

## 2001 Chicago Open

Tossups by Chris Romero, Chris Sewell, Grant Gavranovic, Trey Morris, Ryan Bowling, and Chris Frankel

1. A subplot involves the rescue of a tramp's daughter, Marian Erle, who refuses the wedding proposal of her rescuer. The title character secretly educates herself and also refuses a marriage proposal from the same man, her cousin Romney. However, after fleeing to continental Europe and earning her living by writing, she meets up with a poor and blind Romney, marrying him because he acknowledges the importance of her work. FTP, name this 1857 romance in blank verse, a partly autobiographical work by Elizabeth Barrett Browning.

Answer: Aurora Leigh

2. A special case of the Holder inequality in which  $p$  equals  $q$  equals 2, Bunyakovskii proved it for a simple interval in 1859. Extended by its first namesake to sums and by its second to inner products, it states that the square of the product of two vectors is less than or equal to the product of the sum of the square of the two vectors. FTP, name this key inequality used in analysis and named for French and German mathematicians.

Answer: Cauchy-Schwartz Inequality

3. Justice Frank Murphy predicted this decision several years earlier with his dissent in *Wolf v. Colorado*, which this case overturned. In the official decision, Justice Tom Clark wrote, "There is no war between the Constitution and common sense." It arose when police claimed to have found pornographic material during a raid without a warrant on an African American woman's house. FTP, name this 1961 Supreme Court case in which the court ruled that evidence obtained in violation of the fourth amendment could not be used in state or federal trials.

Answer: Mapp v. Ohio

4. As secretary to King Frederick I, he ran up debt, was thrown in prison and forced to flee Württemberg. He studied under Abbe Vogler and Michael Haydn, the son of Joseph, creating several pieces for his personal favorite, the clarinet, as well as for the piano, including *Grand Concerto No. 1* and *Invitation to the Dance*. However, he is best-known for three operas, for the last of which, *Oberon*, he learned English. FTP, name this composer who told of the expert huntsman, Max, in his *Der Freischütz*.

Answer: Carl Maria von Weber

5. This novel makes references to recent literature with the discussion of *Middlemarch* and the "sentimental slop" *Tears, Idle Tears*. Reverend Sewell's "economy of pain" is a central ethical premise in this novel, which examines the change in the ethics of the title character as well as his daughter Penelope, who eventually elopes with Tom to Mexico. The title character, who once aspired to be like Bromfield Corey, disgraces himself by getting drunk at a party, but is redeemed by the end despite losing his fortune. FTP, name this best-known novel of William Dean Howells.

Answer: The Rise of Silas Lapham

6. Isoniazid, zoram, and ethylene bromide give a positive one. Its protocol calls for a strain of *Salmonella typhimurium*, which carries a mutant gene making it unable to synthesize histidine. The test subject is then added to some agar plates and then monitored for bacteria growth, an indication of a cell mutation. FTP, identify this test for the mutagenicity of a chemical named for its American discoverer.

Answer: Ames test

7. It was precipitated by the issuance of the bull *Decet Romanum Pontificem*, and much of what we know of it comes from the writings of the radical Reformer, Thomas Muntzer. On the third day a hearing was held under the guise of the archbishop of Trier, who like Frederick, elector of Saxony, did not enforce the church's intended excommunication and wishes. The words "Here I stand. I cannot do otherwise," were, FTP, famously uttered by Martin Luther before Charles V at what 1521 gathering?

Answer: Imperial Diet of Worms

8. It was not written by Durkheim and concludes that suicide is not a denial but rather an affirmation of one of the titular ideals. The author then suggests that the negation of that ideal may lead to liberation of the mind. It begins by declaring the world comprehensible only with the aid of the constructs of man's intellect and depicts the world as a multiplicity of things next to and following one another. Composed of four books centered on a theory of knowledge, the philosophy of nature, aesthetics, and ethics, FTP, name this 1819 work by Arthur Schopenhauer.

Answer: *The World as Will and Idea* or *Die Welt als Wille und Vorstellung*

9. After tiring of their old name, Eleventeen, they took on the name of an obscure blood-sucking villain from the X-Files. Signed straight out of high school, where lead singer Max Collins graduated with a 0.87 GPA, the band's self-titled first album quickly went platinum. The members' love of video games led them to ask Randy Green, the creator of Lara Croft, to design a comic book-style cover for their sophomore release, *Horrorscope*. FTP, name this band, responsible for the singles "Leech," "Here's to the Night," and "Inside Out."

