

**ST. LOUIS OPEN – 1999**  
**Round One**

**Toss-Up Questions**

1. On St. Patrick's Day, 1740, this justice of the peace, writing under the name Captain Hercules Vinegar, summoned poet laureate Colley Cibber to court for murder of the English language. In his later years, he turned to political writing, publishing the periodical *The Convent Garden Journal*. His career as a writer began as he delved into the picaresque works of parody for which he is well known. FTP, identify this great English writer who gained fame by parodying the works of another pioneer in the English novel, Samuel Richardson.

Answer: Henry Fielding

2. About 300 genera and 6000 species of this type of plant occur throughout the moist temperate to tropical regions. The two types, thallose and leafy, are characterized by a conspicuous, gametophytic generation, to which is attached a usually inconspicuous, asexual generation. They are often confused with mosses since their sporophytes are very similar in appearance, though much more complex. FTP, identify these plants under the phylum Bryophyta that make up the class Hepaticae.

Answer: liverwort(s)

3. The Union lost an estimated 17,666 men. Generals Wadsworth and Hays were killed, Getty and Carroll wounded, and Shaler and Seymour captured. The Confederacy lost an estimated 7,750 men. Generals Jenkins, Jones and Stafford were killed; and Longstreet, Pegram, Hunter, and Benning were wounded. The battle started when the Army of the Potomac under Grant crossed the Rappahannock on May 4, but was forced to stop and wait for the supply train to catch up. Lee pounced on the opportunity for attack and advanced his army the next day. FTP, identify this May 5-7, 1864 Virginia battle that had the Union army at a disadvantage due to the terrain.

Answer: Battle of the Wilderness

4. Two countries can obtain mutual gains from trade, provided that they trade along the lines of this theory. It also states that a market system with profit-seeking enterprises will lead both countries to do so. Opportunities for mutual gains from trade arise from differences in the conditions of production in the two countries, and that so long as there are differences there will always be opportunities for trade, even if one country can produce everything more cheaply than the other. FTP, identify this two-word economic theory purported in *The Principles of Political Economy and Taxation* by David Ricardo.

Answer: comparative advantage

5. Subtitled *A Penny for the Old Guy*, the third part begins "This is the dead land / This is the cactus land..." Here, the poet describes the gravity of a graveyard scene. "Eyes I dare not meet in dreams / In death's dream kingdom / These do not appear..." is how the second part begins, in which the poet relates his fear in entering "death's dream kingdom," saying he will disguise himself in "Rat's coat, crowskin, crossed staves..." FTP, identify this T.S. Eliot poem which concludes "This is the way the world ends / Not with a bang but a whimper."

Answer: *The Hollow Men*

6. An enthusiastic alpinist, he made important observations on the structure and movement of glaciers in his 1860 *The Glaciers of the Alps*. He succeeded Michael Faraday as superintendent of the Royal Institution of Great Britain in 1854, and in 1869 he helped disprove the theory of spontaneous generation by optically demonstrating that putrefaction did not occur in the presence of dust-free air. He is most famous, however, for the effect named after him that describes the dispersion of light in

colloidal suspensions. FTP, identify this British scientist whose namesake effect explains why the sky is blue.

Answer: John Tyndall

7. In the 10<sup>th</sup> century, these people used their name as the Hebrew name for Germany. They moved eastward from the Rhineland into Poland during the 15<sup>th</sup> and 16<sup>th</sup> centuries. Many of them migrated to North America and to Israel during the 19<sup>th</sup> and 20<sup>th</sup> centuries. Their biblical eponym is used to separate them from their cousins descended from the Iberian Peninsula and North Africa, the Sephardim, and their traditional vernacular is Yiddish. FTP, identify this term used to label 85% of all Jews today, the larger of the two major groupings in the Jewish religion.

Answer: Ashkenazim or Ashkenazi Jews

8. Eight anarchists were arrested and charged with being accessories to this incident, on the ground that they had publicly and frequently advocated such violence. They were tried and found guilty on a variety of charges, though the identity of the bomb thrower was never found. It resulted from a strike that was in progress at the McCormick reaper works, and a meeting was called at the site of the event as a protest against police violence witnessed against strikers the previous day. FTP, identify the namesake site of this Chicago riot that took place on May 4, 1886.

