

**TOSSUPS – SHOOTOUT #1 CENTER OF THE KNOWN UNIVERSE OPEN 2002 -- UT-CHATTANOOGA**  
**Questions by various contributors to COTKU, Deep Bench, and Rollapalooza**

1. This social phenomenon, given its name by Irving R. Janos, could be observed during the Vietnam War, when President Lyndon Johnson and his policy advisors escalated the war despite warnings from all U.S. allies and intelligence agents. The organization exhibits feelings of invulnerability and unquestionable morality. Enemies are impossible to negotiate with; problems with the organization or its thoughts are rejected; all opinions are seen as universally held by all members of the organization. FTP, name this kind of social influence that enforces the society found in 1984.

**Groupthink**

2. These proteins have an unusual primary sequence, in that there is a very high concentration of lysine and arginine. Also, about 80 percent of the secondary structure for these proteins is alpha-helix. There are five major classes: H1, H2A, H2B, H3, and H4, with the sequences for H3 and H4 being nearly identical from organism to another. In the cell, these proteins form an octameric disc around a 146 base pair segment of DNA. FTP, name these proteins that the DNA of eukaryotes form supercoils around.

Answer: **histones**

3. Essential elements of the victory were the defeat of St. Leger's troops at Fort Stanwix, and the defeat of Hessian Mercenaries attempting to raid the depot at Bennington. Also essential was the ill-advised departure of William Howe on a campaign against Philadelphia. This enabled Daniel Morgan and Benedict Arnold to defeat John Burgoyne at Freeman's Farm and Bemis Heights in, FTP, what battle marking the turning point of the Revolution?

Answer: **Saratoga** (prompt on **Freemans Farm** and **Bemis Heights** before they are given)

4. Unlike most works of this form, this masterpiece does not contain a declaration of faith in the Resurrection, because the composer was not religious. The composition was begun after the death of the composer's mother, which followed the death of his teacher and friend, Robert Schumann. FTP, identify this choral masterpiece in rondo form, that is one of Brahms's best-known choral works.

Answer: **German Requiem** (accept **Ein Deutes Requiem**)

5. In the end, Dame Pliant is married off to Lovewit by her brother Kestrel, who confronts Surly, who in order to expose the hucksters, disguised himself as a Spaniard in need of a whore. While Dapper is found locked in the privy, Sir Epicure Mammon and Tribulation Wholesome are turned away from the house, their hopes of obtaining the philosopher's stone dashed. Subtle and Doll manage to flee while Face reverts to being Jeremy the butler. FTP, name this play about swindlers who exploit superstition, a comedy by Ben Jonson.

Answer: **The Alchemist**

6. Based on an electrochemical reaction where carbon electrodes transmit a current through a cryolite melt. After its invention, the product of the process was adapted to the Bessemer process as a replacement for silver and tin. However, the process had the drawback of creating a mixture that was explosive in air and many deaths resulted. This notwithstanding, it made refining bauxite ores industrially feasible and made a group three element no longer a precious metal. For ten points name this process named for both an American and French Chemist.

Answer: **Hall-Heroult Process** (accept either name)

7. The son of Lebanese immigrants, after getting his law degree he taught for two years at the University of Hartford. Among his books are *Canada Firsts*, written to give his Canadian friends material to brag with, *Verdicts on Lawyers*, about the legal profession's monopoly status, and the 368-page *Lemon Book*, about how to deal with manufacturers of defective cars. Of the many organizations he has founded, the largest is the Washington-based Public Citizen. FTP, who is this consumer-rights advocate, whose best known book is 1965's *Unsafe At Any Speed*?

Answer: **Ralph Nader**

8. Dong Zhuo helped to suppress the Yellow Turban rebellion, and defeated an allied army under Yuan [YOOEN] Shao at Sishui [SIR - SHWAY] pass. Guan Yu was the leader of the "five tigers" who fought for Shu, in this novel attributed to Luo Guanzhong [LWOH GWEN JOHNG]. Shu's leader was a former straw mat weaver named Liu Bei. The leader of Wu was the Ruthless Zao Zao. FTP, what is this Chinese classic set at the end of the Han dynasty, featuring the countries of Shu, Wu, and Wei.

Answer: **Romance of the Three Kingdoms**

9. One of the rulers of this kingdom built the new capital of Kar-Tukulti-Ninurta but it lasted only as long as he did. A precursor to this kingdom was that constructed by Shamshi-Adad I around 1800 B.C. Its power would wax and wane over the centuries after that, but its heartland was always centered on the key religious city of Ashur. Reaching its zenith from 750 to 620 B.C., FTP name this Near Eastern empire ruled then by kings such as Sennacherib and Esarhaddon.

Answer: **Assyria**

10. He was drafted in 1985 out of Mississippi Valley State University. After 18 years in the NFL, he now possesses nearly every record for his position. In his third game of 2002, he broke Walter Payton's record for most career yards from scrimmage. FTP – identify this legendary wide receiver that now wears number 80 for the Oakland Raiders.

Answer: Jerry **Rice**

11. Suppose two firms, X and Y, are in competition, and must each decide whether to adopt a red or a blue package for their product. Assume each firm earns a higher profit if it selects a package color that differs from the other's. If X chooses blue, it is in the best interest of Y to choose red. As long as X stays with blue, Y should choose red in order to maximize its payoff. The set of strategies and corresponding payoffs then meet this condition. FTP, what is this important result from game theory, for which its eponymous discoverer won the 1994 Nobel Prize in Economics?

