

## BHSAT XI: Quarterfinals

### TOSSUPS

1. He fancies himself an athlete, and once trained for *American Gladiators*, but his attempts at high school baseball always end in failure. His friends include Steve, at whose house he practices electric guitar, and Denise, his blind girlfriend. FTP, name this brother of Paige and Jason, the oldest child in the comic strip, *Fox Trot*.

ANSWER: Peter Fox

2. He is more comfortable in the wilds of the northeast than in its cities, but he has a strong sense of Christian morality. He carries a rifle called Killdeer, which once belonged to a bounty hunter living in the wilderness. Toward the end of his life, he dies of old age on the Great Plains of the West. FTP, give the Christian name of this fictional frontiersman also known as Hawkeye, Pathfinder, and Deerslayer, who appears in *The Leatherstocking Tales* of James Fenimore Cooper.

ANSWER: Nathaniel (Natty) Bumpo

3. They are traditionally grain farmers whose primary currency in the 18<sup>th</sup> and 19<sup>th</sup> centuries consisted of large herds of cattle. Ruled by figures such as Cetiswayo and Dingiswayo of the Mtetwa chieftain, this tribe became a powerful empire in the Natal region in the 1820s through the use of short spears instead of bulky long spears. FTP, name this largest black ethnic group in South Africa, which reached its height of power under the ruler, Shaka.

ANSWER: Zulus

4. He claimed that he had preceded Champollion with his translation of the Rosetta stone, but is better known as a scientist. He studied the function of the eye, and though he believed erroneously in the luminiferous aether, he made important contributions to physical optics. FTP, name this Englishman who supported the wave theory of light with his double-slit experiment.

ANSWER: Thomas Young

5. Unfortunately, the original nitrate negatives for this film are gone. With a screenplay written by Herman Mankiewicz during his recovery from an illness, the newspaper giant, William Randolph Hearst, was incensed at the movie for its obvious parallels to his life. The film details the humble beginnings through to the final lonely days of the title character, who dies with the word, "Rosebud." FTP, name this film, an early opus of Mercury Theater giant Orson Welles.

ANSWER: Citizen Kane

6. Its founder, Mirza Husayn Ali Nuri, took a name meaning "The Glory of God" while exiled in Baghdad. Boasting over 5 million followers, the central tenets of this faith include the oneness of God, the oneness of humanity, the common foundation of all religion, gender equality, world peace, and the desire for a worldwide federal government. FTP, name this modern religion founded in 1844 by Mirza Ali Mohammad, also known as Al-Bab.

ANSWER: Baha'i

7. First promoted by some students in Paris in the 1930s, this movement represented a reversal of elitist colonialist views. Advocated by poets like David Diop and former Senegalese president Léopold Sédar Senghor, it upheld the culture and even color of Africans

as more dynamic and beautiful than those of Europeans. FTP, name this African-West Indian movement that heavily influenced Francophone black literature for a number of decades.

ANSWER: **négritude**

8. It usually appears before children are three years old, but its symptoms are often too subtle to notice. Speech develops slowly or irregularly and is characterized by echolalia, the constant repetition of what others say. In addition, reactions to sound, danger, and pain tend to be underemphasized and subjects tend to exhibit rhythmic body movements like hand-clapping or rocking. FTP, name this psychiatric disorder, famously captured on screen by Dustin Hoffman's character in *Rain Man*.

ANSWER: **autism**

9. It was originally a settlement of English Puritans led by Theophilus Eaton and John Davenport whose members accepted absorption into a greater colonial entity in 1665. It was sacked during the American Revolution and became a center of the abolitionist movement during the Civil War. Sulfur matches, the Winchester rifle, and the cotton gin were all manufactured there. FTP, name this Connecticut locale, nicknamed the Elm City, the home of Yale University.

ANSWER: **New Haven**

10. While young, he traveled to Italy, Germany, and the Netherlands, but his reserve and lack of fluency in languages except Castilian made him unpopular with German and Flemish nobility. He reigned over Spain's Golden Age, championing the Counterreformation, but he failed to suppress the Netherlands' revolt. Name, FTP, this King of Spain and Portugal, married to Mary I of England, who failed to conquer England in 1588 and lost his "Invincible Armada."