Answer: Haymarket Square riot

9. Among his few nonoperatic works are *Tara Bulba*, a symphonic poem about the war between the Poles and the Cossacks, and *Lachian Dances*. *The Makropoulos Case* and the Dostoyevsky-inspired *From the House of the Dead* are some of his operas. Of his nine operas, eight are ponderous and brooding, while one retains an uplifting tone. He was so concerned with the idea of verismo that he had a forester locate a den of foxes for him to observe while writing his most famous opera. FTP, identify this Czech nationalist composer of such operas as *Jemfa* and *The Cunning Little Vixen*.

Answer: Leos Janáček

10. It is written in trochaic tetrameter with each line having four or five stresses, and it is sung in a narrow range, the melody usually consisting of only five notes. The oldest portions deal with the origins of the world and human culture. The main character in each poem of this compilation is usually a mighty singer, shaman, or sorcerer who makes a journey to the land of the dead to seek knowledge, as depicted in the poems detailing the Battle of Sampo or the kantele playing of Väinämöinen. FTP, identify these poems compiled in 1835 by Elias Lönnrot, the national epic of Finland.

Answer: Kalevala

11. The dimensionality one over  $n$  squared corresponds to molecular interactions of the form one over  $r$  squared, where  $r$  is the intermolecular separation.  $B$  accounts for the repulsive interaction between molecules at a short distance, while  $A$  accounts for the attractive interactions between molecules due to induced dipole-dipole interactions or London forces. FTP, identify this equation developed by its namesake scientist in 1873 that introduces the intermolecular attractions factor into the ideal gas law.

Answer: van der Waals equation

12. Charles VII of France issued one in 1438, establishing certain freedoms for the French church and favoring a curtailment of papal power. Ferdinand VII of Spain issued one in 1830 that abolished the Salic Law, allowing his daughter, Isabella II, to rule after him. Charles VI, Holy Roman emperor, issued the most famous one in 1713, decreeing that if he died without a male heir, his eldest daughter, Maria Theresa, would inherit the Habsburg dominions. FTP, identify this two-word solemn ordinance of a head of state relating to a matter of primary importance.

Answer: pragmatic sanction

13. The author of this work argued that language is composed of propositions that can be analyzed into less complex propositions until one arrives at simple or elementary propositions. It begins with proposition 1: "The world is all that is the case." It then goes on in a series of propositions, seven total, and corollaries, such as 4.0312 and 5.4711, to arrive at the conclusion, proposition 7: "What we cannot speak about we must pass over in silence." FTP, identify this 1921 seminal work in analytic and linguistic philosophy by Ludwig Wittgenstein.

Answer: Tractatus Logico-Philosophicus (prompt on Tractatus)

14. Two figures lurk in the shadowy recesses. The one on the right, probably a male, looks enraged and carries a bowl in both hands. The figure on the left, most likely female, bears a melancholy expression and toys with a dagger. Between these two figures sits the title character in a grand wooden throne. She looks up and to the left, one arm raised, the other casually slung over the armrest of the throne. She is highly illuminated against the dark background, wearing a flowing red dress with pearls. FTP, identify this 1784 Sir Joshua Reynolds painting that depicts a famous British actress as a Greek goddess.

Answer: Mrs. Siddons as the Tragic Muse

15. He killed all the incarnations of Aggrajag, though each time it was an accident. He almost got into a fight with Thor over a woman at an aerial party. He was also personally insulted by Wowbagger the Infinitely Prolonged while living on prehistoric earth with the Golgafrinchans. However, his greatest trial while tramping around the galaxy was his search for a good cup of English tea. FTP, identify this traveling companion of Trillian, Ford Prefect and Zaphod Beeblebrox, the main character of Douglas Adams' *The Hitchhiker's Guide to the Galaxy*.

Answer: Arthur Dent

16. Recent work by Shimura, Taniyama, and Weil has led to important breakthroughs in the analysis of this theoretical proposition. Dirilecht published a proof for  $n = 14$  in 1832, and Lamé solved for the case  $n = 7$  in 1839. It was shown by Sophie Germain to split into two cases: 1) None of  $x, y, z$  is divisible by  $n$ , and 2) one and only one of  $x, y, z$  is divisible by  $n$ . FTP, identify this mathematical theorem which states that  $x$  to the  $n$  power plus  $y$  to the  $n$  power equals  $z$  to the  $n$  power has no non-zero integer solutions for  $x, y$ , and  $z$  when  $n$  is greater than 2, the final theorem purported by a French mathematician in 1630.

