

1. First published serially in the *National Era*, it was adapted for the stage with great popularity by G.L. Aiken. Modern readers may be surprised by characters like Cousin Ophelia, who is highly prejudiced but opposes slavery, and her cousin Augustine St. Claire, who shows no hostility toward blacks other than owning them. An adaptation into a stage piece in the style of Thai theater figures prominently in the musical *The King and I*. Featuring Topsy, Little Eva, and the runaway Eliza, FTP, name this influential novel by Harriet Beecher Stowe.

Answer: **Uncle Tom's Cabin**

2. Though the name was coined in 1927 by Harvard chemist James Bryant Conant, their importance would not be realized until the 1960s. One made by mixing hydrofluoric acid and antimony pentafluoride, fluoroantimonic acid, was until recently the strongest one known. Used in hydrocarbon cracking, their reactions allowed the production of high-octane unleaded gasoline as well as the first direct observation of carbocations (*car-bo-cat-ions*), an endeavor that earned George Olah the 1994 Nobel Prize in Chemistry. FTP give the name for this type of acid, which has a proton-donating ability equal to or greater than that of anhydrous sulfuric acid.

Answer: **superacids**

3. His plan was used for the march upon the capital in the coup of President Ramon Castillo, after which he became the power behind the administration of Edelmiro Farrell. He converted trade unions into a fascist-like militant organization called the *descamisados*, or “shirtless ones.” FTP name this two-time president of Argentina who was succeeded by his third wife Isabel, but who may be better remembered for the support of his second wife, Eva.

Answer: **Juan Domingo Peron**

4. His apprentices built his home at the base of the McDowell Mountains in Scottsdale, Arizona. He christened it with the name of a Welsh poet, a name that literally means “shining brow” in Welsh and that also named his summer home. Following the construction of this home in 1937, his career underwent a rebirth that included the design of buildings such as the Grady Gammage Auditorium at Arizona State University. FTP, who is this man whose namesake school of architecture is located in Arizona in the winter and at his Taliesin studio in Spring Green, Wisconsin in the summer?

Answer: **Frank Lloyd Wright**

5. This dish is generally believed to have been created around 1971 at a Treviso restaurant called “Le Beccherie.” While it is similar to Zuppa Inglese in that they both contain a custard known as Zabaglione, the key liquid ingredient in this dessert was not popularized in Italy until the post-World War II era. With a name that literally means “pick-me-up” in Italian, for 10 points, what is the dessert that consists of lady fingers soaked in Espresso, sandwiched in a Mascarpone-Custard blend, and topped off with a dusting of cocoa?

Answer: **tiramisu**

6. As a result of observations of marine shells in France and Italy, he was the first to suggest the division of the Tertiary period into the Eocene, Miocene, and Older and Newer Pliocene Epochs. In his most significant work, he rejected the then-dominant geologic belief of catastrophism. For 10 points, name this British geologist whose *Principles of Geology* brought more attention to the more scientific theory of uniformitarianism first proposed by James Hutton.

Answer: **Sir Charles Lyell**

7. The youngest among her sisters, she was the goddess of underground waters. She bore over 3,000 children, including the Potamoi, Okeanides, and the Nephelai, or rivers, streams, and clouds. When the war against the Titans erupted, both she and her brother-slash-husband, the titan Oceanos, refused to take sides. Later, she cursed Callisto and her son Arcas to endlessly circle in the sky, never to drop below the horizon. For ten points, name this Greek deity who was the nursemaid of Hera.

Answer: **Tethys**

8. His work began to appear in his country's literary magazines in the early 1980's. The first four stories in the English translation of his short story collection *Buying a Fishing Rod for my Grandfather* were published in four different Chinese cities from 1983 to 1985. In 1987, he fled China for Paris, after being persecuted because of his plays. His second novel that has been translated into English, *One Man's Bible* is more of a chronicle of society than a novel. For 10 points, who won the 2000 Nobel Prize for Literature his novel *Soul Mountain*?

Answer: **Gao Xingjian**

9. First elected to Congress as a Whig in 1854, he helped found the Vermont Republican Party. Beginning in 1867 he served over thirty years in the U.S. Senate, but his two most noted legislative achievements came earlier as a member of the House of Representatives. Sponsor of the Tariff Act of 1861, FTP, who is this man most famous for his eponymous 1862 Land-Grant Colleges Act?

