## BERKELEY QUESTIONS by Arikkat Arun Unnikrishnan (1), 9\28\95

- 1. He has shrugged off criticism over his latest brawl on the floor of parliament and has said the woman whom he fought with probably enjoyed it as a form of rape. "Such women dream of being raped, but no one wants them," the ultranationalist said of fellow lawmaker Yevgenia Tishkovskaya, whom he grabbed by the hair and throat during a heated debate over the intense NATO bombing campaign against Serbia, a traditional ally. FTP, name this controversial opposition leader in Russia' Duma, whom many feel may finally have destroyed his political career with this latest incident. \Vladimir ZHIRINOVSKY\
- 2. It had enjoyed a long reign as America's largest banking company, but recently, two New York-based megabanks, Chase Manhattan and Chemical Bank, announced they would merge, forming the country's largest bank, and bumping this bank to the number two position. FTP, name this \$216 billion bank, still the nation's largest issuer of credit cards and one of the few banks with coast-to-coast operations, currently the subject of much gossip about a possible merger with Bank of America. \CITICORP or CITIBANK\
- 3. Jim Allchin, head of Microsoft Corporation's Business Systems Division, has recently been forced to concede that this much-hyped product, still more than a year from release, will not merge the code base of Windows 95 and Windows NT. "It's become clear to us that we will always have two versions of Windows, one for the high-end and one for the low-end of the market, because merging the disparate code bases is proving to be just too difficult," he said in a press release discussing this product, which is slated to include such advanced features as Distributed OLE and the Object File System. FTP, what is the code name for this major upgrade to Windows NT, a name it shares with the Egyptian capital. \CAIRO\
- 4. After nearly two decades of searching, scientists have declared that it has officially been discovered. Both of the main experimental groups at Fermilabs's Tevatron collider have independently observed the production and decay of what had been the crucial missing piece in the scientific picture of matter. In announcing the discovery, physicists reported that it has the same mass as a gold atom, or about 200 times the mass of a proton, making it by far the heaviest particle ever observed. FTP, name this subatomic particle, which exists for only an instant before decaying into a bottom quark and a W boson. \TOP QUARK\
- 5. New measurements of galactic distances have confirmed paradoxical findings last year that the universe appears to be younger than some of the stars in it. And this has many astronomers, with a great deal of initial reluctance, turning to a concept that Einstein proposed and then repudiated, saying it was the "greatest blunder of my life". It is a kind of antigravity force, as yet undetected, that affects the motion of matter over tremendous distances. By some estimates, the effects of this force on expansion could yield an age of 18 billion years for the universe. FTP, what is this newly resurrected idea? \COSMOLOGICALCONSTANT\

6. Under bills pending in both the House and Senate, this research subsidiary of the Dept. of Commerce would be dismantled, but 25 American winners of the Nobel Prize in Physics and the presidents of 18 scientific societies joined recently in an 11th-hour plea to save the institute. Representatives of the group said they knew of no instance in which so many prominent American physicists had shown such unity. FTP, what is the full name of this Gaithersburg, MD based institute, founded in 1901, which is commonly referred to as the NIST?

\NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY\

- 7. In Sept. 1967, the regents of the University of California ended a seven-month quest for a new president by unanimously choosing him to succeed Dr. Clark Kerr, whom they had dismissed the previous January. At the time he was a vice-chancellor for UC, in charge of fiscal affairs. He retired from the presidency in 1975. FTP, name this president of UC at a time of turbulent unrest, who died recently at the age of 85. \Charles HITCH\
- 8. Born in London in 1912, he was actually conceived in India, where his father was employed in the Indian Civil Service. He attended Sherborne, an English boarding school, and in 1931 won a scholarship to King's College, Cambridge. After completing his dissertation, which included a rediscovery of the central limit theorem, he formulated a solution to the decision problem in which he invented the most general model of a computing machine. After WWII, he worked on the development of early computers, especially in the field of AI. In 1954, he committed suicide by taking cyanide, without leaving a clear explanation. Legal troubles related to a homosexual relationship and hormonal treatments mandated by the court to lessen his sex drive may have been factors in his decision to end his life. FTP, name this British mathematician and computer scientist. \Alan Mathison TURING\
- 9. This mathematical theorem was originally posed as a conjecture in the 1850s. It was finally proved by Kenneth Appel and Wolfgang Haken in 1976. Prior to 1976, many incorrect proofs were published, including what is perhaps the most notorious fallacious proof in all of mathematics, the incorrect proof published in 1879 by London barrister and amateur mathematician, Alfred Kempe. Even though Kempe's proof of this theorem was incorrect, his line of reasoning turned out to be the basis of the successful proof given by Appel and Haken. Their proof generated a great deal of controversy because it was the first proof ever to rely on computers. Many mathematicians claimed, for example, that the proof was not valid because there could have been a bug in the computer program which generated incorrect results. FTP, name this theorem, which states that the chromatic number of a planar graph is no greater than four.