ANSWER: **Philip II**

11. This internal random-access memory is an extension of the main memory. It is smaller than the main memory, and so it accesses data within it more quickly and easily. Therefore, when the processor accesses internal memory, it checks this location first to see if the data it wants is there, and only checks the main memory if it cannot find the data here. FTP, identify this memory location that stores often-used instructions and data.

ANSWER: **cache** memory

12. Giant crossbows. A breech-loading cannon. Hygrometers. Deep-sea diving suits (never revealed for fear they would be used in war). Parachutes. Cars (though not internal combustion). Tanks. Helicopters. FTP, these devices all sprang from the fertile brain of what Renaissance artist and scientist?

ANSWER: Leonardo **da Vinci**

13. Though best known as an author, this American began as a political cartoonist. He later won two Academy Awards, one for a wartime documentary about Japan, the other for the animated character Gerald McBoingboing. However, once his first book, *And to Think That I Saw It on Mulberry Street*, was published under a soon-to-be-famous pseudonym, he concentrated on children's books. FTP, identify this author of *The Cat in the Hat*.

ANSWER: **Dr. Seuss** or Theodor Seuss **Geisel**

14. The criminal complaints against him were filed in the federal district court of Alexandria, Virginia, and carry the possibility of a life sentence, but not the death penalty. Thus, multiple

charges including conspiracy to kill U.S. nationals abroad and providing material support and resources to terrorist organizations are somewhat less serious than treason. FTP, name this American Taliban, captured by the U.S. military following a prison uprising.

ANSWER: John Walker Lindh (accept "Suleyman al-Faris" or "Abdul Hamid")

15. The search for this began in the 1930s when astronomer Fritz Zwicky noted the abnormally swift movement of faraway galaxies. Many theories have been proposed since then, with WIMPs, MACHOs, and simple hydrogen gas currently being offered as the source of this mysterious substance. FTP, name this material, thought to outnumber the detectable substances in the universe 10 to 1, which allows Einstein's theory of gravity to explain the speed of certain galaxies.

ANSWER: dark matter

16. He was born in 1847 in Dublin, Ireland, where he worked for a time as a civil servant. He later became a drama critic and theater manager, positions that allowed him to meet and befriend Oscar Wilde and Arthur Conan Doyle. He wrote children's stories and novels called *The Snake's Pass* and *The Jewel of Seven Stars*, but he is best remembered for a novel based loosely on the life of a Wallachian prince. FTP, name this author of *Dracula*.

ANSWER: Bram Stoker

17. One member was Senator Daniel Inouye, who received a Medal of Honor and lost his right arm in an assault on a machine gun nest. It was the most decorated unit in U.S. history, receiving over 18,000 military awards. It rescued the famed "Lost Battalion" and the town of Bruyeres in France, and liberated the Dachau concentration camp. Ironically, the relatives of, FTP, this Japanese-American military unit were themselves in internment camps at home in the U.S.

ANSWER: 442nd Regimental Combat Team

18. In 1973, he became the first director to win an Oscar, Emmy, and Tony in the same year. He was as notorious for his womanizing, workaholic ways as for his dance arrangements, which included shoulder rolls, hip thrusts, and other stylized postures that appeared in filmed and staged musicals like *Damn Yankees*, *Cabaret*, and *Chicago*. FTP, name this choreographer, the subject of an eponymous Broadway revue.

ANSWER: Bob Fosse

19. He passed for 413 yards in the 1995 Peach Bowl, but was drafted as a wide receiver. He spent much of his college career practicing against the equally versatile Champ Bailey at Georgia, and now isn't even the best-known combination quarterback/wide receiver on his own team. FTP, name this wideout known as a good blocker who leads the Steelers in catches.

ANSWER: Hines Ward

20. Although not the invasion of Normandy, there were over 110,000 troops sent to invade by land, sea, and air in 1942. Under the supreme command of Major General Eisenhower, the objectives were to secure footholds between Oran and Tunisia on the Mediterranean and to secure bases in French Morocco against the Axis powers led by General Rommel. FTP, give the code name for the American and British campaign in North Africa.

ANSWER: Operation Torch (prompt on "North African Campaign" or similar responses)

21. Let us define God as "that [being] than which nothing greater can be conceived." If God

existed only in the mind, he then would not be the greatest conceivable being, for we could imagine a greater one because it would exist in both the mind and reality, and would then be God. Thus, to imagine God as existing in only the mind but not reality leads to a logical contradiction; this proves the existence of God in both the mind and reality. FTP, all this paraphrases what philosophical argument for God's existence?