Answer: **Nash Equilibrium**

12. "The Encantadas" details the authors experiences during his 1841 journey to the Galapagos Islands. The story of a salesman who visits during thunderstorms is told in "The Lightning-Rod Man". Published in the wake of the critical failure "Pierre", most of its contents had been printed previously in "Putnam's Monthly Magazine." Among these are a story about the artist "Bannadonna", the requisite tale of shipboard intrigue, and a "Story of Wall Street". FTP, Identify this collection of stories by Herman Melville, including "Bartleby the Scrivener", and "Benito Cereno".

Answer: The **Piazza Tales**

13. Controversial plans for a dam in the Batoka Gorge along this river have been cancelled, although several massive dams, including the Kariba, have been built in the past. Drawing its name from the Batonka people's words for great river, it flows some 2700 kilometers from its confluence near the Zambia/Angola/Democratic Republic of the Congo border to the Indian Ocean in Mozambique. For ten points, name this river, the fourth longest in Africa, best known for a feature along the Zambia/Zimbabwe border named Victoria Falls.

Answer: Great **Zambezi** River

14. His career has been mostly behind the camera as an announcer, first on the 5-season run of "Soap." In the early 80's, he hit his stride, serving as announcer on 4 game shows during the period including 5 years on "Love Connection," and all 5 seasons of "Press Your Luck." FTP, name this man, who since 1986, has been the announcer on "The Price Is Right."

Answer: Rod **Roddy**

15. Beginning his professional career as a sailor, from 1836-1848 he lived in South America in exile due to his involvement in a republican plot back home. His fame serving the Uruguayan government reached his home country, and he returned in 1848. Again, he was exiled due to sympathies with the republican sentiments of Mazzini. Allowed to return in 1854, in 1860 he deposed the Bourbons in Naples, his greatest achievement. FTP, name this leader of the Red Shirts.

Answer: Giuseppe **Garibaldi**

16. In 1862 he entered a technical school at Utrecht, where he was expelled, accused of having produced a caricature of one of the teachers. When studying cathode rays he discovered that material outside of the apparatus fluoresced, thereby discovering bremsstrahlung. He famously made a photograph of the bones in his wife's hand using this new penetrating radiation. FTP, name this physicist, discoverer of x-rays, the first winner of the Nobel Prize in Physics.

Answer: Wilhelm **Röntgen**

17. Born from the union of Gaia and Tartarus, according to Hesiod he is the father of the four winds. During a lengthy battle, he gained the upper hand on Zeus, and stole the sinews from his body, leaving him helpless in a cave. Zeus was rescued by Hermes, but needed the help of the fates to defeat this monster. They told him that eating the flesh of mortals would give him strength, but it actually weakened him enough for Zeus to fling an island on top of him, which became Sicily. FTP, who is this hundred headed monster of Greek myth, the father with Echidna of the Sphynx, the Nemean Lion, and the Chimera among others?

Answer: **Typho or Typhon**

18. Used to explain periodic mass extinctions on Earth, this theory proposed the possibility that the Sol system is a binary star system. The near passage of Sol's dim sister star disrupts the Oort cloud of comets, sending a barrage of meteorites through the solar system that in old times was seen as "righteous vengeance" from the heavens. For ten points, name this theory.

Answer: **Nemesis** (accept also **Dark Star**)

19. It was found on the Esquiline, near the Domus Aurea, in 1506. It was not complete until a right arm, found separately, was attached in 1905. Its story is essential to that of Aeneas. The central figure is depicted much larger than the flanking two. The title figure was a priest of Apollo who warned the Trojans against opening the Trojan Horse. FTP, what is this classical statue featuring a man and his two sons being strangled by snakes?

Answer: **Laocoön** (LAY-ak-oh-on)

20. His literary success is partially due to his story of a family of Oregon loggers, Sometimes a Great Notion. In The Electric Kool-Aid Acid Test, Tom Wolfe described his exploits as leader of the "Merry Pranksters". However, he is best known for a novel featuring Big Nurse and Randle McMurphy, whose film adaptation won five Academy Awards in 1975. For 10 points name this author of One Flew Over the Cuckoo's Nest.

Answer: **Ken Elton Kesey**

21. John J. Audubon, Henry Clay, James Fenimore Cooper, Andrew Jackson, Dolley Madison, midgets, Commodore Matthew Perry, Daniel Webster, Siamese twins, Mark Twain, Walt Whitman, Edgar Allen Poe, the Monitor and Merrimack, Abraham Lincoln, and soldiers encamped. FTP, these were all subjects of photographs taken by what man, best known for images of the devastation of Civil War battlefields?

Answer: **Matthew Brady**

22. . He got a Ph.D. from the University of Chicago in 1903, the youngest man to do so at the time. Later on, he took a position as professor and director of the psychological laboratory at Johns Hopkins University, where he edited the Psychological Review for fourteen years. But it was after reading of Pavlov's experiments that he developed the concept of conditioning as a method of treatment. For 10 points-name this founder of behaviorism, whose experiments on Little Albert have since been vilified.

Answer: **John Broadus Watson**

23. It opens with a mysterious plague in the titular city, which the main character, a recent graduate from the Academy, is recruited to help combat. With the help of Aarin Gend, the paladin Aribeth, and Lord Nasher, he works to find the cure for, and the source of, the plague. For ten points, name this BioWare computer role-playing game that is set in the frozen northern regions of the Forgotten Realms.

Answer: **Neverwinter Nights**