## TOSSUPS - BLIND ROUND \#3 CENTER OF THE KNOWN UNIVERSE OPEN 2002 -- UTC Questions by Illinois Institute of Technology with some from Missouri-Rolla

1. Its author wrote to a friend, "The only person I can't show the little enclosed poem to is, of course, my father, who doesn't know he's dying." This poem is one of the few in which its author restricts himself by use of a strict form, the villanelle. Before dealing separately with wise men, good men, wild men, and grave men, it says old age should "burn and rave at close of day." FTP, name this poem in which Dylan Thomas urges the reader to "Rage, rage against the dying of the light."

Answer: "Do Not Go Gentle into That Good Night"
2. A beta-1,4 polymer of N -acetylglucosamine, at least 10 gigatons of it are synthesized and degraded in the biosphere each year. Claimed by some to be a reducer of dietary fat, this structural polysaccharide can be found in fungal cell walls. It is also found in the exoskeletons of insects, crabs, lobsters, and other arthropods. FTP, name this polysaccharide.

Chitin
3. Due to the relative emptiness of his home territory, he could not afford the metal necessary for heavy artillery. He transformed this weakness into an advantage, however, by building many smaller cannons, creating one of the first effective "field artillery" forces. This was one of the factors that allowed him to advance as far south as Munich in the Thirty Years' War. FTP, name this warrior-King of Sweden who was killed in battle at Lutzen on November 6, 1632.

Answer: Gustavus Adolphus
4. Since 1983 some 50,000 people have been killed in this country's civil war, with the rebels claiming to have suffered 10,000 of those casualties. Among the lives taken by the rebels have been the Navy commander, the government's opposition leader and the husband of President Chandrika Kumaratunga (chan-drika koomara-tunga). The Sinhalese majority faces constant pressure from the Liberation Tigers of Tamil Eelam (ee-laam). FTP name this nation, with its capital at Colombo, which was formerly called Ceylon.

Answer: Sri Lanka
5. This band has had three successful albums, and they also appeared on the Spawn soundtrack with Crystal Method, but some of their hits have been literal. Once the punching bag for Trent Reznor, the lead singer of this band left Nine Inch Nails in 1994. FTP name this band, fronted by Richard Patrick, whose hits have included Take a Picture, Where Do We Go From Here, and Hey Man, Nice Shot.

Answer:
Filter
6. In the middle of the Heian period, Hujiwara-no-Konin selected thirty-six masters who he said excelled above all others at these. Considered more courtly and more feminine than a briefer form more familiar in the West, it also is more conducive for embedding secret messages since contains 2 more lines and 14 more syllables. For 10 points, name the form of Japanese poetry, similar to Haiku, which has 31 syllables in 5 lines.

Answer: Tanka
7. In 1952, while still an undergraduate in college, he accepted a position as a student pastor at Somerset Methodist Church in Indianapolis. He left shortly thereafter and founded his own church. Impressed by his good works and belief in civil rights, the city appointed him head of the Indianapolis Human Rights Commission. A vision of nuclear war, however, caused him to abandon Indiana and transfer his "People's Temple" to California, and later set up a commune in Guyana. FTP, name this religious "cult" leader who committed suicide along with 911 of his followers in November 1978.

## Answer: Jim Jones

8. Denis Papin created the first form of this invention in 1680 , but the invention was not used commercially until another form was invented by Thomas Newcomen in 1712, and only then in the mining of coal. Only after advances in iron working and the creation of a rotary design did a form come about that was useful in all forms of industrial production. For 10 points, name this invention, a better form of which made James Watt famous.

Answer: the Steam Engine

9 Like J.R.R. Tolkien, he described a ring that turns its wearer invisible, and like Tolkien, he said that such a ring's great power would corrupt all who possess it. He called his hypothetical ring the Ring of Gyges, which he discussed in his most famous work, The Republic. FTP name this Greek philosopher.

## Answer: Plato

10. The Swingle Singers have a distinctive a cappella version of this work, its composer's opus 49. Implicated in the hearing loss of some of those closest to it, it was commissioned for the 1880 dedication of the Cathedral of Christ the Savior. It intertwines two songs with strong national identification - the hymn "God the Omnipotent" and "La Marseillaise." For ten points, name this Tchaikovsky work with a truly percussive percussion section.