ANSWER: St. Anselm's **ontological** argument

22. A current question surrounding the search for these is whether a vomeronasal organ exists in the human body. They have been found in many other organisms, such as Bombykol in the female silkworm. They have been hypothesized to serve many functions and have been used as pesticides in experiments. FTP, name these chemicals found in bodily excretions and used by various species to attract mates.

ANSWER: **pheromones**

23. Charles Schmendiman is a pompous idiot who thinks his new building material will make him famous. The anonymous visitor, who claims to come from the future, turns out to be Elvis Presley. Set in 1904 and written by Steve Martin, FTP, name this play in which Albert Einstein meets the title artist in a Paris bar.

ANSWER: **Picasso at the Lapin Agile**

## BONUSES

1. Answer these questions about the Hundred Years' War, FTPE.

a [10]. This August 26<sup>th</sup>, 1346 led by Edward III and Edward the Black Prince ended in an enormous victory thanks to the English longbowmen. King Philip VI of France escaped with a wound.

ANSWER: Crecy

b [10]. This catastrophic defeat of France included the capture of King John II by Edward the Black Prince and ended the first phase of the war.

ANSWER: Poitiers

c [10]. In one 1415 battle, the English defeated a French force 3 or 4 times their size, resulting in over 6,000 French deaths and less than 450 English dead. FFPE, name the battle and the famed English king who led it.

ANSWER: Agincourt and Henry V

2. It may be 2002 outside, but in this packet, it's still 1984! George Orwell's *1984*, that is. Identify the following from that delightful dystopic novel, FTPE.

a [10]. 5 for three, 10 for all four, identify, in any order, the ministries responsible for war, rationing, interrogation, and propaganda.

ANSWER: Ministries of Peace, Plenty, Love, Truth

b [10]. FFPE, identify Winston's two co-workers at the Ministry of Truth who play a major role in the plot, one as his lover, and the other as his primary interrogator at the novel's end.

ANSWER: Julia and O'Brien

c [10]. All of the main characters are members of either the Outer or Inner Party. Give Orwell's name for the third class, made of the poor average citizens.

ANSWER: proles (do not accept "proletariat")

3. 5-10-15, given the number on the Mohs scale, name the corresponding material used as a guideline.

a [5]. 1

ANSWER: talc

b [10]. 6

ANSWER: orthoclase (accept "feldspar")

c [15]. 4

ANSWER: fluorite

4. Identify the following musical instruments FTPE, no strings attached--or are there?

a [10]. The melody is plucked from just one string on this Indian instrument, whose other strings, through sympathetic vibration, create fainter sounds.

ANSWER: sitar

b [10]. This light, pear-shaped instrument of Arabic origin has a soundboard, several pairs of strings, and a long neck. It was most popular in Europe during the 1300s-1700s. John Dowland was a prolific composer of this instrument during the Renaissance.

ANSWER: lute

c [10]. This relative of the lute was developed in Italy circa 1700. Its Neapolitan form includes four pairs of steel strings attached to a metal plate and parallel to a fingerboard. Beethoven, Vivaldi, and Mozart are among the composers who wrote for it.

ANSWER: mandolin

5. Given a description of one of the four horsemen of the Apocalypse from the Book of

Revelation, name him, FTPE.

a [10]. Rides a white horse and carries a bow and crown.

ANSWER: Pestilence

b [10]. Rides a black horse and carries scales.

ANSWER: Famine

c [10]. Rides a pale horse and has Hades close behind.

ANSWER: Death

6. FTPE, identify the following Gandhis.

a [10]. The original, real-deal Gandhi, this man worked as a lawyer in South Africa. He introduced the idea of Satyagraha as a tool for Indian home rule and tried to elevate the status of the lowest castes.

ANSWER: Mohandas Karamchand Gandhi (accept "Mahatma")

b [10]. Serving as a prime minister from 1984 to 1989, he was assassinated in 1991, unfortunately duplicating the fate of his mother, Indira.

ANSWER: Rajiv Ratna Gandhi

c [10]. Her maiden name is Maino, and she was born in Turin, Italy. The widow of Rajiv, she has been active in Indian politics since the 1970s. She became President of the Congress Party in 1997.