  \The FOUR-COLOR THEOREM\
- 10. He was born at Rome in his father's praetorship on Dec. 15, AD 130, the birthday of the emperor Nero. His real father was Lucius Ceionius Commodus, who was adopted by the emperor Hadrian as L. Aelius Caesar in Dec. AD 136, and named Caesar. Unfortunately, Hadrian's chosen successor died even before Hadrian did, so the ailing emperor named Antoninus Pius as his heir and instructed him to designate both Marcus Aurelius and Aelius's young son as his successors. When Pius died in AD 161, Hadrian's wishes were obeyed, and the Roman Empire was ruled jointly for the first time in its history. FTP, name this Roman Emperor, co-ruler with Marcus Aurelius from 161 to his premature death in 169 from apoplexy. \LUCIUS VERUS\

- 11. The world's first entirely artificial heart is implanted into a human being, Major League Baseball celebrates its 100th anniversary, the Concorde makes its first supersonic flight, North Vietnamese leader Ho Chi Minh dies at age 79, and Richard Milhous Nixon is inaugurated as the 37th U.S. president, all in FTP, what year?
- 12. He made enemies when he gave tolerance to Protestants by the Edict of Nantes in 1598. He was the grandson of Queen Margaret of Navarre, and married Margaret of Valois, the daughter of Henry II and Catherine de Medicis. He later divorced Catherine and in 1600 married Marie, who served as Regent of France for 7 years after his assassination in 1610. His son by Marie assumed the throne of France in 1617 as Louis XIII, nicknamed the Just. FTP, name this King of France, the first of the House of Bourbon, who ascended to the throne in 1589.
- 13. Approximately 7000 years ago, a 9900 ft high volcano in southern Oregon, erupted violently, ejecting ash and lava. The ash spread over the entire northwestern United States and as far away as Saskatchewan, Canada. During the eruption, the top of the mountain collapsed, leaving a caldera 6 miles across and about half a mile deep, which filled with rain water to form what is now called Crater Lake. FTP, name this volcano, the site of which is now a popular National Park.

  \MountMAZAMA\
- 14. Once a leading figure in the now-defunct Christian Democratic Party, this enigmatic political power broker has fallen far from the lofty pedestal he occupied in the 1980's and early 90's when he served seven times as prime minister of Italy. Now he is on trial in a heavily guarded prison courtroom in Palermo, facing charges that he has secretly acted as political godfather for La Cosa Nostra, the Sicilian Mafia. FTP, name this man, who symbolizes for many the corrupt political machine that had ruled Italy almost continuously since WWII before a wave of corruption scandals brought it down a few years ago. \Giulio ANDREOTTI\
- 15. Located in the Atlantic Ocean west of Morocco, they form two provinces of Spain, and consist of the islands of Tenerife, Palma, Gomera, Hierro, Grand, Fuerteventura, and Lanzarote; the thriving ports of Las Palmas and Santa Cruz are also located here. Their combined land area is 2807 square miles. FTP, name these islands, the last stop for Christopher Columbus before he embarked on his voyage to the New World. \CANARY Islands\
- 16. A bronze statue of the Sun god Helios, it was worked on for 12 years in the early 200's BC by the sculptor Chares. It was probably 120 ft. high. The city after which it was named was then at its height, and the statue, standing on a promontory overlooking the harbor, was a fitting symbol for its namesake. FTP, name this work of art, one of the seven wonders of the ancient world, which was located in the largest city on the island of Rhodes.

\COLOSSUS of(at) RHODES\

17. In this case, the Court ruled that the First Amendment prohibition against government abridgment of the freedom of speech applied to the states as well as to the federal government. FTP, name this 1925 Supreme Court ruling, the first of a number of rulings holding that the 14th Amendment extended the guarantees of the Bill of Rights to state action. Hint: the defendant in this case was the state of New York. \GITLOW vs. NEW YORK\

- 18. Not all delegates who signed the engrossed Declaration of Independence were present on July 4th. In particular, although he was appointed as a delegate by the colony of Maryland on the day the Declaration was adopted, he only arrived in Philadelphia in the middle of July, presenting his credentials to the Continental Congress on Jul. 18th. Not until Aug. 2nd did he finally place his John Hancock on the document. Not that it mattered in the end though, because he out-lived all the other signers. FTP, name this Maryland delegate, born Sept. 19, 1737, and the last surviving signer of the Declaration of Independence when he died Nov. 14, 1832 at the age of 95. \Charles CAROLL of Carollton\
- 19. This 621 sq. mile island, nicknamed the Isle of Cloves, was for centuries the center for Arab slave-traders. Portugal ruled it for 2 centuries until ousted by the Arabs in 1700. It became a British Protectorate in 1890; independence came in Dec. of 1963. Revolutionary forces overthrew the Sultan only 1 month later. The new government ousted Western diplomats and newsman, slaughtered thousands of Arabs, and nationalized farms. FTP, name this island, which has achieved a measure of stability since its political union with the Republic of Tanganyika on Apr. 26, 1964, 3.5 months after its bloody revolution. \\ZANZIBAR\\
- 20. "As it is not yet six thousand years since the first man...are not those to be ridiculed rather than refuted who try to persuade us of anything regarding a space of time so different from, and contrary to, the ascertained truth?...We, being sustained by divine authority in the history of our religion, have no doubt that whatever is opposed to it is most false." The author of this quotation goes on to excoriate the Egyptian tradition that the world is as much as a hundred thousand years old as "abominable lies." He would probably be extremely disheartened to learn that, nearly 1600 years later, the scientific consensus is that even the Egyptians were off by about 4.6 billion years! FTP, name the author the preceding quotation, which appears in his work The City of God. \ST. AUGUSTINE\