Answer: Eve 6

10. A one-time reviewer for the New York *Herald Tribune*, this writer's autobiographical works include *An Unfinished Woman* and *Pentimento*. In reference to the misrepresentations in her memoir *Scoundrel Time*, Mary McCarthy said of her, "every word she writes is a lie, including 'and' and 'the.'" Better known are plays like *The Searching Wind* and *Days to Come*, written during her relationship with Dashiell Hammett. FTP, name this writer of *Watch on The Rhine* and *Little Foxes*.

Answer: Lillian Hellman

11. It can be calculated by measuring the pressure gradient along a pipe and applying Poiseuille's equation, or by using an instrument developed by Couette. It is inversely proportional to temperature, and its force is proportional to the rate of strain in a Newtonian fluid. Measured in Netwon-seconds per square meter, FTP, identify this reciprocal of fluidity, which is a measure of a fluid's resistance to flow.

Answer: viscosity

12. Early on in the battle the Confederate general sacked Lieutenant-General Polk and D.H. Hill, while on the Union side McCook and Crittenden were removed as well. The capture of the Confederate pickets at Brown's Ferry allowed Joseph Hooker to reinforce, thus opening the famous "Cracker Line," which eventually led to a surprise attack on Bragg's position on Missionary Ridge. FTP, name this Civil War battle which also saw fighting at Lookout Mountain and which was fought in and around the namesake city on the Tennessee River.

Answer: Battle of Chattanooga

13. This painting was stolen from its home at the Musee Marmottan in 1985 but was recovered five years afterwards. Actually painted in 1873, the artist incorrectly dated it 1872 when he signed years later. Soon after its public display, an article in *Le Charivari* by Louis Leroy famously mocked this depiction of two vessels in the Le Havre harbor as seen through the morning mist. FTP, name this Claude Monet work said to have ushered in a namesake art movement.

Answer: Impression: Sunrise or Impression: soleil levant

14. He had a great affinity with the priest king Topiltzin and in fact his name was given to all higher priests. He has many forms including Ehecatl, but is always the ruler of the fifth cycle and twin brother of Xolotl. In some traditions he is the gay lover of Tezcatlipoca, who is also seen as his opposite in other traditions. The most revered of Coatlicue's sons, he is credited with fashioning humans of a new era before disappearing across the sea. Known as the "feathered serpent," FTP, name this Aztec god whose legend was taken advantage of by Cortes.

Answer: Quetzalcoatl

15. It opens with the performance of a play with just one character, which is actually just a voice. On the periphery is the tale of Masha, who loves a literary man but settles for Medvedenko. Older characters include the ineffective physician Dorn and the protagonist's actress mother, who kept Trigorin as her lover. However, the main focus is on Treplyev's unrequited love for Nina, which leads him to commit suicide after killing the title character in, FTP, what Anton Chekhov play?

Answer: *The Seagull* or *Chayka*

16. In his namesake rearrangement reaction, an allyl phenyl ether can be synthesized from ortho-allylphenol by heating. In his namesake condensation reaction, two esters can react to form a beta-keto ester via an aldol addition, enolate anion attack, and an acid-base reaction. FTP, name this German chemist, whose name along with that of J.G Schmidt, has been used for a method to synthesize unsaturated ketones from an aldehyde and ketone via a crossed aldol reaction.

Answer: Ludwig Claisen

17. Support for it was galvanized by the perceived success of the Canada Constitutional Act passed 10 years earlier, however its true driving force was William Pitt the Younger, who saw it as a means to give a greater voice to Irish Catholics. It was officially ended on January 15, 1922, when Michael Collins and his Provisional Government did away with it, more than 120 years after it came into effect on January 1, 1801. FTP, name this agreement through which England, Scotland, Wales, and Ireland became the United Kingdom.

