *Old Possum's Book of Practical Cats*. His reputation rests more on poems with lines like "This is the way the world ends / Not with a bang but a whimper" in *The Hollow Men* and a poem divided into sections such as "A Game of Chess" and "What the Thunder Said." FTP, name this modern poet of "The Love Song of J. Alfred Prufrock" and *The Wasteland*.

Answer: **Thomas Stearns Eliot**

6. (JV) Some of the interesting orchestration for this symphony is the inclusion of such instruments as the piccolo, English horn, French horn, cornet, snare drum, and harp. It is also considered the first use of the macabre and supernatural in an important symphony. Written to reflect the composer's unrequited love of actress Harriet Smithson, its movements, such as *Reveries*, *Passions*, *A Ball*, and *Scene in the Country* use an *idée fixe* to represent her. FTP, name this symphony composed in 1830 in five movements by Frenchman Hector Berlioz.

Answer: ***Symphonie Fantastique (Fantastic Symphony)***

7. (JK) For one mole at 298K and 1 atmosphere pressure, this value is 0 for carbon in the form of graphite, 2.9 kilo-Joules for carbon in the form of diamond, and -237.13 kilo-Joules for water in the form of a liquid. The sign of these values is important, as a value of zero indicates a reaction is in equilibrium, a positive value indicates that the reverse reaction is spontaneous, and a negative value for this quantity indicates that the forward reaction is spontaneous. Equivalent to the enthalpy minus the temperature times the entropy, FTP, identify this free energy named after an American scientist.

Answer: **Gibbs free energy**

8. A patron of the Catholic Schools Association in his home country, his idea of creating a third Slav-ruled kingdom in Croatia alienated many politicians. Taking power after the suicide of Prince Rudolph in 1889, this nephew of Franz Joseph I and husband of the countess Sophie Chotek worked tirelessly to maintain peace within Eastern Europe, a fact that renders inexplicable the efforts of Gavrilo Princip. FTP, name this Archduke whose assassination on June 28, 1914, brought about the beginning of World War I.

Answer: Archduke Franz (Francis) **Ferdinand**

10. (RL) Born on the fourth of July, this descendant of a judge in the Salem witch trials went to college at Bowdoin, where he met writer Horatio Bridge and future-president Franklin Pierce. He invested in the utopian community Brook Farm as a business venture, getting nothing in return but the material for his novel *The Blithedale Romance*. Later, President Pierce appointed him American consul at Liverpool after his 1851 publication of *The House of Seven Gables*. FTP name this American who wrote *The Scarlet Letter*.

Answer: Nathaniel **Hawthorne**

11. (JV) According to some legends, he had a son named Lityerses who challenged people to harvesting contests but was defeated and killed by Heracles. A lesser-known story about him tells of his moving to the countryside and, after siding with Pan over Apollo in a musical contest, had his ears turned into those of donkeys. He is, of course, more famous for taking care of Silenus and being given a wish by Dionysus in which he chose poorly. FTP, name this mythological leader who turned his daughter into a statue and couldn't eat since everything he touched turned to gold.

Answer: King **Midas**

12. (JS) Their name in Latin comes from a verb meaning "to gnaw" and names this order because its members have an upper and lower pair of rootless, continuously growing, incisors, which they have to keep within manageable lengths by constantly wearing them down. Extinct species like the *Phoberomys pattersoni* grew to weights of 1500 pounds and were about the size of buffalo, while today the capybaras are the largest living species and sometimes weigh over 100 pounds, though the smallest one can be as small as six centimeters. Displaying a wide variety of shapes and sizes in their 27 extant families and 2,055 living species, FTP name this order, the most numerous of mammals, whose most famous representatives are mice and rats.

Answer: **rodentia** or **rodents**

13. (JV) One of the biggest blunders of this battle by the losing side was Richard Ewell's decision not to take Culp's Hill at the end of the first day. The next pivotal action occurred south of the town at the Little Round Top where the 20th Maine held the flank. This describes, FTP, what Civil War battle that took place July 1st through the 3rd, 1863, which began as a search for shoes and ended with Pickett's Charge in a small Pennsylvania town?