Answer: Fermat's Last Theorem

17. Mary Kingsley works as a nurse caring for POWs; Sir Arthur Conan Doyle runs a field hospital; Sir Robert Baden-Powell makes his mark successfully defending Mafeking; a young Mohandas Gandhi serves as a stretch-bearer with the British medical corps; Rudyard Kipling writes as a war correspondent; and Winston Churchill's exploits at the Battles of Ladysmith and Pretoria get him elected to Parliament. FTP, identify the war in which all these people served, ended by the Treaty of Vereeniging, fought between 1899-1902 in South Africa.

Answer: Boer War (prompt on Transvaal War)

18. Chaucer's inspiration for *The Knight's Tale* and *Troilus and Criseyde* came from this work. The title character, a goddess, leads the reader in dramatic dialogue from self-pity through "the gentler remedy" to "the stronger remedy." She explains in brief passages of alternating prose and poetry that Man's sin is mere forgetfulness and that she can restore that memory. This 100-page book also justifies the ways of God to humans by explaining how the notion of free will works. FTP, identify this thin, sixth century C.E. classic about the goddess Philosophy written during the imprisonment of its author, Boethius.

Answer: *The Consolation of Philosophy*

19. It began as a protest to associationism since little room was allowed for concepts such as meaning and value. Its founders adopted the newly developed field theory of physics, which permitted them to look at perception in other terms. According to this school, images are perceived as a pattern or a whole rather than merely as a sum of distinct common parts, and the context of an image plays a key role. FTP, identify this school of psychology whose German name translates roughly into “configuration,” founded at the turn of the century by Kurt Koffka, Wolfgang Köhler, and Max Wertheimer.

Answer: Gestalt psychology

20. Also called Yaotl, he was the protector of slaves and punished anyone who mistreated them. He also ruled over the district schools where youths received an elementary education and military training. A god of the night sky and the moon and stars, he was usually depicted with a black stripe across his face or a mirror on his chest, in which he saw all the deeds and thoughts of humankind. FTP, identify this Aztec god of evil and black magic whose cult introduced human sacrifice into Central America, the eternal enemy of Quetzalcoatl.

Answer: Tezcatlipoca

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### Round One

#### Bonus Questions

1. Identify the following about the history of India FTSNOP.

- a) This dynasty lasted from 322 B.C.E.-185 B.C.E. and was founded by Chandragupta. Under this dynasty, with capital at Pataliputra, nearly the whole of the Indian subcontinent was united under such leaders as Bindusara and Ashoka, who embraced Buddhism and made it the state religion.

Answer: Mauryan Dynasty or Mauryas (accept Maurya grudgingly)

- b) The Indus Valley civilization lasted between 2500 B.C.E. and 1500 B.C.E. This civilization was represented by its two largest cities. FTPE, identify these two largest cities of the Indus River civilization.

Answer: Mohenjo-Daro and Harappa

2. Identify the branch of the Department of Labor being described FTPE.

- a) This division oversees programs to furnish job training and placement services; supervises payment of unemployment compensation under federal and state laws; and conducts national employment and training programs for Native Americans, migrant workers, and other disadvantaged citizens.

Answer: ETA or Employment and Training Administration

- b) This branch enforces laws regulating wages and hours and prohibiting sex and age discrimination in employment; administers workers' compensation for work-connected disabilities among federal and certain private employees; and supervises equal opportunity requirements for federal contractors.

Answer: ESA or Employment Standards Administration

- c) This branch issues regulations, conducts inspections, and issues citations for noncompliance with safety and health standards established by the act that created it in 1970.

Answer: OSHA or Occupational Safety and Health Administration

3. "Some recent work by E. Fermi and L. Szilard, which has been communicated to me in manuscript, leads me to expect that the element uranium may be turned into a new and important source of energy in the immediate future. Certain aspects of the situation which have arisen seem to call for watchfulness and, if necessary, quick action on the part of the Administration."