Answer: **Justin Smith Morrill**

10. (DR) Their Star Wars™ game is the only one where you can actually kill Jar Jar Binks. They started in 1939 in Billund, Denmark, as a durable goods and wooden toy manufacturer before they invented their patented Automated Binding Bricks in 1949. By 1980 73% of all Western European families with kids under 14 had a set of their bricks. FTP, name this toy industry standout that, along with its Bionicle and Duplo lines, has created "a lifetime of play" for children of all ages.

Answer: **Lego**

11. Its capital was the present-day city of Balkh. Originally an eastern Persian province, it fought hard under Bessus before being conquered by Alexander the Great in 328 BC. When Alexander died, the region came under the rule of the Seleucid Empire, but it was not until circa 255 BC that its satrap, Diodotus I, managed to wrestle control away from Antiochus II. Widely regarded as a center of culture for the day, its people exhibited blending of Greek and Buddhist culture as well as some of the earliest western contact with China. FTP name this kingdom in the Hindu-Kush Mountains, located in modern-day Afghanistan, also associated with two-humped camels.

Answer: **Bactria or the Greco-Bactrian Kingdom** [be kind and prompt on Afghanistan before it's said]

12. During the height of "production," only one percent of operations were successful in producing one. Pope Sixtus V allowed their use in 1589, but Pope Leo XIII outlawed them in 1902. In the Baroque period, seventy percent of opera singers were of this type, and as a result some operas from the period can no longer be performed today. The last known one was Alessandro Moreschi, who left the Sistine Choir in 1913 and is the only one known to make a recording, doing so in 1904. For 10 points, what is this is the type of singer of which the most famous example was Carlo Broschi Farinelli?

Answer: **castrato** [plural **castrati**]

13. Robert Blake and Clifton Collins, Jr. have portrayed him in film. He was of Indian heritage and his parents were often absent. After his final appeal was denied, he was hanged for murdering the two men in the Clutter family. With his friend Dick Hickock, he robbed the Clutter home in Holcomb, Kansas. For 10 points, name this subject of Truman Capote's "factual novel" *In Cold Blood*.

Answer: **Perry Smith**

14. Its name derives from a Tohono O'odham (*ODD-uhm*) Indian word, but Spanish mispronunciations of that word have led to its current name. Elf Owls and Gilded Flickers are two examples of animals that typically nest within them. Most grow to between 15 and 50 feet tall, take 50 to 75 years to develop side shoots, and live for 200 years, although some live for up to 400 years. FTP, name this plant found only in the Sonoran Desert whose blossom is the state flower of Arizona.

Answer: **saguaro cactus** (prompt on "cactus")

15. Along with his brother, he was the patron saint of cobblers, tanners, and leather workers – that is, until they were both decanonized in the early 1960's, since there was insufficient evidence that they actually existed. His lasting contribution to the Catholic faith was his annual veneration on October 25<sup>th</sup>. For 10 points, who is this man on whose feast day Henry V gave a speech to his men before the Battle of Agincourt in Shakespeare's play *Henry V*?

Answer: **Saint Crispin**

16. In the late 19<sup>th</sup> century he attended the same church and had law offices in the same building as William Jennings Bryan, with whom he often disagreed on economic issues. Losing his only Senate bid in 1901, in 1921 he was appointed the first director of the U.S Office of Management and Budget. His eponymous plan to help Germany rebuild its post-World War I economy earned him a share of the Nobel Peace Prize in 1925. For 10 points, name this man, whose only elected office was as Vice President under Coolidge.

Answer: Charles Gates **Dawes**

17. Edward Lorenz is said to have discovered this field in 1961 when entering 0.506 into an equation resulted in radically a different output than the original value of .506127. Requirements of systems in this field include sensitive dependence on initial conditions, dense, periodic, orbits, and topologically transitivity. Using it, scientists can model many things – from trees to blood vessels to populations to weather. For 10 points, what is the branch of mathematics deals with the use of fractals to observe order in apparently random data?