ANSWER: Sonia Gandhi

7. FTPE, answer these questions about Lillian Hellman dramas.

a [15]. This 1939 play about the psychological clashes within a wealthy, amoral Southern family is probably Hellman's best known play.

ANSWER: The Little Foxes

b [15]. Despite its frankness, Hellman's first drama about a young girl's charge of lesbianism against two teachers ran successfully on Broadway for 691 performances.

ANSWER: The Children's Hour

8. Identify the following top performers from the current college basketball season, FTPE.

a [10]. This wide-bodied Florida center, who had a career game in his team's loss to Michigan State in the 2000 finals, has carried the Gators to their best ranking in school history.

ANSWER: Udonis Haslem

b [10]. A repeat of Duke's championship run from last year seems inevitable thanks to the return of this point guard, who, with Chris Duhon, gives Duke the highest-scoring backcourt in the country.

ANSWER: Jason Williams

c [10]. Iowa's chances in the Big Ten this season rest largely on the broad shoulders of this power forward, the team's best rebounder.

ANSWER: Reggie Evans

9. Identify the following polyatomic ions from formulas FTPE.

a [10].  $\text{MnO}_4^{-2}$

ANSWER: permanganate

b [10].  $\text{SO}_3^{-2}$

ANSWER: sulfite

c [10].  $\text{ClO}_4^{-1}$

ANSWER: hypochlorite

10. Name these French rococo artists from works, FTPE.

a [10]. *The Swing, The Love Letter, The Lovers Crowned*

ANSWER: Jean-Honoré **Fragonard**

b [10]. *Harlequin and Columbine, The Embarkation for the Island of Cythera*

ANSWER: Antoine **Watteau**

c [10]. *Diana Leaving Her Bath, The Triumph of Venus*

ANSWER: François **Boucher**

11. Identify the characters left out of the movie version of *The Fellowship of the Ring* FTSNOP.

a [5]. The biggest omission by far was this character, who saves the hobbits from Old Man Willow and the Barrow-Downs.

ANSWER: Tom **Bombadil**

b [10]. This elf was replaced by Arwen in the movie to make her role larger than the decorative one she plays in the book. In the book, he is the one who helps Frodo reach the ford safely.

ANSWER: **Glorfindel**

c [15]. This inhabitant of Bree is a spy for the Nazgul. He sells the hobbits a pony at an extremely inflated price.

ANSWER: **Bill Ferny**

12. People often say that America needs to find its center. Now you can help. Identify the state in which you can find each of these geographic "centers," FTPE.

a [10]. The geographic center of the lower 48 states.

ANSWER: **Kansas** (Smith County, near Lebanon)

b [10]. The geographic center of all 50 states, including Alaska and Hawaii.

ANSWER: **South Dakota** (Butte County, west of Castle Rock)

c [10]. The geographic center of the North American continent.

ANSWER: **North Dakota** (Pierce county, near Rugby)

13. Answer these questions about the Texas Revolution, FTSNOP.

a [5]. William Travis, Davy Crockett, and James Bowie defended this mission from an overwhelming force, delaying the Mexican Army for 13 days before their defeat.

ANSWER: **Alamo**

b [5]. The Texas surprise attack at this battle caught the Mexican general literally with his pants down, and ended the war.

ANSWER: **San Jacinto**

c [10]. This man led the forces at San Jacinto and became first president of Texas.

ANSWER: Sam **Houston**

d [10]. This general and dictator led the Mexican forces.

ANSWER: Antonio Lopez de **Santa Anna**

14. Given a description of a famous philosopher, name him, FTPE. You'll only get 5 points if you need one of his works.

a [10]. This German philosopher who studied with Husserl emphasized the need to understand "being", especially the unique ways that humans act in and relate to the world.

[5] *Being and Time*

ANSWER: Martin **Heidegger**

b [10]. This Danish philosopher held that "truth is subjectivity," that religion is an individual matter, and that man's relationship to God requires suffering. He was also an influential

founder of existentialism.

[5] *Either/Or, Fear and Trembling*

ANSWER: Søren Aabye **Kierkegaard**

c [10]. This French philosopher, dramatist, and Marxist held that man is "condemned to be free" and to bear the responsibility of making free choices.

[5] *Being and Nothingness*

ANSWER: Jean-Paul **Sartre**

15. 5-10-15, given the experiment, concisely identify the scientific discovery it produced. For example, if the question explained the Miller-Urey experiment, you would say that it led scientists to believe that the building blocks of life could be created from simple molecules on Earth.

a [5]. Barbara McClintock noted that some of the maize in her laboratory seemed to transfer genetic elements from one area to another.

