

ROUND 1: TOSSUPS

Bulldog High School Academic Tournament VII

1. An American college professor goes to Spain to fight with the Republican army. He is given the task of blowing up a bridge, falls in love, blows up the bridge, but is wounded and left to die. The protagonist's name is Robert Jordan, and the title comes from a passage from John Donne's "Devotions". FTP, name the ringing novel by Ernest Hemingway.

ANSWER: For Whom the Bell Tolls

2. Given the velocity of a charge and the direction of its magnetic field, this can be used to determine the direction of the magnetic force. And if the direction of a rotating record is known, the angular velocity vector can be determined with this method. FTP identify this rule that is commonly used to establish the direction of a cross product of two vectors.

ANSWER: right hand rule

3. This man is a Tony award-winning Broadway star, but unless you saw his work in the 1995 television adaptation of *Bye Bye Birdie*, you'd probably never guess that he was such a talented singer and dancer. FTP name this actor, who portrays the decidedly un-Broadway George Costanza on *Seinfeld* every week.

ANSWER: Jason Alexander

4. A/R/F He and his brother were the first to rule Rome as joint emperors. Though a dedicated, honest, and skillful ruler, his military and political triumphs are remembered less than his correspondence with his tutor Epictetus and his private writings. FTP, name this second-century AD stoic philosopher-king and author of the *Meditations*.

ANSWER: Caesar Marcus Aurelius Antoninus Augustus

5. Although they upgraded the machinery in their garage from Macintoshes to SGI workstations, brothers Rand and Robyn Miller stuck with the same formula that made their rookie endeavor in 1993 such a groundbreaking success. FTP name the Millers' new multimedia adventure game, which begins where its predecessor *Myst* left off.

ANSWER: Riven

6. When two stimuli are presented in an appropriate time and intensity relationship, one of them will come to induce a response resembling that of the other. This process can be described as one of stimulus substitution. In the traditional Pavlovian technique, a dog is placed in a soundproof room and trained to expect food when a bell rings. FTP identify this form of learning.

ANSWER: classical conditioning or respondent conditioning

7. Conspiracy theorists suggest that he did not die of pneumonia in 1923, but instead committed suicide. He promised a "return to normalcy," but his ineptitude prevented that. His greatest weakness lay in his loosely selected and largely unsupervised cabinet, which included men like Albert Fall. FTP name this President whose death conveniently freed him from the Teapot Dome Scandal.

ANSWER: Warren Gamaliel Harding

8. His real name was Jerome van Aken. The more famous name of this Dutch painter comes from the name of the province where he worked in isolation. Living from 1450 to 1516, FTP, name this artist who painted the 7-foot-tall triptych now called *The Garden of Earthly Delights*.

Answer: Hieronymus Bosch

9. . A poor student kills an elderly pawnbroker and her sister. Afterward, he reexamines his motives for the murder, and becomes disgusted by his act. Police inspector Petrovich waits until the student, Raskolnikov, confesses. FTP, this is a brief plot summary of which work by Feodor Dostoevski?

ANSWER: Crime and Punishment

10. This king of Wessex prevented the Danes from overrunning England and promoted learning and literacy. A scholarly king, he designed warships, translated Latin works into English and protected the weak from ignorant and corrupt judges. His reputation as an intellectual giant and wise lawgiver lives on to this day. FTP, name this victor of the Battle of Edington who lived from 849-899 AD.

ANSWER: Alfred or Alfred the Great

11. Because DNA is only synthesized in the 3 prime to 5 prime direction, the lagging strand cannot be replicated in a single piece. Instead, it is replicated in short pieces which are later joined. FTP identify the name of these pieces, which also is the name of a Japanese industrial city.

ANSWER: Okazaki fragments

12. She attended an academy that shared its name with a college her grandfather helped found, and her father served in Congress in the mid-nineteenth century. A recluse, she only published five poems in her lifetime. For ten points identify this "New England mystic," creator of many post-humously published untitled poems, including "Because I Could Not Stop for Death."