Answer: The Battle of **Gettysburg**

14. (JK) Their name was first used by J.J. Sylvester. Toeplitz ones are useful in computer sciences, as they can be added in $O(n)$ time and multiplied in $O(n \log n)$ time. Stochastic ones are used in defining Markov chains. Hermitian ones contain complex entries and is equal to its own conjugate transpose. Orthogonal ones are whose transpose are its inverse. Skew-symmetric ones have all zeros on the diagonal and whose elements symmetric to the main diagonal are the negative of each other. Square ones have the same number of rows and columns. FTP, these are all what kind of mathematical structures that contain a rectangular table of numbers?

Answer: **matrices**

15. (JK) Although the main character of this work injures his foot, the real-life inspiration for the character actually injured his knee. In response to the hanging of a young child, the protagonist asks "where is God now?" and responds to himself that "he is hanging here on this gallows." A powerful event in the work is a train ride from Gleiwitz to Buchenwald, which only twelve of the hundred Jews who start the journey survive. FTP, identify this autobiographical work by Elie Wiesel and recent entry in Oprah's Book Club that retells and reflects on his survival of the Holocaust.

Answer: ***Night*** or ***La Nuit***

16. (MD/CS) Its national motto is "Bersekutu Bertambah Mutu." Its flag features 13 alternating red and white stripes with a moon crescent and sun in the top-left corner. In the mid-1990's it began building a new administrative capital, Putrajaya, to supersede its official capital, which is also its largest city. Besides the twelve states in its main or Western part, it has an Eastern part which includes the island of Labuan and the states of Sabah and Sarawak on the island of Borneo. FTP name this country whose capital, at least for the moment, is still Kuala Lumpur.

Answer: **Malaysia**

17. (CWRU) QUOTE: "Annual income twenty pounds, annual expenditure nineteen nineteen six, result happiness. Annual income twenty pounds, annual expenditure twenty pounds ought and six, result misery." That's a memorable quote from this novel, which includes the landlady Mrs. Crupp, the schoolmaster Mr. Creakle, the stagecoach driver Barkis, and the unctuous clerk Uriah Heep. FTP name this semiautobiographical novel by Charles Dickens, whose first chapter has the imaginative title "I Am Born."

Answer: **David Copperfield** [prompt on Dickens before "this novel"]

18. (JK) An April 2005 patch saw a bug fix that led to the removal of Captain Placeholder. One of this game's enemies, Hakkar the Soulflayer, resides in Zul'Gurub and caused a stir when the Corrupted Blood plague spread from him. Players can choose to be a part of either the Alliance or the Horde in the online universe of Azeroth. FTP, identify this Blizzard Entertainment massively multiplayer online role-playing game based on a series of real-time strategy games.

Answer: **World of Warcraft**

19. (JK) It can be derived by integrating the Navier-Stokes or Euler equations and deals with circumstances where the Reynolds number is between 1000 and 2000. Variables in this equation include acceleration due to gravity, height from an arbitrary point in the direction of gravity, velocity, pressure along the streamline, and fluid density. FTP, identify this equation describing fluid moving along a streamline that is named after a Dutch mathematician.

Answer: **Bernoulli's equation**

20. (QR) The issue was violation of the Butler Act, a statute passed earlier that year. Local mine manager George Rappelyea persuaded leading businessmen that challenging it would bring in extra revenue and attention to the town. Though the Hicks brothers, the original prosecutors, were friends of the defendant, the lawyers who eventually assisted both sides were much more recognizable outside the small town of Dayton, Tennessee. FTP name this 1925 event, that saw William Jennings Bryan assist the prosecution in a case about evolution being taught in schools.

Answer: **Scopes or Monkey Trial**

21. (JV) Its fourth stanza declares that "Then conquer we must, when our cause it is just" and that "this be our motto: 'In God is our trust!'" Its second stanza, a reply to the most well-known first, says that the title object "catches the gleam of the morning's first beam / In full glory reflected now shines in the stream." The events that inspired the poem were set in motion when the poet was sent to retrieve Dr. William Beanes in a prisoner exchange and was detained overnight on the HMS Minden. FTP, name this poem first titled *The Defence of Fort McHenry* that says the title object does wave "O'er the land of the free / and the home of the brave."