Answer: **chaos** theory

18. Early in his career, he put a swastika on the dust jacket of all his books, right above where he signed his name. But this was well before Nazism; he died in 1936, one year prior to the publication of his autobiography, *Something of Myself*. Such authors as George Orwell and Salman Rushdie have debated the paradox of his respect for and prejudice against the native people in his many works in Imperial settings. For 10 points, name this author of *The Light That Failed*, "The White Man's Burden" and *The Jungle Book*.

Answer: Rudyard **Kipling**

19. One was created unintentionally using fermions by Deborah Jin and Rudolf Grimm in 2003, a few months before Jin successfully achieved the first formation of its fermionic counterpart. The first one was created using rubidium by Eric Cornell and Carl Wieman in 1995 at the University of Colorado at Boulder. In order to become one, bosons must be cooled to temperatures nearing absolute zero. For 10 points, what is this phase of matter, namesake jointly of an Indian physicist and the author of the Theory of Relativity?

Answer: **Bose-Einstein condensate** [accept early buzz with condensate or fermionic condensate before "its fermionic counterpart." Technically, Jin created the latter intentionally and without Grimm, but why quibble?]

20. They have been known to exist since 450 BC, the first known one being issued by King Artaxerxes of Persia to an official named Nehemiah. However, their use did not become popular until the reign of King Louis XIV of France, when they were known as "letters of request" and whose text defined its current name. Until the early twentieth century, they usually contained a description of the holder. Most today are machine-readable and some are biometric with RFID chips. For 10 points, what is the identifying document whose diplomatic variety has black covers, and whose personal variety has blue covers?

Answer: **passport**

21. This classic of the Romantic period was taken along during the Apollo 11 mission. Its composer claimed that its four movements were greatly influenced by Negro Spirituals and Native American music, but like much of his work it bears more of a resemblance to the folk music of his native Bohemia. For 10 points, what is this timeless classic by Antonín Dvořák?

Answer: Symphony **from the New World** (Accept **New World Symphony** or **Symphony No. 9**.)

22. This phenomenon was initially discovered in 1848. When Shoemaker-Levy 9 passed within Jupiter's and fragmented, it would have become part of Jupiter's rings had its angle of descent been different. This is because all observed ring systems are inside this distance, where the gravitational force exerted by one body is cancelled by the tidal force of another body. For 10 points, give this term for the minimum distance that an orbital body can approach its primary before being torn apart.

Answer: **Roche limit**

23. In *Futurama*, Bender opined that bodies were for fat people and for *these* people. Members of this group have been played by thespians Amy Smart, Richard Gere, and Julia Roberts, and in real life have plied their trade on thespians Hugh Grant and Eddie Murphy. For 10 points, what is this so-called world's oldest profession?

Answer: **hooker** (Accept equivalents – prostitute, whore, etc.)

Questions by Virginia Tech A with spares from Oklahoma, John Kilby, Dren Rollins, and your genial quizmaster; editorial assistance from Matt Keller and Brian Weikle

1. For 10 points each, name these books of the Bible.

This New Testament book details the Pentecost and the many adventures of Paul.

Answer: **Acts**

Often cited as the most boring book in the Bible is this book, an extensive list of rules for the Israelites.

Answer: **Leviticus**

Prophesying the coming Day of Judgment, this book is the twelfth and last of the books of the Minor Prophets.

Answer: **Malachi**

2. For 10 points each, name these works of Stephen Crane.

This Crane short story is his fictional account of being on a dinghy in the middle of an ocean after a ship wrecks. It is based on Crane's own experience in the matter.

Answer: **"The Open Boat"**

In this story, Marshal Jack Potter averts a showdown with the troublemaking Scratchy Wilson.

Answer: **"The Bride Comes to Yellow Sky"**

Crane's most famous work tells the story of Henry Fleming and his experiences during the Civil War.

Answer: ***The Red Badge of Courage***

3. Answer the following related to stars, for ten points each.

a) This diagram is used to classify stars based on temperature, luminosity, and absolute magnitude.

Answer: **Hertzsprung-Russell Diagram (accept H-R Diagram)**

b) Ninety percent of stars on the Hertzsprung-Russell Diagram are thought to lie on a band, given this two word-designation, that stretches from the upper left corner to the lower right corner.

Answer: **main sequence**

c) This type of bright star found at the top middle of the Hertzsprung-Russell Diagram oscillates between two states and has been used to measure distance.