## Answer: The $\mathbf{1 8 1 2}$ Overture

11. Tickets to a popular concert cost $\$ 25.00$. You spend hours in line waiting to buy them, but the tickets sell out before you make it to the ticket window. A few "scalpers" are selling tickets for upwards of \$250, but you're not willing to spend that much. Suddenly, you miraculously find a ticket lying on the ground, unclaimed. Your inclination would probably be to use the free ticket to attend the concert with the free ticket, but an economist would decry that as a waste, since you could have sold the ticket for $\$ 250$. FTP, what is the economic term for the $\$ 250$ you lost by using the free ticket instead of selling it?

Answer: Opportunity Cost
12. Discovered when it was found that a curdy material resulted when animal fat was heated, this process is the basecatalyzed hydrolysis of the ester linkages in fats and oils. Some have speculated that, after fermentation, it was the second chemical process to be understood and utilized by primitive humans. For 10 points, name this process whose root is derived from the Latin word for one of its primary products, soap.

## Saponification

13. Set in Austria in the late $16^{\text {th }}$ century, it contrasts the priests Father Adolf and Father Peter, and like any story about evil incarnate, there's also a lawyer involved. It details the devil's corruption of, and victory over, a young boy's mind following the death of his friend. The child, through the devils machinations, comes to believe that he is the only entity in existence and that all others are merely figments of his imagination. FTP name this short work by Samuel Clemens.

Answer: $\quad$ The Mysterious Stranger
14. During the Franco-Prussian War of the early 1870 s, it had been the last fortress to fall to the Prussians. This gave it a symbolic importance to the French, which the German army recognized in World War I, leading to their attack on it in 1916. For ten points, name this French fortress, site of perhaps the longest and bloodiest battle in World War I, during which nearly a million casualties were inflicted.

Answer: Verdun
15. He signed only seven of his works, and over the years scholars have determined that fewer and fewer of those attributed to him are really his; at present only 25 to 30 are definitely ascribed to him. Little is known of his life and training, but we do know that Philip II of Spain collected some of his best work, including his "Temptation of St. Anthony." While it's clear that his paintings are allegorical, his crowded style and grotesque tone defy clear interpretation. FTP name this Renaissance painter whose most famous work is "The Garden of Earthly Delights." Answer: Hieronymus Bosch
16. Its aim was to gain control over the major bridges over the Rivers Mass, Waal, and Lower Rhine. Planned jointly with US forces it was launched on September 17, 1944. The British paratroopers were landed eight miles from their targets, and took four hours to reach them. This may not have been so disastrous if two SS Panzer divisions hadn't happened to be in the area training on how to repel airborne landings! Of the 8986 men that took part, 1174 were killed and 5903 captured. FTP, name this battle immortalized in Cornelius Ryan's "A Bridge Too Far".

The Battle of Arnhem: (accept Operation Market Garden)

It has been theorized that gravity is transmitted as a wave. In order to detect this, two physics facilities are using it lasers to try to detect the waves. Those lasers are being used in a device of a type more commonly used to measure. all, precise dimensions such as the thickness of a soap bubble film. Developed by Michelson, Morley, and Miller, FTP, at type of length and distance-measuring device are these lasers being used in?

## Interferometer

18. Its roots can be found in the allegorical morality plays of the Middle Ages and the "nonsense" literature of Lewis Carroll. It is based on the philosophy of Camus, who argued that a fully rational explanation of the universe was beyond human reach. It relies heavily on poetic metaphor to portray the playwright's emotional perception of an inner reality. FTP, name this school of literature that finds examples in Samuel Beckett's "Happy Days" and Eugene Ionesco's "The Bald Soprano".

## Answer: $\quad$ Theater of the Absurd

19. This god, noted for his benevolence, is associated with the morning star and the wind. At the beginning of the fifth age, he created humanity by sprinkling bones brought back from the underworld with his own blood. Unlike his rival Tezcatlipoca, he did not condone the sacrifice of humans and instead asked for the sacrifice of jade, snakes, and butterflies. FTP, name this feathered serpent god who was worshipped by the Aztecs, which came in handy for Hernando Cortez, who was tragically mistaken for him.

