

TOSSUPS – RAGAB BLIND ROUND**Center of the Known Universe Open 2005 -- UT-Chattanooga****Questions mostly by Ahmad Ragab with Ray Luo, Cal-Berkeley (Ashley Chow, Martha Matsumoto, Salpi Vartivarian), Wesley Mathews, and your genial quizmaster**

1. (RL) J. B. S. Haldane wrote a treatise titled after them, and Eduard Buchner found they were apart from cells, contrary to Pasteur's vitalism. Frederick Kuhne coined the term for them, while John Northrop and Moses Kunitz crystallized them, confirming James Sumner's work with urease that showed they were made of proteins. Daniel Koshland proposed its induced fit, while Adolphe Wurtz proposed its complex with substrates. Emil Fischer gave a lock-and-key model for, FTP, what catalytic proteins?

Answer: **enzymes**

2. Consisting of mostly speeches and little action, it is now considered by most scholars to be the work of another hand, perhaps one as late as the 4th century BC. The daughters of Okeanos, who make up the chorus, appear and attempt to comfort the protagonist by conversing with him. Okeanos himself, a friend, arrives and warns the hero not to arouse the further wrath of Zeus by boasting of the god's future overthrow. Remaining defiant, Cratos, Bia, and Hephaestus FTP chain the hero to a mountain in the Caucasus in this play attributed to Aeschylus about the myth of a Titan who gave the gift of fire to mortals.

Answer: **Prometheus Bound**

3. Admiral Patricio Montojo had been dispatched rapidly to the area but was equipped with a variety of obsolete vessels. Efforts to fortify his position amounted to nothing when the incredibly corrupt Spanish colonial bureaucracy sent explosives meant for mines to friendly construction companies. On 1 May, the phrase, "You may fire when ready, Gridley," was famously uttered aboard *USS Olympia* by Admiral George Dewey. FTP name this engagement of the Spanish-American War which gave the U.S. control of the Philippines.

Answer: **Battle of Manila Bay**

4. Doug Lenat's Automated Mathematician supposedly rediscovered the problem in 1982. In order to generate publicity for a book with it in the title by Apostolos Doxiadis, British publisher Tony Faber offered a \$1,000,000 prize for a proof of the conjecture in 2000. The prize was only to be paid for proofs submitted for publication before April 2002. The prize was never claimed. First proposed by a Prussian mathematician in a letter to Leonard Euler, FTP name this conjecture, one of the oldest unsolved problems in number theory which states that every even number greater than 2 can be written as the sum of two primes.

Answer: **Goldbach's Conjecture**

5. (UCB/RL) She had the best lawn on Wisteria Lane until Martha Huber dropped a collapsed jogger into her hydrangeas. Her attempts to preserve her marriage to Rex include sabotaging his mattress and trying to steal the tape of his session from Dr. Goldfine, but she also almost kills Rex by giving him onions and reveals at a dinner party that he cries after ejaculating. Rex eventually comes back when her son Andrew hits Mrs. Solis with a car. For ten points, name this red-haired *Desperate Housewife*, played by Marcia Cross.

Answer: **Bree Van De Kamp**; accept either first or last name

6. (UCB/RL) Schoolboys pelted her husband's entourage with snowballs when he married her, an example of growing xenophobia during her reign. She led an unhappy childhood, being banished from court at a young age to Ludlow. After ascension to the throne, she falsely believed that she was pregnant. Her attempt to reconcile England to the Catholic church failed, perhaps largely due to the fact that it was known that her successor would be Protestant. The daughter of Catherine of Aragon, for ten points, name this bloody Tudor monarch.

Answer: **Mary I**; or **Mary Tudor**

7. In 1933 his daughter Wanda married the Russian pianist Vladimir Horowitz. He was originally a cellist, but in an 1886 performance of *Aida* in Rio de Janeiro his conductor was booed offstage, and this man had to finish. Thus beginning his career of conducting at the tender age of 19, his near-perfect pitch and photographic memory made him well-suited for the task. FTP name this man often considered the greatest of conductors, known for his many performances on NBC of Verdi and Beethoven, who became the resident conductor at La Scala in 1898.