Answer: **Cepheid Variable**

4. For 10 points each, identify these Supreme Court Cases.

This 1966 case created precedent for the requirement that all people arrested by the police had to be read their rights in order to waive his or her rights to silence or to an attorney.

Answer: **Miranda v. Arizona**

This 2003 case struck down a Texas law forbidding homosexual sodomy. It overturned the precedent set by the case of Bowers v. Hardwick.

Answer: **Lawrence v. Texas**

The plaintiff in this 1963 case, which established the right of indigent defendants to adequate legal counsel, submitted his original petition from prison in pencil.

Answer: **Gideon v. Wainwright**

5. For 10 points each, name these poker players often found on TV.

Nicknamed "The Poker Brat", this player is well known for his on-camera tantrums. Despite his demeanor, he is the owner of 9 World Series of Poker bracelets, and he won the World Series of Poker Main Event in 1989.

Answer: **Phil Hellmuth, Jr.**

Perhaps best known for his appearance in the movie "Rounders", this man is known by the somewhat offensive nickname "The Orient Express". He is the owner of 10 World Series of Poker bracelets, tied for the most of all time, and won the World Series of Poker main event in 1987 and 1988.

Answer: **Johnny Chan**

This man, who hails from Australia, is known mainly for winning 7.5 million dollars in the 2005 World Series of Poker main event. Whenever he won a hand in that tournament, his rooting section would chant "Aussie Aussie Aussie, Oy Oy Oy!"

Answer: **Joseph Hachem**



6. For 10 points each, name the Russian writer from works.

*Eugene Onegin.*

Answer: Alexander **Pushkin**

*Notes from the Underground*

Answer: Fyodor **Dostoevsky**

*The Lower Depths*

Answer: Maxim **Gorky**

7. (VT/CS) For 10 points each, name these first presidents of African countries from a brief description.

He agitated for his country's independence and was a leader in the Pan-African movement. President of Ghana from 1960 to 1966, his government was overthrown while he was visiting Asia.

Answer: Kwame **Nkrumah**

Co-founder with Nkrumah of the Pan-African Federation, he was the first President of Kenya.

Answer: Jomo **Kenyatta**

Formerly a school teacher, he was viewed as an African Socialist and was a leader of the Pan African movement. He was President of the Republic of Tanzania from 1964 to 1985.

Answer: Julius **Nyerere**

8. (JK) Identify the following questions related to circuit laws and concepts FTSNP.

[5] An alternate statement of this law is current density equals conductivity times the electric field, but a most common statement of it is voltage equals current times resistance.

Answer: **Ohm's law**

[10] This man has two namesake laws. One states the the sum of the voltages in the closed loop of a circuit is zero. The other states the sum of the currents entering and leaving any node of a circuit is zero.

Answer: **Kirchoff's laws**

[15] Unlike the Thevenin equivalent, which simplifies a circuit into an ideal voltage source and ideal resistor, this equivalent named after an American engineer simplifies a circuit into an ideal current source and ideal resistor.

Answer: **Norton equivalent**

9. (CS) Name these Northern European artists from works, 5-10-20-30:

a) Woman Weighing Pearls, Head of a Girl, View of Delft

Answer: Jan **Vermeer**

b) Laughing Cavalier, Officers of the Militia Company of St. George

Answer: Frans **Hals**

c) Ghent Altarpiece, Arnolfini Wedding

Answer: Jan van **Eyck** [pronounced *eck* but accept *ike* or other reasonable attempts]

d) The Corn Harvest, Blind Leading the Blind, Hunters in the Snow

Answer: Pieter **Breughel** the Elder

10. For 10 points each, identify these famous math problems, based on the descriptions given.

This famous but unproven hypothesis conjectures that neither a certain zeta function nor any Dirichlet L-series has a non-trivial zero with real part larger than  $1/2$ . Aside from this, it has deep implications in the study of prime number distribution.

Answer: **Riemann hypothesis**

Another unsolved conjecture, this one has both a weak and strong version. The strong states that every even integer greater than two can be written as the sum of two prime numbers. The weak states that all odd numbers greater than nine can be expressed as the sum of three odd primes.

Answer: **Goldbach's conjecture**

This formerly unsolved problem states that every rational elliptic curve has a corresponding modular form with the same Dirichlet L-series. Most noted for its connection with Fermat's Last Theorem, it was proven by Andrew Wiles.