## Queztalcoatl

20. In Austin, Minnesota a 16,500 square-foot museum opened for this product in September 2001. Hawaii leads the U.S. in consumption per capita of this product, which as of ten years ago was the second most popular meat in Korea. Those of the World War II generation are often confused when they hear how desirable it is to have filters to protect onese;f from it. Immortalized in a Monty Python skit where boisterous Vikings chant its name, FTP, name this cultural relic whose name has come to be used for unwanted mass e-mails.

## Answer: Spam

21. This chemical blocks the synthesis of prostaglandins in humans.In large enough doses it is toxic and can cause death; in smaller amounts it can cause significant stomach irritation. Synthesized through the reaction of salicylic acid and acetic anhydride, it is effective as a blood thinning agent as well as an antipyretic and anti-inflammatory. For 10 points, name this popular painkiller introduced by Bayer.

## Aspirin

22. Viliumas Malinauskus, a resident of this ex-communist state, won the "Ig Nobel Prize" for Peace with his construction of "Stalin World", a historical amusement park. Most of its inhabitants are not so forgiving; it was one of four former Soviet republics that did not join the "Commonwealth of Independent States" that succeeded the USSR. FTP, name this country with its capital at Vilnius.

## Lithuania

23. On September 26 of 2002, he joined the ranks of such notable Americans as Ronald Reagan, Rudy Giuliani, and Bob Hope when he was given an honorary knighthood by Queen Elizabeth II. The honor, granted shortly after his visit to the Bank of England, was given in recognition of his contribution to global economic stability. FTP, name this famous American economist appointed Chairman of the U.S. Federal Reserve by Ronald Reagan, a position he still holds.

## Alan Greenspan

BONI - BLIND ROUND \#3
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1. "Tanstaafl!" This word, taken from a Hugo-winning 1960's novel and adopted into modern English as computer jargon, is actually an acronym. For ten points, what does it stand for?

Answer: There Ain't No Such Thing As A Free Lunch!
For ten more points, what novel about revolutionaries on the moon in the year 2076 is this acronym taken from?
Answer: $\quad$ The Moon is a Harsh Mistress
For a final ten points, who is the author of The Moon Is a Harsh Mistress?
Answer: Robert Heinlein
2. In chemistry, different compounds that share the same molecular formula are known as isomers. FTP apiece, name these classes of isomers:

1. This class of isomers describes a pair of nonsuperimposable mirror image molecules whose properties differ only in the direction in which they rotate polarized light.

## Enantiomer (accept Optical Isomer)

2. These isomers compose a subclass of the diastereomer and differ in their geometric arrangement on a ring or double bond.

## Geometric (accept Cis-Trans Isomer)

3. These isomers differ in the placement of a proton and the corresponding location of a double bond.

Tautomer
3. F5PE or 30 for all correct, give the US election year from slogans or catchphrases:
"Tippecanoe and Tyler, too"
1840
"Why not the best?"
1976
The ungrammatical "return to normalcy".
1920
Dueling insults: "Ma! Ma! Where's my pa?" and "Blaine, Blaine, James G. Blaine, Continental liar from the state of Maine."
1884
"Fifty-four forty or fight!"

## 1844

4. For 10 points apiece, I'll give you the two first names of people from a family involved presently or in the past with Championship Auto Racing Teams (CART), you give me the last name.
5. Emerson and Christian

Answer: Fittipaldi
2. Al Sr . and Al Jr .

Answer: Unser
3. Mario and Michael

Answer: Andretti
5. While most painters can be characterized in one of the major art styles, some artists are put in their own classification because of their unique creativity. For 10 points each, answer these two questions about Georges Seurat. a. Seurat's paintings are classified in this unique style, named for its juxtaposition of tiny dots to form a solid figure.

Answer: Pointillism
b. Name his most famous painting, featuring many people on a waterfront on a weekend day..

Answer: A Sunday Afternoon on the Island of La Grande Jatte
c. In what American museum would you find "A Sunday Afternoon on the Island of La Grande Jatte"?

Answer: $\quad$ Art Institute of Chicago or Chicago Art Institute
6. It tells of Okonkwo, a respected Ibo clansman at the turn of the century who has trouble adjusting as colonialism and Christianity encroach on his village. FTPE:
a) First, name this 1958 novel.