- a) FTPE, identify the scientist who wrote this letter dated August 2, 1939 and the person to whom the letter was addressed.

Answer: Albert Einstein and Franklin Roosevelt (accept FDR)

- b) FTP, to which isotope of uranium was Einstein referring in his letter to FDR?

Answer: uranium-235

- c) FTP, what element is achieved when uranium-238 is bombarded with deuterons, the first of the trans-uranium elements?

Answer: neptunium or Np

4. Given a brief description, identify the recent recipient of the Nobel Prize in Literature FTPE, or FSPE if you need the year in which he or she won the Prize.

a) (10 points) This playwright is known for such works as *We Can't Pay? We Won't Pay!* and *Archangels Don't Play Pinball*, but he is best known for the one-man play *Mistero buffo* which, when televised in 1977, the Roman Catholic Church deemed "the most blasphemous show in the history of television."

(5 points) 1997

Answer: Dario Fo

b) (10 points) Controversial because of his ties to his country's Communist Party, this author's works include *The Stone Raft* and *Blindness*. He is the first Portuguese recipient of the Nobel Prize in Literature.

(5 points) 1998

Answer: José Saramago

c) (10 points) This author is considered the greatest Japanese writer since World War II. He reports his greatest influences to be the birth of his mentally handicapped son and a visit to Hiroshima, both of which are represented in his *Hiroshima Notes*. His masterpiece is considered to be the complex and existential *The Silent Cry*.

(5 points) 1994

Answer: Kenzaburo Oe (accept either name)

5. Given a list of characters, identify the opera FTPE. If you need the composer of the opera, you will receive five points.

a) (10 points) Fenton, Ford, Dr. Cajus, Bardolfo

(5 points) Giuseppe Verdi

Answer: Falstaff

b) (10 points) Fiona, Meg Brockie, Tommy Albright

(5 points) Alan Jay Lerner and Frederick Loewe

Answer: Brigadoon

c) (10 points) Herr von Faninal, Count Octavian Rofrano, The Marschallin

(5 points) Richard Strauss

Answer: Der Rosenkavalier or The Knight of the Rose

6. Answer the following questions regarding the Panic of 1907 FTPE.

- a) The Panic began when this large, powerful New York City bank fell, affecting a large number of smaller institutions and threatening to throw the whole country into a deep depression.

Answer: Knickerbocker Bank

- b) Theodore Roosevelt's leadership during the Panic of 1907 was minimal. Instead, he handed the reins to this Secretary of the Treasury who worked with a group of financiers, including J.P. Morgan, to support threatened financial establishments.

Answer: George B. Cortelyou

- c) The fact that so powerful an institution as the Knickerbocker Bank could fail for lack of currency, even though it owned sound assets, forced Congress to pass this act in 1908 as a stopgap measure intended to support unstable banks by enabling them to issue circulating notes under particular conditions.

Answer: Aldrich-Vreeland Act

7. Identify the following geographic regions of Africa FTSNOP.

- a) (10 points) This region serves as a transition zone between the arid Sahara in the north and the wetter tropical areas of the south. It contains relatively sparse savanna vegetation.

Answer: Sahel

- b) (5 points) Extending from Morocco into Tunisia, these rugged peaks linked by high plateaus are at the fringes of the Northern Plateau.

Answer: Atlas Mountains

- c) (15 points) This plateau region in central Cameroon extends into southeast Nigeria and western Central African Republic. It is an upland area of volcanic origin where savanna vegetation predominates.

Answer: Adamawa Plateau

8. Identify the following concerning the biochemical pathway known as glycolysis FTPE.

- a) This enzyme is inhibited by glucose-6-phosphate and activated by insulin. It requires a divalent metal ion such as  $Mg^{2+}$  or  $Mn^{2+}$  and it is responsible for the transfer of a phosphoryl group from ATP to various hexoses. It is responsible for the first step in glycolysis.

Answer: hexokinase

- b) This enzyme is responsible for cleaving fructose-1,6-biphosphate into two 3-carbon molecules, dihydroxyacetonephosphate and glyceraldehyde-3-phosphate. This is a reversible reaction achieved through the formation of a protonated Schiff base at a specific lysine residue in the enzyme.

Answer: aldolase

- c) This enzyme catalyzes the reversible dehydration of 2-phosphoglycerate to phosphoenolpyruvate in the penultimate step of glycolysis.

