

**The Mark Discordia Singles Tournament
Playoff Round 1
Question Set 4: 20 tossups plus tiebreaker**

Editing and non-science questions by Matt Weiner
Science by Anthony de Jesus, the Washington University Academic Team, and Matt Weiner

1. "The Blue Heaven has ended... In the Jiazi year, the world shall enjoy great fortune," proclaimed Zhang Jiao, who dubbed himself "General of Heaven" while leading this uprising. The rebels claimed that establishing a new government in accordance with the Book of Great Peace would create a utopian society, but they were defeated by General Ts'ao Ts'ao. FTP, name this 184 CE rebellion against the Han Dynasty whose members wore the color of the new heaven to come as headgear.
ANSWER: Yellow Turban Rebellion
2. Always a positive quantity and always defined in relation to a gaseous substance, it can be determined by taking the average based on the enthalpy change in the process of atomization. The enthalpy of a reaction can be determined by summing these for the old molecules, and subtracting the total of these for the new molecules formed. FTP, name this measure of stability, the enthalpy change required to separate two atoms in a molecule.
ANSWER: bond-dissociation energy [or bond energy]
3. Its benchmarks for three-year-olds include the ability to repeat two numbers and locate body parts; ten-year-olds are expected to place three words into a sentence and reproduce drawings from memory. It was first available under its current name in Lewis Madison Terman's *The Measurement of Intelligence*. FTP, identify this intelligence test which dropped the name of codeveloper Théodore Simon in favor of the name of the university which revised it.
ANSWER: Stanford-Binet intelligence test [prompt on IQ test or equivalents; prompt on Binet-Simon test before Simon is mentioned]
4. One of two worlds alternately cited as the abode of the dead in a certain mythology, it became identified with Hell and the antichrist after the start of Christian influence. Meaning "land of desolation," it was located at the extreme south of the universe and was the homeworld of the first living being, who, in loneliness and boredom, cast sparks across Ginnungagap and melted Elivagar, creating Audumbra and Ymir. Its queen is Sinmore, the wife of its ruler Surt. FTP, identify this world of fire in Norse cosmology.
ANSWER: Muspelheim [or Muspell]
5. The executive order creating it notes that it is responsible for working with the National Economic Council to keep financial markets stable in times of crisis, reviewing vaccination policies, and ensuring "the continuity of the Federal Government" among other duties. FTP, name this new cabinet-level department charged with developing an "integrated national strategy to combat terrorism" and headed by Tom Ridge.
ANSWER: Office of Homeland Security
6. Its magnetic field is not consistent over its cross section, and the permeability constant times the current times the number of turns divided by the central circumference gives the magnetic field in its central region. A central feature of the tokamak, for ten points, name this object used to create huge magnetic fields, which can be considered a solenoid bent into the shape of a donut.
ANSWER: toroid [do not accept "solenoid"]
7. He led the capture of Fort William Henry as well as Oswego, securing French control of Lake Ontario, and in 1758, he led the undermanned defense against James Abercromby at Fort Ticonderoga. However, his complaints of corruption in his superior, the Marquis de Vaudreuil, went unheeded, and he was destined to lose both the Seven Years' War and his life in 1763. FTP, name this French general who was killed along with his counterpart, James Wolfe, at the Battle of the Plains of Abraham in Quebec.
ANSWER: General Louis-Joseph Montcalm-Gozon, Marquis de Saint-Véran
8. In the *Patrem Omnipotentem* movement of this work's *Credo*, the mystical number eighty-four appears several times. Its fourth and final major section is *Osanna, Benedictus, Agnus Dei et Dona nobis pacem*, while the third section, *Sanctus*, has only one movement. It uses the same *circulatio* theme to open the *Kyrie* as it uses throughout the *Crucifixus*, musically linking the Christian concepts of God and Jesus. FTP, name this eighteenth-century religious composition by Johann Sebastian Bach.
ANSWER: mass in B minor [prompt on partial answer]
9. Set forth in the *Proslogium*, it was attacked from the start by Guanilo, who appears in an allegorical story about the destruction of the wax tablets on which its defense was written. Modern philosophy rejects it because it depends on unsupported, meaningless assertions such as "reality is greater than the mind" and "God is that thing than which nothing greater can be thought." FTP, name this argument for the existence of God developed by Saint Anselm.
ANSWER: ontological argument
10. This phenomenon can only be caused by a stimulus large enough to open voltage-gated sodium channels and the subsequent opening of slower-acting potassium channels. It can be divided into three periods; depolarization, repolarization, and the refractory period. FTP, name this rapid changes in membrane potential, the transmission of signal down the axon of neurons.
ANSWER: action potential
11. It is the sixth building of its name on its site, the ditch known as the *Zimnyaya Kanavka*. The columns at the front are double-tiered to create chiaroscuro and white to contrast with the green walls, while the roof hosts one hundred and seventy-six sculpted figures. Designed by Bartolomeo Francesco Rastrelli, it was completed in 1762. FTP, identify this building which now houses the Hermitage art museum, a former residence of the tsar in St. Petersburg.
ANSWER: Winter Palace [prompt on Hermitage before it is mentioned]
12. The last name's the same. One, the author of *The Golden Isles* and *Queen Joan*, led a Provençal linguistic revival. The other wrote essays

for the *Radical Diary of Coquimbo* under her real name of Lucila Godoy Alcayaga before adopting her pen name to produce *Sonnets of Death, Ternura, and Desolación*. They won their respective Nobel prizes in 1904 and 1945. FTP, give the last name of French poet Frédéric and the Chilean poet's pseudonym Gabriela.