Answer: **Arturo Toscanini**

8. His investigations into the action of electrostatic and magnetic fields on the nature of so called "anode rays" or "canal rays" would eventually result in the invention of the mass spectrometer. Born in 1856 this English physicist would do most of his work Cavendish Laboratory, eventually becoming Cavendish Professor of Physics at Trinity College at Cambridge in 1884, where one of his students was Ernest Rutherford. Winner of the 1906 Nobel Prize in Physics, FTP name this man best known for his discovery of the electron.

Answer: **J.J. Thomson**

9. (UCB/RL) Including visits to the Harvilles and to Lady Dalrymple, this novel begins with the letting of an estate neighboring Uppercross to the Admiral, which leads to another meeting between the protagonist and the brother of Mrs. Croft, whom she refused on the advice of Lady Russell. Louisa Musgrove's fall off the steps on the Cobb led to her engagement to shy Captain Benwick. Centering on the inhabitants of Kellynch Hall, for ten points, name this Jane Austen novel featuring the romance of Captain Wentworth and the gullible Anne Elliot.

Answer: **Persuasion**

10. (UCB/RL) Many of its inhabitants were transferred to Norfolk island in 1856. Rediscovered by Philip Cateret, this island is part of a group that contains Henderson, Ducie, and Oeno, and contains the village of Adamstown. A creole language formed here from the interaction of Tahitian and an 18th century dialect of English. About half-way between Peru and New Zealand, it has about 50 inhabitants, the least populated country of the world. With a tradition of sexual abuse of young girls, for ten points, name this island occupied by mutineers of HMS Bounty.

Answer: **Pitcairn Island**

11. Upon graduation from the George Washington Law School 1940, he took a job with the Federal Trade Commission. His first case was whether a toilet paper brand called "Red Cross" was misleading consumers into thinking it was endorsed by the American Red Cross; he determined that people did use toilet paper, but did not appreciate talking about it. He relates this story in his 1979 memoirs, in which the first line begins, "The Bill of Rights is not a suicide pact," referring to the treatment of fellow Bureau agents as criminals and other policies that protect criminals. Convicted in 1980 of violating the civil rights of contacts of his in the Weathermen, FTP name this recently revealed source in the Executive Branch who had access to information at the Committee to Re-elect the President.

Answer: **W. Mark Felt**

12. Born in Boston, she was the daughter of a professor of biology at Boston University. She began writing verse as a child and in 1952, as an undergraduate at Smith College, won a fiction contest that involved acting as guest editor for a national magazine. In one of her poems, the title character states, "Dying is an art, like everything else, I do it exceptionally well" – ironic in light of her multiple failed suicide attempts. Posthumously winning a Pulitzer Prize for her *Collected Poems* in 1982, FTP name the author of *The Bell Jar*.

Answer: **Sylvia Plath**

13. (UCB/RL) While S, C, and E polymorphisms of this molecule lead to abnormalities, Savannah, Bangkok, Zurich, and Tokuchi variants of one of its subunits are perfectly normal. Before birth, it is synthesized in the liver using 2 gamma subunits. The Bohr effect is the downward shift of its sigmoidal dissociation curve at lowered pH. Consisting of noncovalent interactions of 2 alpha chains and 2 beta chains, it contains 4 porphyrin rings and 4 iron atoms. For ten points, name this protein that transports oxygen from the lungs to the tissues.

Answer: **hemoglobin**

14. The mosaic floor of Westminster Abbey is imitated in this work. On the shelf in the back of the painting, there is Peter Apian's book on accounting as one of the representatives of the quadrivium on display. The shelf also holds a sundial and a globe. Just below Jean de Dinteville and Georges de Selve is a distorted skull that appears normally if viewed from below. FTP, name this portrait by Hans Holbein depicting the titular representatives of Francis I in London.