Answer: **Taniyama-Shimura conjecture** or **Taniyama-Shimura theorem** (accept names in either order)

11. Name these science fiction authors from works, 10-5

(10) A new non-fiction work by this author is subtitled *Too Soon from the Cave, Too Far from the Stars*. Two of his early short story collections are *The Illustrated Man* and *The Golden Apples of the Sun*.

(5) His novels include *Dandelion Wine*, *Something Wicked This Way Comes*, *The Martian Chronicles* and *Fahrenheit 451*.

Answer: Ray **Bradbury**

(10) This author's works include the short story collections *Orsinian Tales*, *Four Ways to Forgiveness* and the novel include *The Farthest Shore*.

(5) Her better-known works include *The Left Hand of Darkness*, *The Dispossessed*, and *Tales from Earthsea*.

Answer: Ursula K. **Le Guin**

(10) His first work with DC Comics was a series called *Black Orchids*. His most recent novel is *Anansi Boys*.

(5) His other novels include *Neverwhere*, *American Gods*, and (with Terry Pratchett) *Good Omens*.

Answer: Neil **Gaiman**

12. (CS) Name the gas from its formula FTPE or from other clues for 5 pts.:

a) (10 pts.)  $C_2H_2$

(5 pts.) The simplest alkyne, used as a fuel in welding

Answer: **acetylene** or ethyne

b) (10 pts.)  $C_4H_{10}$

(5 pts.) An alkane used in the manufacture of synthetic rubber and in domestic fuels and cigarette lighters

Answer: **butane**

c) (10 pts.)  $CCl_2F_2$

(5 pts.) Nontoxic, and nonreactive, this haloalkane is used as an aerosol propellant and refrigerant

Answer: **Freon-12** or dichlorodifluoromethane

13. (VT/CS) For 10 points each, name these dark horse presidential candidates from the party they were nominated from, the year of the election, and their opponent.

Democrat, 1852 vs. Winfield Scott.

Answer: Franklin **Pierce**

Republican, 1880 vs. Winfield Scott Hancock.

Answer: James **Garfield**

Democrat, 1924 vs. Calvin Coolidge.

Answer: John W. **Davis**

14. FTSPNOP name the South American author from works. In each case, you'll get two chances with descending point values.

(15) *Memories of My Melancholy Whores*, *Living to Tell the Tale*

(5) *One Hundred Years of Solitude*.

Answer: Gabriel **Garcia Marquez**

(15) *Blood of Requited Love*, *Heartbreak Tango*, and the play *Under a Mantle of Stars*

(10) *Kiss of the Spider Woman*

Answer: Manuel **Puig**

15. FTPE, stuff about a German:

Among this man's most famous works was *Thus Spake Zarathustra*.

Answer: Friedrich **Nietzsche**

This Nietzsche book, published in 1882, is most well known for the quote "God is Dead."

Answer: *The Gay Science*

Nietzsche's last book before his death, it is his attempt to summarize his own work. It contains chapters with such titles as "Why I Am So Clever" and "Why I Write Such Good Books."

Answer: *Ecce Homo*

16. (OU) FTPE identify these major English victories of the Hundred Years' War:

A.) This June 24, 1340, battle was one of only two naval battles personally commanded by Edward III. It saw the death of both French commanders, Hugues Quiéret and Nicolas Béhuchet and the near total destruction of the French fleet.

Answer: Battle of **Sluys**

B.) Among the dead at this Aug. 26, 1346, battle were Charles II, the brother of King Philip VI and John I, the blind King of Bohemia. The heavily outnumbered English repelled 16 French advances, thanks to the expertise of their longbowmen.

Answer: Battle of **Crécy**

C.) Led by The Black Prince, at this Sept. 19, 1356, battle another outnumbered English force captured John II, King of France, who was then ransomed for twice the yearly income of France. Needless to say, he eventually died in prison.

Answer: Battle of **Poitiers**

17. Identify these literary groups FTPE:

(10) The subject of the Tom Wolfe book the *Electric Kool-Aid Acid Test*, this group led by Neal Cassady and Ken Kesey traveled in a bus named Further.