ANSWER: **Mistral**

13. Legal questions peculiar to this practice are solved among the Nair people by designating the man who pays for delivery expenses as a child's legal father. Besides the Nair, who live on the Malabar Coast of India, the only other place where it is practiced regularly is Tibet. The Tibetan version only allow it if the males involved are brothers, while the Nair require that the males be of equal or higher class than the female. FTP, give the name for the practice of a woman having multiple husbands.

ANSWER: **polyandry** [prompt on **polygamy** before the end]

14. He won the eighth-grade science fair by transforming a sexual device into a CD player using chicken wire, but he never achieved his dream of being a dancer in Vegas. He has extolled the virtues of women who make lasagna, made an *Indiana Jones and the Last Crusade* reference, explained the finer points of image licensing law, and warned Holden McNeil not to make the same mistake with Alyssa Jones as he did with a girl named Amy. FTP, identify this somewhat misnamed partner of Jay.

ANSWER: **Silent Bob**

15. While John Dryden's English translation is now standard, Thomas North's version was the one which inspired several Shakesporean plays. The first section is political, the second is moral, the third is about the dangers of power, the fourth is the most heavily mythical, and the fifth emphasizes the importance of seemingly minor figures, comparing Artaxerxes to Galba and Aratus to Otho. FTP, name this work consisting of twenty-three comparisons of a Greek to a Roman by Plutarch.

ANSWER: **Parallel Lives of Famous Greeks and Romans** [or **Bioi paralleloi**; accept *The Lives of Noble Grecians and Romans*]

16. This problem-solving approach can be used in finding the convex hull of a set of points; finding the inverse of a matrix; and in the sorting algorithms quicksort and merge-sort. Like dynamic programming, it splits a problem into similar but smaller subproblems, which are solved and recombined to get the answer to the original problem. FTP, name this rather hostile-sounding method of solving problems.

ANSWER: **divide and conquer**

17. Its nominal cause was Samuel Foote's resolution to abolish the office of Surveyor General and Thomas Hart Benton's charge that Foote was scheming to suppress emigration from Northern states. One participant tied the federal lands issue to the tariff, while the other baited his opponent into defending slavery and declared "Liberty and Union, now and forever, one and inseparable!" FTP, identify this 1830 event in which Senators from Massachusetts and South Carolina discussed the issue of states' rights.

ANSWER: the Daniel **Webster** and Robert Young **Hayne** debate [or clear equivalents which mention **Webster** and **Hayne**]

18. Its narrator is writing a biography entitled *The Day the World Ended*. The narrator corresponds with the three children of the biography's subject: the spinster Angela, the midget Newton, and Frank, an aide to the dictator of a Bokononist Caribbean island. We learn that Felix Hoenikker's most threatening creation was not the atomic bomb but a substance which can turn water into a hot solid, Ice-9. FTP, name this novel by Kurt Vonnegut whose title refers to the game played between Felix and the infant Newton.

ANSWER: **Cat's Cradle**

19. In Buddhism, he is fittingly a part of Mara, the demon which ties humans to the earth through desire. In classical Hinduism, he shoots five flowers, one for each sense, from a bow made of sugar cane strung with honeybees. Son of Vishnu and Lakshmi, he rides a parrot across the worlds, enchanting humans into love. FTP, identify this Hindu god who thus lent his name to the Sutra of passion and love.

ANSWER: **Kama**

20. After her affair with Nelson Algren, she depicted Algren as Lewis Brogan in *The Mandarins*. She addressed the question of World War II and the Resistance in the story of Hélène's Communist lover Jean Blomart, *The Blood of Others*, and continued addressing politics in *The Ethics of Ambiguity*. *Memoirs of a Dutiful Daughter* and *L'Invitée* addressed her relationship with Jean-Paul Sartre. FTP, name this French feminist, author of *The Second Sex*.

ANSWER: Simone Lucie-Ernestine-Marie-Bertrand de **Beauvoir**

Tiebreaker:

It was the site of the Barefoot Revolt against salt taxes in 1639. Its first Duke was Rollon, and its golden age as an independent kingdom occurred under William the Long Sword. Nineteen years after the Battle of Formigny, its last duke, Charles, was deposed, and a royal parliament replaced the Exchequer of Rouen. FTP, name this region, now part of France, which was the base for William I's conquering of England.

ANSWER: **Normandy**