Answer: **The (French) Ambassadors**

15. (UCB/RL) In a 1965 excavation of this site, Yigael Yadin found potsherds with Hebrew names, possibly lots cast to decide who would die first. Fortifications built by Herod the Great here were put to use by the 1000 men, women, and children led by Eleazar ben Jair against the 15,000-man Roman legion X Fretensis for 2 years, until the Romans built a ramp of earth up to this fortress and set fire to its walls. Southeast of Jerusalem, for ten points, name this mountaintop fortress, where in 73 C. E. the Romans found that all but 7 of the Zealots had taken their own lives.

Answer: **Masada**

16. Intending initially to become a painter he has cited the Austrian expressionist painter Oskar Kokoschka as a major inspiration for his works. He attended several art schools before settling at the Pennsylvania Academy of Fine Arts where he began working with film. His first short film, *Six Figures Getting Sick*, features six statues whose heads get bigger and then vomit, a full four minutes in length. This Transcendental Meditation groupie who also happens to be a prolific, eclectic, and slightly overrated director characterized himself simply as, "Eagle, Scout, Missoula, Montana" to the press in 1990 when he won the Palme d'Or at Cannes for the movie, *Wild at Heart*. FTP name this director of such other films as *Fire Walk With Me*, and *Eraserhead*.

Answer: **David Lynch**

17. John Ridpath, Mercer Adams, and Charles Edmund wrote the definitive biography of this man, calling him a pre-revolutionist. His sister Mercy was an accomplished writer, penning a play *The Alduteur* and one of the first History of the Revolutionary War. His brother Samuel Allyne was secretary of the US Senate and collected supplies for the Continental Army. He himself was a lawyer in colonial Massachusetts who was an early advocate of the political views that led to the American Revolution. speaking and writing in support of liberty in a case involving the Writs of Assistance. FTP name this outspoken pre-revolutionary attributed to have said, "Taxation without Representation is Tyranny."

Answer: **James Otis**

18. (UCB/RL) In a poem composed on death of his wife, he notes that she has "a Spanish body and a belly like a Swiss frau." Called away from his studies under Ponocrates when the king of Lerne, Picrochole, invades the land of his father, he was carried for 11 months and born out of the left ear of his mother after she had eaten too much liver, while he shouts "drink, drink, drink." With a name meaning "gullet," for ten points, identify this son of Grandgousier and Gargamelle, and father of Pantagruel, a title giant in a work of Francois Rabelais.

Answer: **Gargantua**

19. (UCB/RL) Its atmospheric methane absorbs light at the red end of the spectrum, while an unusual magnetic field governs its rotation. The only planet with an equator lying on a perpendicular plane, it has 11 rings, the outermost of which is called the epsilon ring. William Lassell discovered two of its moons: Umbriel and Ariel, while Gerard Kuiper found Miranda. Discovered in England by the German astronomer William Herschel, for ten points, name this third largest planet in the solar system that lies beyond Saturn.

Answer: **Uranus**

20. QUOTE: "Let no one enter who does not know geometry", was inscribed on his door. Born in 429 B.C. this Athenian nobleman was disillusioned by the current forms of government in Athens. Oddly enough, in the potentially falsified Seventh Letter, where he claims real philosophy cannot be written down, we find much of his work extant. In one of his main works he discusses how men can be properly governed if their rulers were philosophers or their philosophers became rulers. FTP name this founder of the Academy author of the Republic and student of Socrates.