Answer: The **Merry Pranksters**

(10) This southern poetry group preceding the Agrarians formed at Vanderbilt, published an eponymous literary magazine from 1922-1925, and counted among its members Allen Tate, John Crowe Ransom, and Robert Penn Warren.

Answer: The **Fugitives**

(10) The group's earliest poem could be considered "In a Station of the Metro." In 1914 they published an anthology in London that included the work of William Carlos Williams, Amy Lowell, H.D. and Ezra Pound.

Answer: **Imagists**

18. For 5 points per answer or 30 for all 5 correct, identify the modern form of each of these instruments.

sackbut

Answer: **trombone**

ophicleide

Answer: **tuba**

chalumeau

Answer: **clarinet**

dulcian

Answer: **bassoon**

naker

Answer: **timpani**

19. (OU) Science has made a number of breakthroughs in recent years with the study of extremophiles, organisms which thrive in conditions which were previously thought too inhospitable to support life. FTPE, given an organism and a description of the extreme environmental conditions suitable for it, identify what kind of extremophile it is.

A. *Deinococcus radiodurans*; these organisms can withstand incredible levels of radiation, with *Deinococcus radiodurans* capable of withstanding an instantaneous burst of 5000 Gy, more than 500 times the level which will kill a human.

Answer: **Radioresistant**

B. *Acidithiobacillus thiooxidans*; these organisms thrive under highly acidic conditions, with *Acidithiobacillus thiooxidans* consuming sulfur to produce sulfuric acid and being discovered after destroying sewer pipes containing hydrogen sulfide.

Answer: **Acidophilic or Acidophiles**

C. *Thermus aquaticus*; these organisms can withstand amazing extremes in temperature, with *Thermus aquaticus* thriving between 70° and 80°C, while living in or near hot springs in Yellowstone National Park.

Answer: **Thermophilic or Thermophiles**

20. Answer the following about the history of the Grand Canyon FTPE:.

The first man to lead a scientific expedition to the Grand Canyon was this man. The Glen Canyon Dam forms a lake named after him.

Answer: John Wesley **Powell**

This man's namesake Trading Company was the primary concessionaire for the Grand Canyon during the 1910s and 1920s, likely due to its high standards and efficient service from his namesake waitresses.

Answer: Fred **Harvey**

Fred Harvey's company female architect, she built several structures at the Grand Canyon and is most known for the Hopi House and Watchtower on the rim of the canyon and the Phantom Ranch at the bottom of the canyon.

Answer: Mary **Colter**

21. FTSNOP, identify these psychologists who studied human motivation.

For 5 points, this man proposed all people satisfy their needs in a hierarchical nature, satisfying more basic needs such as physiological needs before moving up to higher needs such as safety and esteem needs.

Answer: Abraham **Maslow**

For 10 points, he asserted that human motivation consists of three basic needs for achievement, power and affiliation.

Answer: David **McClelland**

For 15 points, unlike Maslow and McClelland, this man believes motivation is the result of only two factors: motivation factors and hygiene factors.

Answer: Frederick **Herzberg**

22. For 10 points each, identify these periods of Roman military organization that are named for historical figures.

The military was re-structured into cohorts instead of maniples and was notable for the homogeneity of soldiers compared to the previous period. The period began in 107 BC and was named for the man who instituted the reforms.

Answer: **Marian**

This period, most ubiquitous in Hollywood movies, consisted of cohorts armored in the lorica segmentata and appeared circa 27 BC. This era was also the first time that the Romans employed a professional standing army.

Answer: **Augustan**

Predating the aforementioned eras, this organization of troops was an intermediate one present during the Etruscan wars.

In it, Triarii were still equipped as hoplites, and they fought in the final rank beside Rorarii and Accensi. It is named for the 5th century BC hero credited with creating it.

Answer: **Camillan**

23. Identify the chemical compound, 30-20-10.

(30) The discovery of its use in cell signaling won Furchgott, Ignarro, and Murad the 1998 Nobel Prize in Medicine.

(20) A free radical, it can be produced by reacting sodium nitrite with ferrous sulfate in the presence of sulfuric acid.

(10) It is produced naturally by lightning and artificially by combustion engines. Like its cousin NO<sub>2</sub>, it plays a role in ozone layer depletion.

Answer: **nitric oxide or nitrogen monoxide** [do not accept nitrous oxide]