ANSWER: discovery of **transposons** (prompt on "jumping genes"; accept reasonable equivalents)

b [10]. In the Meselson-Stahl experiment, the namesake scientists used two isotopes of nitrogen while replicating DNA and a centrifuge to separate the strands.

ANSWER: **DNA replicates in a semi-conservative fashion** (accept reasonable equivalents)

c [10]. Thomas Hunt Morgan found that, after an F1 generation of *Drosophila* in which all the flies had red eyes, only the males in the F2 generation showed the recessive white eye condition.

ANSWER: existence of **sex-linked genes** (accept reasonable equivalents)

16. FTPE, answer these questions about a sadly familiar incident.

a [10]. In the first week of January, a teenaged boy who had left a note professing support for Osama Bin Laden stole this type of plane during a flying lesson in Florida.

ANSWER: **Cessna 172**

b [10]. Identify the company building into which he crashed the plane.

ANSWER: **Bank of America Plaza**

c [10]. In what city did this incident occur?

ANSWER: **Tampa**, Florida

17. FTPE, given the description, name the poetic genre.

a [10]. This extended poem describes legends, heroes, and universal themes in a lofty narrative style.

ANSWER: **epic**

b [10]. To the ancient Romans and Greeks, this kind of poem was characterized by couplets. Since the 1500s, though, its content has consisted of mournful reflections and lamentations.

ANSWER: **elegy**

c [10]. This dignified lyric poem exalts its subject and often treats nature in an intellectual manner. It was initially a type of song presented with musical accompaniment.

ANSWER: **ode**

18. Answer these related questions, FTPE.

a [10]. A recent creation of Sony, this robot dog can do tricks, learn commands, and even take pictures. Its price ranges from around \$500 to over \$1200.

ANSWER: **Aibo**

b [10]. A cute Aibo was featured on an episode of this TV show starring Pamela Anderson as celebrity Valerie Irons, who joins a bodyguard agency.



ANSWER: **VIP**

c [10]. *VIP* also stars actor Dustin Nguyen, who played a detective in this '80s TV show about undercover police in high schools.

ANSWER: **21 Jump Street**

19. Given a monarch from the United Kingdom, name the ruling house from which he came, FTSNOP.

a [5]. Henry VIII

ANSWER: **Tudor**

b [10]. George I

ANSWER: **Hanover**

c [15]. Edward VII

ANSWER: **Saxe-Coburg-Gotha** (prompt on partial answers)

20. Answer the following about optics FTPE.

a [10]. This unit, equal to an inverse meter, measures the power of a lens.

ANSWER: **diopter**

b [10]. This phenomenon is the bending of light around a solid obstacle.

ANSWER: **diffraction**

c [10]. Diffraction is explained by this principle, which states that any point on an electromagnetic wave can be treated as a point source of new waves.

ANSWER: **Huygens'** principle

21. F15PE, identify the techniques of intaglio printing from their definitions.

a [15]. An acid is used to eat into the metal plate in this technique. The image is drawn with a fine needle, and then placed in an acid bath.

ANSWER: **etching**

b [15]. In this technique, very fine, pencil-like tools engrave images with extremely rich, soft lines. Those lines are so thin that they may be lost after a number of prints.

ANSWER: **drypoint**

22. Identify the author from works, 30-20-10.

[30] *One Man's Meat, Here is New York*, co-authored *Is Sex Necessary?*

[20] co-authored *The Elements of Style*

[10] *The Trumpet of the Swan, Charlotte's Web*

ANSWER: E. B. **White**

23. Given a description, identify these terms from economics.

a [10]. A situation in which there are so many firms that no one firm can influence the market price. At that price, the firm may sell as much as it wishes, but if it raises that price, it loses all sales.

ANSWER: **perfect competition**

b [10]. A form of imperfect competition in which the market has several firms, but sufficiently few such that each must take the reactions of rivals into account before making any pricing decisions.

ANSWER: **oligopoly**

c [10]. A situation in which many suppliers are competing for a single buyer. Firms are no longer able to raise their prices indiscriminately since the consumer could simply decide not to buy from any of them if it gets too expensive.

ANSWER: **monopsony**