Answer: enolase

9. Answer the following questions about the *Epic of Gilgamesh* FTSNOP.

- a) (5 points) Gilgamesh was so powerful because he was partly divine. What fraction of a god was he?

Answer: two-thirds

- b) (10 points) Gilgamesh and Enkidu were sent to the cedar forests of Lebanon to destroy what evil monster?

Answer: Humbaba

- c) (15 points) Gilgamesh's goal was to obtain immortality; thus he sought this man, the only antediluvian human known at the time. Identify this ancient person.

Answer: Utnapishtim

10. Identify the following concerning the history of a certain economic consortium FTPE.

- a) In May of 1950, Robert Schuman, a French foreign minister, proposed the creation of a common authority to regulate a particular industry in West Germany and France in order to promote cooperation and good will. What economic body was created in 1951 by his plan?

Answer: ECSC or European Coal and Steel Community

- b) The European Coal and Steel Community was the predecessor to what present-day economic consortium?

Answer: EEC or European Economic Community (accept Common Market)

- c) The Treaty of Rome created the European Economic Community in 1957. What other consortium did the Treaty create?

Answer: EURATOM or European Atomic Energy Community

11. Identify the figure from mythology, 30-20-10.

- a) He is the brother of the drunken plowman Balarama and cousin to Kunti, mother of the Pandavas.
- b) He has thousands of wives, but his favorite consort is the shepherd girl Radha.
- c) This eighth avatar of the god Vishnu serves as charioteer and spiritual guide to Arjuna in the *Bhagavad-Gita*.

Answer: Lord Krishna

12. Identify the following pre-Socratic philosophers FTPE.

- a) This "Weeping Philosopher" of Ephesus believed that fire was the primary form of reality and the universe was in an eternal state of flux.

Answer: Heraclitus

- b) This chief philosopher of the Eleatic school was a disciple of Xenophanes and wrote in conscious objection to the ideas of Heraclitus. He incorporated Pythagorean cosmology into his Way of Belief philosophy.

Answer: Parmenides

- c) Whereas Heraclitus believed in fire and Thales in water, this student of Anaximander believed in air as the primordial substance. He was the last philosopher from the Milesian school.

Answer: Anaximenes

13. Identify the following screening tests for genetic diseases FTPE.

- a) This test can pinpoint such defects as Tay-Sachs disease and cystic fibrosis. Fetal cells are taken from the amniotic fluid and cultured to allow the analysis of chromosomes, proteins, enzymatic reactions, and other biochemical processes.

Answer: amniocentesis

- b) This technique is related to amniocentesis. A small sample of cells from the placenta is aspirated out with a long syringe. The advantage of this test is that it can be performed earlier than amniocentesis, which must await the development of a large enough volume of amniotic fluid.

Answer: chorionic villus sampling or chorionic villi sampling or CVS

14. Given a description, identify the works of William Golding FTPE.

- a) This 1964 novel concerns the obsessive determination of mankind. The hero attempts to construct a great cathedral tower regardless of the consequences.

Answer: The Spire

- b) Golding's first novel, published in 1954, examines the conflict between humanity's innate barbarism and the civilizing influence of reason. A group of young boys are stranded on an island, where they struggle to create their own society.

Answer: Lord of the Flies

- c) This 1955 novel reaches into prehistory, advancing the thesis that humankind's evolutionary ancestors triumphed over a gentler race as much by violence and deceit as by natural superiority. Neanderthal man is slowly replaced by *Homo sapiens* and eliminated as a species.

Answer: The Inheritors

15. Identify the following acts passed by the U.S. government relating to Native Americans FTPE.

- a) This set of acts was passed at the turn of the 19<sup>th</sup> century. It was designed as a series of programs aimed at reducing fraud and other abuses in commerce with Native Americans.

Answer: Trade and Intercourse Acts

- b) Passed in May 1830, this act empowered the president of the U.S. to move eastern Native Americans west of the Mississippi to what was then "Indian Territory" (now essentially Oklahoma). This act caused the brutal Trail of Tears.

Answer: Indian Removal Act

- c) This act was designed to absorb Native Americans into the society of the United States. It was an aggressive assault on tribalism by parceling out communally owned reservation land on a severalty basis. This act went into effect in 1887.