Answer: **Plato**

21. The name's the same. The music producer responsible for Cypress Hill's latest album, a science fiction novel by Geary Gravel, a 17th painting by the Flemish painter David Teniers the Younger, a 17th century play by Ben Jonson, and a FullMetal one in a anime series. Most notably a 20th century allegorical novel originally written in Portugese, about a man who goes on a quest to discovery his treasure only to realize his treasure is where he left it a church with a tree growing in the middle by Paul Cohello FTP give this name also shared by one who is very interested in turning lead to gold.

Answer: **The Alchemist**

22. The earliest proponents of the idea were W. D. Hamilton and John Jaenike. Its first part states that, in tightly coevolved interactions, evolutionary changes by one species could lead to extinction for another species, and that the probability of such an event is independent of the species' age. Originally named by Leigh Van Valen, its other more famous part states that coevolution could lead to sustained oscillations in genotype frequencies. In other words in order for other species to compete, they must engage in an continually escalating arms race, alluding to the metaphor that the name implies, move twice as fast to get anywhere. FTP, identify this hypothesis of evolutionary biology named after a royal character in *Alice in Wonderland*.

Answer: **Red Queen Hypothesis or Effect**

BONI – RAGAB BLIND ROUND Center of the Known Universe Open 2005 -- UT-Chattanooga
Questions mostly by Ahmad Ragab with Ray Luo, Cal-Berkeley (Ashley Chow, Martha Matsumoto, Salpi Vartivarian), Wesley Mathews, and your genial quizmaster

1. (UCB/RL) For ten points each, identify these ancient doctor/philosophers.

1. This man was believed to have lived sometime around the 4th century B. C. E. He first put forth the idea of the four humors, and his oath is still used.

Answer: Hippocrates of Cos

2. He was personal physician to Marcus Aurelius and gave the first description of the chambers of the human heart. He also wrote treatises on logic and ethics which have not survived.

Answer: Galen

3. This Arabian physician and philosopher's "Canon" was the principal text of medical schools in Europe and Asia for several centuries after his death in 1037 C. E. He also wrote on metaphysics and theology.

Answer: Avicenna

2. FTPE name the President given events in his Administration

(10) 'the billion dollar Congress', 'Pan-American Congress', 'Sherman Anti-Trust Act'

Answer: **Benjamin Harrison**

(10) 'Black Thursday', Bonus Army March, Star-Spangled Banner officially becomes National Anthem

Answer: **Herbert Hoover**

(10) Dorr's Rebellion, the annexation of Texas, and the death of two Cabinet members when a cannon exploded in a ceremonial firing on the USS *Princeton*

Answer: **John Tyler**

3. (UCB/RL/CCS) Answer the following related questions FTPE:

(10) This metaphysical poet wrote "Batter My Heart, Three Person'd God" and "The Flea."

Answer: John **Donne**

(10) Donne's Meditation XVII, source of the Hemingway title *For Whom the Bells Tolls*, opens with this 5-word phrase.

Answer: **"No man is an island"**

(10) Most historians think this man, Donne's first biographer, incorrectly depicted a rakish young Donne. The biographer's fame today rests on his treatise on the pleasures of fishing, *The Compleat Angler*.

Answer: Izaak **Walton**

4. (UCB/RL) Answer the following about growth in plants for ten points each.

1. This is plant tissue made up of actively dividing cells, and regions of indeterminate growth.

Answer: meristem

2. This is a meristem in stem and root, consisting of vascular variety that forms wood and phloem, and cork variety that forms bark with suberin-coated walls.

Answer: cambium

3. This is a meristem in the zone of cell division between the root cap and the primary meristems: procambium, ground meristem, and protoderm.

Answer: apical meristem

5. 60's Hits: Given a hit from the 60's, name the band FFPE.

(5) Please Mr. Postman

Answer: The **Marvelettes**

(5) Happy Together

Answer: The **Turtles**

(5) Do You Believe in Magic?