ANSWER: Emily Elizabeth Dickinson

13. In 1842, he founded the American Museum. A businessman, he promoted the concert tour of Jenny Lind and miraculously discovered the only Mastadon left on Earth and named it, "Jumbo." Of course, he also felt there was "a sucker born every minute." FTP identify the Connecticut native whose "Greatest Show on Earth" later merged with the Ringling Brothers circus?

ANSWER: Phineas Taylor Barnum

14. This was organized in Augusta, Georgia in 1845 by those who disagreed with Northern antislavery attitudes. One hundred and fifty years later, it adopted a resolution denouncing racism and repudiating its prior defense of slavery. But, FTP, what large Protestant denomination recently made headlines at its yearly convention in Dallas, Texas, by voting to boycott Walt Disney and its affiliates?

ANSWER: Southern Baptist Convention

15. Noting the poor quality of American gunpowder, he obtained European support and started his own business. In World War I, his company supplied 40% of the smokeless powder used by the Allies; later, it diversified into acids, lacquers, industrial alcohol, synthetic fibers, and photographic film. FTP, name this man who founded a chemical company near Wilmington, Delaware.

ANSWER: Eleuthère Irénée du Pont de Nemours

16. Born Marie Jana Korbelova in Prague, this Wellesley graduate fled her home twice as a child: from the Nazis and from the Soviets. Hence her comment that "my mindset is Munich"—referring to the 1938 meeting. Baptized and raised a Catholic, her grandparents were Jews who died in the Holocaust. FTP, name this Secretary of State.

ANSWER: Madeleine K. Albright

17. A depiction of this type of prophetess as an elderly crone can be seen on the ceiling of the Sistine Chapel. The Erythraean one revealed to Alexander the Great his divine descent, while the Cumaean one sold a set of prophetic books to the last Roman king. FTP, identify this type of ancient prophetess, one of whom guided Aeneas to the underworld.

ANSWER: sibyl

18. It emerged during the late 1960s and carried out a systematic war against Prince Norodom Sihanouk and later Lon Nol. Despite American aid to their enemies, this group took over their capital city in 1975 and declared a new government. FTP, identify this Cambodian posse.

ANSWER: Khmer Rouge or Cambodian Communist Army

19. Discovered by James Schlatter in 1965 while he was researching anti-ulcer drugs, this dipeptide has the biochemical abbreviation DF: it has an aspartic acid residue linked to one of phenylalanine. FTP, identify this molecule, 200 times sweeter than sucrose, whose brand name is NutraSweet.

ANSWER: aspartame [accept NutraSweet on early buzz]

20. According to the full title, she was “twelve years a Whore, five times a Wife (thereof once to her own brother), twelve years a Thief, eight years a transported Felon in Virginia.” Eventually she became a penitent and grew rich. FTP, who is this famous female picaresque hero of Daniel Defoe?

ANSWER: Moll Flanders

21. The movie version of their most famous album starred Jack Nicholson, Eric Clapton, and Elton John. A movie was also made of another of their rock operas, *Quadrophenia*. FTP, name this London-based group whose members included John Entwistle, Keith Moon, Roger Daltrey, and Pete Townshend.

ANSWER: The Who

22. A child prodigy, he wrote three symphonies by the time he was 18. He had a professional relationship with Franz Liszt, and counted Gabriel Fauré among his students. FTP, name this composer of the *Suite Al-gé-ri-enne*, *Africa*, *Organ Symphony*, *Danse Macabre*, *Samson and Delilah*, and *Carnival of the Animals*.

ANSWER: Camille Saint-Saens

23. It rises to an altitude of 748 feet in the Valdai Hills during its 2290 mile course. Although parts are frozen over during three to four months of the year, this river is almost entirely navigable. For ten points identify this longest European river, which lies entirely in Russia.

ANSWER: Volga

ROUND 1: BONI

Bulldog High School Academic Tournament VII

1. For 10 points each, given a molecule, identify its geometry. For example, if I said iodine trifluoride, you would say "T-shaped."