Answer: Dawes Act or General Allotment Act

16. Answer the following questions about the fastest ship in the galaxy FTSNOP.

- a) (5 points) What is the fastest ship in the galaxy, according to Captain Han Solo and First Mate Chewbacca?

Answer: Millennium Falcon

- b) (10 points) What race did the Millennium Falcon win by going less than twelve parsecs?

Answer: Kessel Run

- c) (15 points) What is the Millennium Falcon's class designation as a lightweight bulk freighter?

Answer: YT-1300

17. Identify the following photographers given a description FTPE.

- a) She turned from sculpture to photography at the behest of Man Ray, her mentor. She is most famous for her pioneering camera work in the physical sciences and her documentation of New York City in her epic *Changing New York*.

Answer: Berenice Abbott

- b) He became famous early on for his photographs *The Car Horses at the Terminal* and *Winter Fifth Avenue*. A pioneer in turning photography into an art form, he is best remembered for his marriage to Georgia O'Keeffe and his cycle of cloud pictures, *Songs of the Sky*.

Answer: Alfred Stieglitz

- c) His painstaking control of tonality and detail made him unequalled as a technical master of the black and white print. He is best remembered for his black and white photographs of Yosemite National Park, the California coast, and other wilderness areas of the American West.

Answer: Ansel Adams

18. Identify the following terms related to Buddhism FTSNOP.

- a) F5PE, identify the two main schools of Buddhism that translate as "Greater Vehicle" and "Lesser Vehicle."

Answer: Mahayana and Theravada (accept Hinayana for Theravada)

- b) FTP, identify the school of Buddhism that developed in China, and later in Japan, as the result of a fusion between the Mahayana form of Buddhism originating in India and the Chinese philosophy of Taoism.

Answer: Zen Buddhism

- c) FTP, identify the form of Buddhism that developed from the blending of Mahayana with popular folk belief and magic in northern India. With its strong emphasis on sacramental action, it concentrates on the development and harnessing of psychosexual energy.

Answer: Tantra or Tantrism

19. Identify the American authors given their famous last words FTPE. You will receive five points if you need works by the author.

- a) (10 points) “Remember me to my friends, tell them I’m a hell of a mess.”

(5 points) *A Book of Burlesques* and *Damn! A Book of Calumny*

Answer: H.L. Mencken

- b) (10 points) She asked, “What is the answer?” When no response came forth, she laughed and said, “In that case, what is the question?”

(5 points) *The Autobiography of Alice B. Toklas* and *Tender Buttons*

Answer: Gertrude Stein

- c) (10 points) “Death, the only immortal, who treats us all alike, whose peace and whose refuge are for all. The soiled and the pure, the rich and the poor, the loved and the unloved.”

(5 points) *The Innocents Abroad* and *The Mysterious Stranger*

Answer: Mark Twain or Samuel Langhorne Clemens

20. Given an equation, identify the famous mathematical curve it represents FTPE. Note that the letter “a” represents a constant in each of the equations.

- a)  $x^3 + y^3 = 3axy$  (read: x cubed plus y cubed equals three times a times x times y)

Answer: Folium of Descartes (accept equivalents)

- b) The polar equation  $r = a\theta$  (read: r equals a times theta)

Answer: Spiral of Archimedes (accept equivalents)

- c)  $y(x^2 + a^2) = a^3$  (read: y times the quantity x squared plus a squared equals a cubed)

Answer: Witch of Agnesi (accept equivalents)

21. Answer the following questions about a certain nonprofit litigation and lobbying organization FTPE.

- a) What organization was founded in 1920, originally to defend conscientious objectors during World War I, but later expanded its activities to include defending “freedom of expression, privacy, due process, and equal protection – in a nonpartisan fashion on behalf of anyone, irrespective of how unpopular the cause?”

Answer: ACLU or American Civil Liberties Union

- b) This woman from Montana was a founding member of the ACLU, and the only member of the House of Representatives to vote against both World Wars. Identify this first female Representative.

Answer: Jeannette Rankin

- c) The ACLU became heavily involved in this 1931 legal case where nine young black men were alleged to have raped two white girls. Eight of the nine were sentenced to death, but none were executed after six years of appeals.

Answer: Scottsboro case