Answer: The **Lovin' Spoonful** [accept it but correct them if they say "Loving Spoonful"]

(5) In the Year 2525

Answer: **Zager & Evans**

(5) 96 Tears

Answer: **? [pronounced Question Mark] and the Mysterians**

(5) Time Has Come Today

Answer: The **Chambers Brothers**

6. (UCB/RL) Answer these questions about artwork with a common theme for ten points each.

1. *The Old Guitarist* is perhaps the best-known painting by Pablo Picasso during his phase from 1901 to 1904 that came to be known by this name.

Answer: The **Blue Period**

2. This man's 1770 portrait of Johnathan Buttall, classically posed in a flamboyant costume, is now called *The Blue Boy*.

Answer: Thomas **Gainsborough**

3. In these four similarly titled works of a series completed between 1952 and 1954 by Henri Matisse, the representation of the human figure reaches its highest degree of abstraction.

Answer: *The **Blue Nude***

7. Chemical weapons are not cool, but name them anyway FTPE.

(10) A powerful herbicide and defoliant, this colorless liquid used during Vietnam is a one to one mixture of 2,4-D and 2,4,5-T

Answer: **Agent Orange**

(10) Said to have been invented by a Syrian Christian refugee named Kallinikos (Callinicus) of Heliopolis, its production was so secret we still do not know how it was produced, though most speculate it was a concoction of sulfur, quicklime, and liquid petroleum.

Answer: **Greek Fire or Byzantine Fire**

(10) Also known as carbonyl chloride, it is a highly toxic gas or refrigerated liquid that was used as a chemical weapon in World War I. The Colorless gas form has an odor resembling mould hay.

Answer: **Phosgene**

8. (WM/CCS) Name these short stories set in the American West from a description FTPE or from the author for 5:

(10) When the titular town is described as "honest," "upright," and very proud of its "unbesmirched" reputation... well, you know *that's* not going to last.

(5) Mark Twain

Answer: "The **Man that Corrupted Hadleyburg**"

(10) The sheriff of the title town refuses to be called out by Scratchy Wilson because he has recently married.

(5) Stephen Crane

Answer: "The **Bride Comes to Yellow Sky**"

(10) It's a heartwarming tale about how a town of rowdy prospectors get more civilized when a baby is born in their boom town. Well, heartwarming except the bit about the flash flood that kills the baby and his two protectors.

(5) Bret Harte

Answer: "The **Luck of Roaring Camp**"

9. Given a treaty, FTPE name the war it ended:

(10) Treaty of Versailles

Answer: **World War I**

(10) Treaty of San Stefano

Answer: **Russo-Turkish War (1877-1878)**

(10) Treaty of Nystad

Answer: **Great Northern War**

10. Jungian Terms from description FTSNOP

(5) Jung viewed this construct as a sort of morphologically innate evolutionary derived psychological organ, they represent innate structures of ideas and include The Self, The Shadow, the Animus and Anima

Answer: **archetype**

(10) This term also a title of one of Jung's publications, represents an acausal connecting principle that shows that many events perceived as experience are not just coincidental but represent the collective unconscious manifesting itself in physical reality.

Answer: **Synchronicity**

(15) Jung used this to describe to denote an archetypal pairing of contrasexual opposites, which symbolized the communication of the conscious and unconscious minds, in astronomy it also describes when three celestial bodies are positioned linearly.

Answer: **Syzygy**

11. (UCB/RL) For ten points each, answer these questions about a small town in South Dakota.

1. On December 29, 1980, over 200 Lakota Indians were massacred by the troops of the 7th Cavalry at this site on the Pine Ridge Indian Reservation.

Answer: **Wounded Knee**

2. The slain were members of this movement which the army was there to put down. Started by a Paiute Indian, Wovoka, Lakota members hoped for a return of native lands and the disappearance of whites if certain rites were performed.

Answer: **Ghost Dance**

3. On February 27, 1973, around 200 members of this group, took over the town of Wounded Knee and refused to leave until the U.S. government addressed some of its grievances.