- a. ammonia
- b. methane
- c. cisplatin

ANSWER: pyramidal or trigonal pyramidal

ANSWER: tetrahedral or tetrahedron

ANSWER: square planar

2. You probably know that the main Hindu gods form a Triad.

- a. First, 5 points each, name those 3 gods.

ANSWER: Brahma, Shiva, Vishnu

- b. Now, 15 points name any of their wives

ANSWER: Sarasvati, Kali, or Lakshmi

3. Identify these Latin American poets, 15-5:

- a. 15: Chilean poet, author of *Twenty Love Poems and a Song of Despair* and *Extravagaria*
5: He won the 1971 Nobel Prize and was the basis for a character in the movie *Il Postino*
ANSWER: Pablo Neruda [ACC: Ricardo Neftali Reyes]
- b. 15: His collections include *Eagle or Sun?*, *Sun Stone*, and *Salamandra*.
5: He won the Nobel in 1990
ANSWER: Octavio Paz

4. Tom Clancy fans and biology lovers unite! FTP each, identify each of the following as bovines, Russian aircraft companies, both, or neither. Note that common names are used.

- a. MiG [mig] ANSWER: Russian aircraft company [accept equivalents]
- b. Yak ANSWER: both
- c. Ibex ANSWER: bovine

5. Given a set of steps or stages, identify the innovative psychologist, 10 points each.

- a. 4 stages of cognitive development, including concrete operational
ANSWER: Jean Piaget
- b. 5 step hierarchy of needs
ANSWER: Abraham Harold Maslow
- c. 8 stages of psychosocial development
ANSWER: Eric Homburger Erikson

6. Answer these questions about key signatures, for ten points each

- a. What is the major key with three flats?
ANSWER: E flat major
- b. What term describes the relationship of C minor to C major?
ANSWER: parallel minor
- c. This term describes two keys with different signatures that sound the same.
ANSWER: enharmonic

7. 30-20-10, name the author from works.

30: *Chitty Chitty Bang Bang*

20: *Casino Royale*

10: *Dr. No*

ANSWER: Ian Lancaster Fleming

8. Given a Roman Emperor, name his predecessor for ten points each:

a. Claudius ANSWER: Caligula (ACC: Gaius Caesar Germanicus)

b. Hadrian ANSWER: Trajan (ACC: Marcus Ulpius Traianus)

c. Marcus Aurelius ANSWER: Antoninus Pius

9. For ten points each, answer the following about one of the founders of Apple Computer, Steve Jobs.

a. Who, along with Jobs, co-founded Apple Computer in the 1976?

ANSWER: Steve Wozniak

b. Jobs is the current interim CEO of Apple, but for what company is he the full-time CEO?

ANSWER: Pixar Animation Studios

c. What Oregon university did Jobs attend?

ANSWER: Reed College

10. Conjoin the following musicians and biochemistry terms, 15 points each, or 5 if you can give one half of the conjunction.

a. Conjoin the abbreviation of the 80s rap group that gave us "Express Yourself" with the abbreviation of a energy-laden triphosphate molecule.

ANSWER: NWATP [5 for NWA or ATP]

b. Conjoin the original stage name of the rapper who performed "U Can't Touch This" with the name of the conformation that small catalytically active RNA molecules are believed to have.

ANSWER: MC Hammerhead ribozyme [5 for MC Hammer or hammerhead ribozyme]

11. E/AH. Given an event, name the British monarch who was in power at its occurrence FTPE.

a. World War I ANSWER: George V

b. Crimean War ANSWER: Victoria

c. Suez Canal crisis ANSWER: Elizabeth II

12. Identify the authors of these Pulitzer Prize winning plays, on a 15-5 basis.

a. 15: *The Skin of Our Teeth*

5: *Our Town*

ANSWER: Thornton Wilder

b. 15: *Fences*

5: *The Piano Lesson*

ANSWER: August Wilson

13. 30-20-10. Identify the philosopher.

30: In 1649 he was invited by Queen Christina to Sweden, but he was unable to endure the rigors of the northern climate nor the queen's early bird habits and died not long after arriving in Sweden.

20: Mathematics was his greatest interest; often called the founder of analytical geometry, he became famous for a group of essays which appeared in 1637, including the *Discourse on Method*.