Answer: ***The Star-Spangled Banner***

22. (GT) He does not figure into many legends, but one of them was that he helped his more famous brother assign virtues and qualities to all the animals but bestowed so few on man that his brother sought an additional advantage for them, which led to his ruin. The son of Japetus and Clymene, it was this sort of lack of foresight that caused him to ignore his brother's advice never to accept a present from the gods and thus marry the woman by whom he would father Pyrrha, but foresight was hardly his department, as his very name of "hindsight" reveals his true gifts. FTP name this Titan, whose marriage to Pandora ended disastrously and thus ultimately proved the wisdom of the warning that had come from this Titan's brother, Prometheus.

Answer: **Epimetheus**

1. (CS) In every election cycle, it's inevitable that one major party candidate will lose a Presidential election. But all four of the candidates on the two major parties' tickets in 1976 eventually did just that. FTSNOP, name that loser:
 (5) The first to lose was this unelected incumbent President, who took office when Richard Nixon resigned in 1974 but failed in his 1976 race to win a full term.

Answer: Gerald "Jerry" Ford

(5) This former Governor of Georgia defeated Ford in 1976, only to lose his reelection bid in 1980 to Ronald Reagan.

Answers: James Earl "Jimmy" Carter

(10) This former Minnesota Senator was elected Vice President with Carter in 1976. After losing his 1980 reelection bid for that office, he became the Democratic nominee in 1984 and was clobbered by Reagan.

Answer: Walter "Fritz" Mondale

(10) Ford's unsuccessful running mate, this man Senator from Kansas waited another 20 years for his ultimate loss, failing in bids for the 1980 and 1988 G.O.P. nomination before losing to Bill Clinton in 1996.

Answers: Robert "Bob" Dole

2. (JV) We hope nobody playing today is planning a wedding for any time soon, but if so, name the composers of these musical works you would be likely to include FTPE.

The *Bridal Chorus* from his opera *Lohengrin* is often referred to as *Here Comes the Bride*. This German composer is better known for his *Ring Cycle* of operas.

Answer: Richard Wagner (vahg-ner)

He composed the famous *Wedding March* as part of his musical rendition of *A Midsummer Night's Dream*. He may be better known for his Italian and Scottish Symphonies.

Answer: Felix Mendelssohn

The early baroque piece *Canon in D*, composed by this man, is used for many weddings. It uses three violins and a basso continuo.

Answer: Johann Pachelbel

3. (IL) Name these British poems from first lines and the poet's name, FTPE.

[10] "My heartache and a drowsy numbness pains"; John Keats

Answer: "Ode to a Nightingale"

[10] "Wee, sleekit, cowerin', timorous beastie!"; Robert Burns

Answer: "To a Mouse, on Turning Her Up in Her Nest with a Plough"

[10] "The curfew tolls the knell of parting day"; Thomas Gray

Answer: "Elegy Written in a Country Churchyard"

4. (NR) Name these physics objects named for scientists, FTPE.

1. Invented in 1929 by an American physicist to provide energy for particle accelerators, they usually consist of a belt of silk running over two pulleys, one of which is surrounded by a hollow metal sphere with two electrodes positioned respectively near to the bottom of the pulley and inside the sphere.

Answer: Van de Graaff generator

2. One of these can be as easy to build taking a glass battery jar, winding it about 80 times with magnet wire, and slipping into it a primary consisting of eight to ten turns of B & S wire and immersing it in mineral oil. Invented by a Serb-American scientist eccentric and genius to provide energy to cathode ray tubes, they are beloved by science hobbyists.

Answer: Tesla coil [I'm told that "If someone protests about him being Croatian-American, he was a Serb born in Gospic, in what is now the Krajina region of Croatia"]

3. Tunnels obstruct radio reception because they are examples of these, named for the English discoverer of the fact that a changing magnetic field produces an electric one. They exclude electromagnetic waves from their interior.

Answer: Faraday cage or shield

5. (JK) FTPE, name these films NOW PLAYING AT A THEATER NEAR YOU!