Answer: **American Indian Movement**

12. (CCS) It seems unlikely that the 2005 NCAA men's basketball champions will repeat in 2006, given that four of their star players were among the first 14 picks in this year's NBA draft.

(5) First, for an easy five points, name that university.

Answer: University of **North Carolina** – Chapel Hill [accept **UNC** or **Tarheels**; prompt on "Chapel Hill"]

(5) For another 5 points, name UNC's coach, who got the championship he never achieved in his long tenure at Kansas.

Answer: **Roy Williams** [yes, prompt on Williams – there are a lot of Williamses coaching out there]

(5/5/5/5) For five points apiece, name those four Tarheels picked in the first 14 picks of the 2005 NBA draft.

Answer: **Marvin Williams**, Raymond **Felton**, **Sean May**, Rashad **McCants**

13. (UCB/RL) Wet stuff for ten points each:

1. Also called the Mazandaran Sea, the Khazar Sea, and the Khvalissian Sea, this is the world's largest inland body of water. Although the Volga and Ural rivers discharge into this lake, often listed as the world's largest, it is technically endorheic, since there is no natural outflow.

Answer: **Caspian Sea**

2. Since WWII, this largest lake in Europe has been located in Karelia in northwestern Russia, but in earlier times, it served as part of the border between Sweden and Russia, and later between Finland and Russia. The lake boasts a native Ringed Seal subspecies.

Answer: Lake **Ladoga**

3. This largest freshwater lake in Asia and deepest lake in the world is located in southern Siberia between Irkutsk Oblast and Buryatia. The Nerpa, a native species of earless seal, is the only mammal living in the lake.

Answer: Lake **Baikal**

14. Name the French Symbolist poets from description FTPE:

(10) This influential 19th century poet described the essence of Symbolism in a series of essays describing his fellow poets as the *poets maudits* or accursed poets. His best known poem is perhaps "Chanson d'automne," used as a code by the allies during WWI.

Answer: **Paul Verlaine**

(10) One of the writers that Paul Verlaine discusses in his essays is this poet, also he happened to be his lover and shot him in the wrist which apparently ended their relationship, he wrote *A Season in Hell* and *Illuminations*

Answer: **Arthur Rimbaud**

(10) Virtually unknown before Verlaine wrote about him in his essays is this poet from Brittany who died of tuberculosis at 31 and wrote *Les amours jaunes* or *The Yellow Loves*.

Answer: **Tristan Corbiere**

15. Name these sources, actual and hypothetical, of Dark Matter 5-10-15

(5) First postulated by Wolfgang Pauli, this particle whose name was coined by Enrico Fermi, comes in three flavors, electron, muon and tau and was first detected in 1956 and won its detectors the 1995 Nobel Prize.

Answer: **Neutrinos**

(10) It is a hypothetical exotic particle postulated by Peccei-Quinn theory to resolve the strong-CP problem in QCD. A necessary result of string theory these low mass chargeless particles, the CAST experiment is currently attempting to detect ones being ejected by the sun's core.

Answer: **Axions**

(15) Part of the doubling menagerie of particles predicted by supersymmetric theory, these light theoretically virtually undetectable particle, of the putative WIMPs this particle is the leading candidate for composition of cold dark matter.

Answer: **Neutralinos**

16. F5PE, Given an opera tell whether it is an opera by Rossini, an opera by Verdi, both or neither:

(5) Norma

Answer: **neither** (Bellini)

(5) An Italian in Algiers

Answer: **Rossini**

(5) Otello

Answer: **both**

(5) Il Trovatore

Answer: **Verdi**

(5) Turandot

Answer: **neither** (Puccini)

(5) Falstaff

Answer: **Verdi**

17. (UCB/RL) Name these figures from Egyptian mythology for ten points each.

1. This dead king, husband, and brother of Isis, watches over the netherworld and is often depicted in his mummified form. He is worshipped at Abydos and Philae, and is rejuvenated in his son Horus.