10: Building upon the work of others, he originated the Cartesian coordinates and Cartesian curves. He also coined the phrase, "Cogito, ergo sum."

ANSWER: René Descartes

14. For 5 points each, give the six smallest numbers greater than 100 that are prime. *You have 20 seconds to begin your answer.*

ANSWER: 101, 103, 107, 109, 113, 127

15. Answer these questions about architecture of the ancient world for ten points each.

- a. This famed Egyptian sage was chief architect and sculptor for King Djoser of the Third Dynasty and was responsible for the design of the Step Pyramid complex at Saqqara.

ANSWER: Imhotep

- b. This citadel and important center of Aegean Civilization in the late Bronze Age is home to the well-known architectural works of The Lion Gate and the Treasury of Atreus.

ANSWER: Mycenae

- c. The Byzantine Emperor Justinian oversaw the building of this great domed church in Constantinople from 532-537 AD.

ANSWER: Hagia Sophia or Santa Sophia

16. On the coast of west Africa, there are 5 nations between Sierra Leone and Nigeria. Five points each and 5 additional points for all correct, name them in any order. *You have 15 seconds to begin your answer.*

ANSWER: Liberia, Côte d'Ivoire [or Ivory Coast], Ghana, Togo, Benin

17. Name the country from its last king, 10 points each.

- a. Farouk I

ANSWER: Egypt

- b. Zog I

ANSWER: Albania

- c. Pedro II

ANSWER: Brazil

18. Five points each, 30 for six, give the famous names of six of the nine members of the Wu-Tang Clan. To keep this tournament clean, the rapper with "Ol' Dirty" in his name is not an acceptable answer.

ANSWER: RZA (ri-zah), GZA/Genius (Gi-zah), Method Man, Ghostface Killah, Raekwon, Inspectah Deck, U-God, Masta Killa (Ol' Dirty Bastard is also in the group)

19. Given a major or minor character, name the book, 10 points each.

- a. Harry Haller

ANSWER: Steppenwolf

- b. Thorin Oakenshield

ANSWER: The Hobbit, or There and Back Again

- c. H. C. Earwicker (H.C.E.)

ANSWER: Finnegan's Wake

20. Identify the American historical thing, 30-20-10.

30: It was the name of the pro-slavery platform asserted by William Yancey in response to the Wilmot Proviso. John Breckinridge ran for president on this platform.

20: A Confederate raider by this name was sunk by the *USS Kearsarge* off the coast of France in 1864, creating an international law issue.

10: A territory by this name was created in 1817 and granted statehood in 1819. It later seceded from the Union and was home to the Confederate capital.

ANSWER: Alabama

21. Given the name of a character, identify the TV show for the stated amount of points.

- 5: Elaine Benes

ANSWER: Seinfeld

- 10: Maxwell Q. Klinger

ANSWER: M*A*S*H

- 15: Mary Richards

ANSWER: The Mary Tyler Moore Show

22. Ten points each, answer the following questions about Mother Teresa.

- a. Name the community founded by Mother Teresa that was recognized as an order by the Archdiocese of Calcutta in 1950.
ANSWER: Missionaries of Charity
- b. What 63-year-old nun was elected to succeed Mother Teresa as leader of the Missionaries of Charity?
ANSWER: Sister Nirmala Joshi
- c. Many people hope the Pope will speed up the normal process of canonization for Mother Teresa. Pope John Paul II has canonized more saints during his papacy than all other popes this century. Within 20%, how many saints has he canonized?
ANSWER: 276 [ACC: 220 to 332]

23. Answer the following about light for 10 points each.

- a. What Dutchman first advanced the wave theory of light in 1678?
ANSWER: Christian Huygens
- b. What is the term for the deflection from a straight path undergone by a light ray in passing from one medium into another?
ANSWER: refraction
- c. The speed of light in a certain medium is 2.5 times 10^8 meters per second. Calculate the index of refraction for this medium. *You have 10 seconds.*
ANSWER: 1.2 or sixth-fifth or one and one-fifth