A. This film tries to revive the franchise of Inspector Jacques Clouseau, this time portrayed by Steve Martin.

Answer: ***The Pink Panther***

B. Agent Malcolm Tupper once again goes undercover in this sequel to a film that stars Martin Lawrence.

Answer: ***Big Momma's House 2***

C. Paul Bettany costars in this Harrison Ford film about a security specialist who is forced to rob a bank.

Answer: ***Firewall***

6. (JK) The 1940 film adaptation of this work cuts out the final breastfeeding scene that occurs in the novel. FTPE, answer the following.

A. Name this novel about the Joad family's journey to a better life in the west.

Answer: ***The Grapes of Wrath***

B. Name the author of *The Grapes of Wrath*.

Answer: **John Steinbeck**

C. Name the female character who is involved in the aforementioned final scene.

Answer: **Rose of Sharron**

7. Give the numbers of these French kings named Louis given descriptions, FTPE.

[10] Famed for asserting "I am the state", this autocratic monarch ruled France with an iron fist. He built the palace at Versailles, and was known as the "Sun King".

Answer: Louis **XIV**

[10] Beheaded during the French Revolution along with his wife Marie Antoinette, this ineffectual ruler was extraordinarily fat, although not quite as fat as Louis the Fat

Answer: Louis **XVI**

[10] He reigned as king of France for ten years, except for a brief break in 1815 when Napoleon came back into town.

Answer: Louis **XVIII**

8. (DL) You'll need some protective gear to deal with this bonus: identify the following poisonous metals FTPE.

This bluish white metal is the cause of Itai-Itai Disease, named for the Japanese words meaning "pain, pain." Exposure causes the bones to soften and damages the kidneys. About 3/4 of the industrial usage of this element is in batteries.

Answer: **Cadmium**

The tremors, hallucinations and dementia brought on by inhalation of this metal's fumes are believed to be the origin of the phrase "mad as a hatter." This element's use in thermometers and lamps largely has been phased out in recent years.

Answer: **Mercury**

Hair loss is a distinctive symptom of exposure to this metal, once used widely as a rat poison and pesticide. The compound Prussian Blue is used as an antidote to ingestion of this element.

Answer: **Thallium**

9. (DL) "Sea" your way through this bonus. FTPE what body of water separates:

Italy from the Balkan peninsula?

Answer: **Adriatic** Sea

Australia from New Zealand?

Answer: **Tasman** Sea

China from the Korean peninsula?

Answer: **Yellow** Sea

10. (BS) For 10 points each, name the fathers of these biblical figures.

1. Jacob

Answer: **Isaac**

2. Solomon

Answer: **David**

3. Ishmael

Answer: **Abraham**

11. (JV) He dropped out of college, served in the Korean War, and wrote for *Playboy*. And wrote some children's books. Name the following works by Shel Silverstein FTPE.

A. His most famous collection of poetry, this 1974 classic was followed by *A Light in the Attic* and *Falling Up*.

Answer: Where the Sidewalk Ends

B. Published in 1960, this book tells of a boy who grows up dependent on the title figure who provides everything it has for him. Crying ensues.

Answer: The Giving Tree

C. Shel is also in the Nashville Songwriter's Hall of Fame and has two Grammy's. Perhaps his best-known song is a tale of a boy with an effeminate name, recorded by Johnny Cash.

Answer: A Boy Named Sue

12. (MD/CS) Given a starting molecule and one key end product, FTPE name the intervening biochemical process:

A) Pyruvate to adenosine triphosphate

Answer: **Krebs or citric acid or TCA or tricarboxylic acid cycle**

B) Glucose to pyruvic acid

Answer: **glycolysis** (accept with appropriate awe **Embden-Meyerhoff** or **Entner-Doudoroff** pathway)

C) Simple sugars to either lactic acid or alcohols

Answer: **fermentation**

13. (DL) What do you know about the events portrayed in Steven Spielberg's Best Picture nominee, "Munich?" FTPE: In what year were eleven Israeli athletes abducted and later killed by Palestinian terrorists?

Answer: 1972

The terrorist group took its name from what 1970 incident in which King Hussein of Jordan declared military rule following an assassination attempt, leading to the deaths of thousands of Palestinians?

Answer: Black September

What Nobel Peace Prize winner was Chancellor of West Germany at the time of the 1972 Olympic Games?

Answer: Willy Brandt (Herbert Ernst Karl Frahm)

14. (JV) Roy Williams gets around. Given clues, name the college that Roy Williams graduated from FTPE.