Answer: **Osiris**

2. This goddess of love, dance, and alcohol, also sometimes the goddess of death, is usually depicted as a cow and also serves as a protector of women. Before Isis came to be known as the mother of Horus, this goddess assumed that role.

Answer: **Hathor**

3. This god of wisdom and sacred writings was worshipped as a baboon in Hermopolis. His name rhymes with moth, goth, and sloth.

Answer: **Thoth**

18. (UCB/RL) Name the novels from opening lines that all refer to similar things on a 10-5 basis.

1. (10 points) "'Yes, of course, if it's fine tomorrow,' said Mrs. Ramsay. 'But you'll have to be up with the lark,' she added."

(5 points) Written by Virginia Woolf.

Answer: **To the Lighthouse**

2. (10 points) "I begin a pilgrimage. In October, 1917, we had succeeded, my friend B. and I, in dispensing with almost three of our six months' engagement as Voluntary Drivers, Sanitary Section 21, Ambulance Norton Harjes, American Red Cross, and at the moment"

(5 points) Written by E. E. Cummings.

Answer: **The Enormous Room**

3. (10 points) "There was no possibility of taking a walk that day."

(5 points) Written by Charlotte Bronte.

Answer: **Jane Eyre**

19. Name these Islamic Dynasties FTPE.

(10) This was the name of the first dynasty of caliphs who were not closely related to the prophet though they came from the same tribe the Quarish the first dynasty reigned from 661-750 AD

Answer: **Umayyad Dynasty**

(10) Conquering the first Umayyad dynasty this group claimed descendant from Abbas ibn al-Muttalib one of the youngest uncles of the Prophet. This group reign was wrought with controversy and strife. The last ruler Motawakkil III was carried away by Selim I to Constantinople

Answer: **Abassid Dynasty**

(10) This Muslim dynasty ruling some 400 years later of Kurdish decent founded by Saladin conquered Egypt in 1169. The dynasty lasted some 70 years until 1250 when an uprising led by the slave-general Aibek founded the Mamaluk dynasty.

Answer: **Ayubbid Dynasty**

20. (UCB/RL) Different functional groups have different stretching and bending vibrational excitations with frequencies proportional to strength of the bond and inversely proportional to the atomic masses. For ten points each.
1. Plotting transmittance against wavenumber, this spectroscopic technique shows a fingerprint region from 600 to 1500 inverse cm, using long wavelength beams.

Answer: infrared spectroscopy

2. This functional group shows a high energy peak due to the stronger sp² carbon hydrogen bond and different peaks for cis and trans isomers, unlike alcohols which has only one broad peak. They are obtained from alcohols by dehydration-elimination.

Answer: alkenes

3. Calculated by 1/2 the difference between number of hydrogens in a molecule and number of hydrogens in an linear alkane equivalent, it is the sum of the number of rings and double bonds in a molecule, which is 4 for benzene and 1 for ethene.

Answer: degree of unsaturation

21. Name the philosopher from works FTPE

(10) Two Dogmas of Empiricism

Answer: **W.V.O. Quine**

(10) Critique of Dialectical Reasoning

Answer: **Jean-Paul Sartre**

(10) A Letter Concerning Toleration

Answer: **John Locke**

22. Name these luminaries in field of the Sociology of Knowledge FTPE.

(10) This man along with Max Scheler are considered the founders of the study of the sociology of knowledge, he wrote Ideology and Utopia

Answer: **Karl Mannheim**

(10) He argued that reason and knowledge were themselves subject to major cultural bias, therefore "madness" was sociologically defined and that the "cures" that civilization had prescribed were subjective.

Answer: **Michel Foucault**

(10) Reinvented in the 60's to apply to everyday life by this man along with Thomas Luckmann wrote, "The Social Construction of Reality," and applying this field to religion in "The Sacred Canopy."

Answer: **Peter L. Berger**