## Answer: Things Fall Apart

b). Things Fall Apart was the first novel by this Nigerian author, who has written two sequels involving Okonwko's descendants.

Answer: Chinua Achebe
c). Achebe took the title of Things Fall Apart from the poem "The Second Coming" by this 1923 Nobel laureate.

Answer: William Butler Yeats
7. For 10 points each, answer these questions relating to black holes:

1. The phenomenon that causes black holes to shrink

## Hawking radiation

2. This is left after the black hole entire evaporates and is forbidden by nature

Naked singularity
3. Give the name for the kind of black hole that is perfectly spherical

## Schwarzschild black hole

8. For ten points each, name the Supreme Court cases from descriptions of the events behind the case:
9. Police obtained a search warrant to enter an Ohio house in search of a felon and found instead illegal pornography, for which they arrested the house's owner.

## Answer: Mapp v. Ohio

2. An Appointee to the Supreme Court sued the secretary of state for repealing his appointment.

## Answer: Marbury v. Madison

3. A man was arrested for reportedly breaking into a Florida pool hall and robbing a cigarette machine and represented himself in court because he was not supplied an attorney.

## Answer: Gideon v. Wainwright

9. There are plenty of small countries out there in the world. This bonus, however, focuses on the really small ones. Name them for ten points each.
10. Possibly the only case where an international boundary is comprised almost exclusively of a wall, this 0.17 square mile state is located entirely within Rome.

Answer: Vatican City
2. At just 8.11 square miles, this tiny Pacific island is the world's third-smallest country. Holding just over 12,000 people, phosphate mining has left it with almost no arable land.

Answer: Nauru
3. These 1,190 atolls in the Indian Ocean spread over 35,200 square miles, yet comprise just 116 square miles of land none of which is higher than six feet above sea level.

Answer: Maldives
10. Given a brief description of a Jazz figure identify the figure for 10 points each.

10-Born in New Jersey in 1904, his brand of Kansas City jazz became the classic swing-band style, featuring spare keyboard playing with a precise four beat rhythm section. His hits include Jumpin' at the Woodside and Stay Cool. Answer: William "Count" Basie
10 -Born in Washington D. C. in 1899 this pianist, composer, and band leader is considered the most important composer of big-band music. Some of his hits are Mood Indigo, It Don't Mean a Thing and Sophisticated Lady. Answer: Edward Kennedy "Duke" Ellington
10-Born in 1915 in Maryland, this vocalist was famous for her melancholy improvisations of ballads and popular songs. Some of her recordings are Strange Fruit and Lover Man.

Answer: Billie "Lady Day" Holliday
11. Name these stars from the "A" list FTPE:
a) From the Arabic for "End of the River," this white star of 4 magnitude lies at the southern end of the constellation representing the River Eridanus

Achernar
b) A second and equivalent Latin name for this red star in Scorpio with a .7 magnitude is "Marti comparatur"

Antares
c) Varying between 2.3 and 3.5 , this star formerly known as Beta Perseii shares the Arabic source of its name with a longlived Middle Easterner, a foe of Batman.

## Algol

12. FTP each, name these characters from John Steinbeck's The Grapes of Wrath

The story's main protagonist, he is on parole from McAlester state prison, although the initial assumption when he comes home is that he must have busted out..
Tom Joad
This preacher is brutally killed in an attempt to organize the migrant workers.
Jim Casey [accept either name]
This woman, Tom Joad's sister, is abandoned by her husband and gives birth to a stillborn child due to undernourishment.
Rose of Sharon or Rosasharn
13. Few people realize that $9 / 11$ is the anniversary of an earlier tragedy. For 10 points each,

1. What Latin American nation underwent a military coup on Sep. 11, 1973?

Answer: Chile
2. What democratically elected President was overthrown in that coup?

Answer: Salvador Gossens Allende
3. What military dictator replaced the elected government to rule for 17 years?

Answer: Augusto Pinochet Ugarte
14. Identify these often-confused Platonic dialogs from description FTPE.

A: This dialog deals with the spirit of the law as the title character tries to convince Socrates to escape from prison.
Answer: Crito
B: This dialog depicts the actual events of Socrates' death and contains a discussion of the eventual fate of the soul.
Answer: Phaedo
C: Taking its title from the Greek for a formal defense speech, this dialog depicts Socrates' trial for impiety and corrupting the youth.