(10) After coaching Kansas to two consecutive Final Four appearances, Roy Williams led this school, his alma mater, to an NCAA national championship last year.

Answer: University of **North Carolina** - Chapel Hill

(10) Before becoming a wide receiver for the Detroit Lions, this Roy Williams decided to stay around for his senior season under Mack Brown.

Answer: University of **Texas** - Austin

(10) Before being drafted in 2002 and becoming a safety for the Dallas Cowboys, this Roy Williams played for this Big 12 school that kept beating the previous Roy Williams' team in an annual rivalry.

Answer: University of **Oklahoma**

15. (IL) Name these artists from rather scary works on a 15-5 basis.

1. (15) His *The Vampyr* was originally simply entitled "Love and Pain" and at any rate is nowhere near as disturbing as lithographs like *Madonna* and his woodcut *Anxiety*.

(5) This Norwegian painter would do renditions in several media of his most famous work, *The Scream*.

Answer: Edvard Munch

2. (15) Among his famous "Black" Paintings are *Saturn Devouring his Children* and *Witches*, which unintentionally terrifying is the slack blank stare of the subjects in his brutally honest *The Family of Charles IV*

(5) Terrifying because they depicted actual events is this Spanish painter's series *Disasters of War*, which includes *Third of May 1808*.

Answer: Francisco de Goya y Lucientes

16. (MD) Given their mothers, identify the resulting children of Zeus, for the stated number of points.
 (5/5) These twins, one born one without any pain and the other after laboring for nine nights and days, were born to Leto.
 Answer: **Artemis and Apollo**
- (10) This messenger of the gods was born to Maia, the eldest of the Pleiades
 Answer: **Hermes**
- (10) The mortal woman Semele made the mistake of asking to see Zeus in all his glory and was promptly reduced to cinders, but not before Zeus was able to save this unborn god and carry him to term sewn in his own leg.
 Answer: **Dionysus**
16. 17. (JK) Answer the following about concepts from discrete mathematics FTPE.
- A. In graph theory, these objects sometimes called nodes are connected by edges. It is the same name of the point in geometry which two lines of a polygon meet.
 Answer: **vertex or vertices**
- B. In combinatorics, the formula for finding the number of these with size s from a number of n items is n factorial divided by quantity n minus s factorial. In English, these are the different ways a group of discrete objects can be ordered.
 Answer: **permutations**
- C. Although they are more accurately called empty sets in set theory, a set with no elements can also be called this kind of set, a four-letter term often used in computer programming to indicate that a pointer does not have a target.
 Answer: **null**
18. (IL) Name these events in American labor history, FTPE
- [10] This 1892 strike lead to the deaths of 10 men after over 300 Pinkerton detectives were brought in to safeguard the strike-breakers brought in by Henry Clay Frick.
 Answer: **Homestead Steel Strike**
- [10] The 1911 fire at this New York City factory caused the death of over 100 garment workers and led to improved safety standards.
 Answer: **Triangle Shirtwaist Factory Fire**
- [10] This 1894 strike against a certain railway union was broken up by 12,000 U.S. Army troops on the grounds that the strike interfered with mail delivery.
 Answer: **Pullman Strike**
19. (GT) Identify the following Roman authors from works for ten points each.
- (a) *Aeneid*,
 Answer: **Virgil**
- (b) *Satyricon*
 Answer: **Titus Petronius**
- (c) *Ad Urbe Condita*
 Answer: **Titus Livius or Livy**
20. (IL) Give the molecular geometry of these compounds as predicted by the VSEPR model, 10 points each.
1. XeF₄ (xenon tetrafluoride)
 Answer: **square planar**
2. CO₂ (carbon dioxide)
 Answer: **linear**
3. SF₆ (sulfur hexafluoride)
 Answer: **octahedral**
21. (MD) Show some class. FTPE, give the taxonomic class for the following animals:
- A) Polar Bears, Sun Bears, and Sloth Bears
 Answer: **Mammalia or Mammal**
- B) Monitor, Basilisk, and mole viper
 Answer: **Reptilia or Reptile**
- C) Hellbender, Ensatinas, and Tennessee Cave Salamander
 Answer: **Amphibian**