Answer: $\quad$ The Apology (of Socrates)
15. Besides the Chemical Brothers, Astralwerks harbors some of the best talent in the music genre of electronica these days. I'll give you the 4-11 and you give me the artiste.

1. This Astralwerks artist formed Roxy Music and has collaborated with David Byrne, David Bowie, and The Talking Heads. Not to mention he has been the producer on the last four albums by U 2 .
Answer: Brian Eno
2. These Astralwerks mates hail from Scotland. They also toured with Radiohead on their two 2001 North American Tours.
Answer: The Beta Band
3. This band's album cover for its Rooty album features a gorilla chewing a root. If you cannot name this popular, then I may have to ask you Where's Your Head At?
Answer: Basement Jaxx
4. The human pancreas contains small clusters of cells known as the Islets of Langerhans, which are composed of four cell types. FTP each, name the type of pancreatic cell that:

> Produces insulin and amylin.

## Beta Cells

Produces glucagon.

## Alpha Cells

Produces somatostatin.
Delta Cells
17. For much of its history, China was ruled by lines of Emperors; for 10 points each, name these Chinese Dynasties. Lasting from 618AD to 907AD, this Dynasty saw the invention of Block printing and a government system of Confucian scholars selected through civil service examinations.

## Tang dynasty

From 1279 AD to 1368 AD, a Dynasty set up by the Mongol Kublai Khan ruled most of China. Name this Dynasty.
Yuan dynasty (pronounced yoo-EN)
Lasting from 1368 AD to 1644 AD , this Dynasty first saw a great increase in exploration and trade, but, in 1433, it ended naval exploration and began the closing of Chinese borders.
Ming dynasty
18. There were 10 lost tribes of Israel. Identify these groups, who may (or may not) be descended from those tribes: A. These Ethiopian Jews migrated to Israel in the latter half of the 20th century, and practiced a near biblical version of Judaisim
Answer: Falasha
B. Over 50\% of the members of the Buba clan of this Zimbabwe tribe have the Cohen Modal Haplotype.

Answer: Lemba
C. In this warrior group of Japan there is a tradition that their ancient ancestors came to Japan from western Asia around 660 BC, perhaps from Samaria
Answer: Samurai
19. Geoffrey Chaucer's unfinished work The Canterbury Tales contained stories told by a collection of pilgrims. FTP each, answer these questions about The Canterbury Tales.
The pilgrims in the story were on their way to see the shrine to this man.

## St. Thomas à Becket

According to the prologue, each pilgrim was to tell this many tales. four ( 2 on the way to Canterbury, 2 on the way back.)
The first tale, set in Athens, is told by this pilgrim.
the Knight
20. In the Old Testament, only two orders of angels, the seraphim and cherubim, are described. Today, however, a hierarchy of nine orders is commonly used. For 10 points apiece, name:
The third order of angels included in the circle that includes the seraphim and cherubim.

## Ophanim (also accept Thrones)

The fourth order of angels lead by Zadkiel, Hashmal, Muriel, and Yahriel.

## Dominions (also accept Dominitions or Hashmallim)

The order of angels created first by God as guardians against the invasion of heaven or earth.

## Powers

21. Given the airline, name the international alliance to which it belongs

| A. United, Lufthansa, Singapore | Answer: | Star Alliance |
| :--- | :--- | :--- |
| B. British Airways, American, Cathay Pacific | Answer: | Oneworld |
| C. Delta, Air France, Korean | Answer: | Skyteam |

22. For 10 points each, name the Wiccan sect described:
23. This feminist sect worships the Goddess only.

Answer: Dianic
2. This sect is based off of the teachings of the author of "Witchcraft Today," the book that helped revive the modern Wicca movement. Answer: Gardnerian
Answer: Discordia (accept also Discordian)
23. BONUS Identify the architects of these famous New York landmarks:
A. Who designed the NY Daily News Building?

Answer: Raymond Hood
B. What architect led the team that designed the United Nations Headquarters?

Answer: Wallace K. Harrison
C. What firm designed the Empire State Building?

Answer: $\quad$ Shreve Harmon and Lamb