Answer: Act of Union

18. It was officially developed by Friedman and Rosenman in 1964. Question 13 of a structured interview designed to assess it, is asked in a hesitant, halting manner, and in general the interviewer is encouraged to challenge the person's responses. Most clinicians now recognize aggression associated with it as an independent risk factor for heart attacks, partly related to its characteristics of time urgency, competitiveness, and hostility. FTP, identify this basic personality type

Answer: Type A personality

19. The Bible states that this group's territory was bounded on the east by the Jordan River, and its chief towns included Mizpah, Bethel, Jericho, and Jerusalem. According to the final three chapters of Judges, over twenty-five thousand of its number were killed in a war resulting from the rape and murder of a Levite's concubine. FTP, identify this tribe, including Saint Paul and King Saul, named for and consisting of the descendants of Jacob's youngest son.

Answer: Tribe of Benjamin or the Benjaminites

20. Among the characters in this novel are Red Horse, an advisor who is a strong proponent of anarchy. The title character was once infatuated with the Shaper's music and, following an enchantment making him impervious to blades, wages a yearly war for a period of twelve years, before losing his arm in an attack during that twelfth year. FTP, name this title character of a John Gardner novel, who lives in a cave under the sea with his mother and terrorizes the denizens of Heorot before being killed by Beowulf.

Answer: Grendel

21. The winner of an individual bronze and team gold medals at the Calgary Olympic games of 1988, he died suddenly in 1989 and was buried next to his mentor, Freckles Brown. In 1987, he became the first athlete in 309 tries to successfully ride "Red Rock," and that same year won the World Championship in Bull Riding. Killed by "Takin Care of Business," FTP, name this bull rider portrayed by Luke Perry in *8 Seconds*.

Answer: Lane Frost [An Olympic Rodeo was held in Calgary and will again be held in Salt Lake City]

## 2001 Chicago Open

Bonuses by Chris Romero, Chris Sewell, Grant Gavranovic, Trey Morris, Ryan Bowling, and Chris Frankel

1. Answer these questions about theories of modern physics, FTP each:

A. In order for the interactions of fundamental forces to converge properly, what theory became necessary? It holds that each particle has a complementary particle.

Answer: supersymmetry or SUSY

B. Independent of supersymmetry is what theory, which holds that all elementary particles should be considered extended one-dimensional objects of Planck length rather than as dimensionless points?

Answer: string theory (do NOT accept: "Super String")

C. The combined theory, known as the superstring theory, became popular during the 80s through the work of these two scientists. One was from Queen Mary College, the other from Cal Tech. Name either.

Answer: Michael Green OR John Schwarz

2. Name these Ernest Hemingway works, FTP each:

A. While on an African safari, the title character is saved from a lion by his English guide, Wilson. However, the next day, while fighting a wild buffalo, he is shot by his wife.

Answer: The Short Happy Life of Francis Macomber

B. Harry, a writer, goes on an African safari in order to "work the fat off his mind," but gets gangrene, sees a vision of a frozen leopard, and dies.

Answer: The Snows of Kilimanjaro

C. This novel follows the fortunes of Thomas Hudson from his experiences as a painter on Bimini through his antisubmarine activities on Cuba during World War II.

Answer: Islands in the Stream

3. Identify the following concerning historical figures who make a cameos in the *Decameron*, FTP each:

A. Born Benedetto Caetani, in 1294 he was elected Pope following the resignation of Celestine V. He was later captured following a long struggle with Phillip IV of France.

Answer: Boniface VIII

B. In the first story of the first day, Boniface sends Charles III of Valois to Florence to soothe tensions between rival factions of this group.

Answer: Guelphs

C. The leaders of the rival black and white Guelph factions are depicted twice, once in regard to their conflict and later as examples of upper class citizens. Name the head of either faction.

Answer: Corso Donati OR Vieri de' Cerchi

4. Stuff about a 20<sup>th</sup>-century artist, FTP each.

A. Trained as a pointillist by Giacomo Ball, he would go on to paint works like *Riot in the Galley* and *The City Rises*.

Answer: Umberto Boccioni

B. Boccioni was the best-known member of this movement announced in 1909 in a manifesto published in *Le Figaro* by Fillipi Tommaso Marinetti

Answer: Futurism

C. Boccioni is actually better-known as a sculptor and primarily for this 1913 work

Answer: Unique forms of Continuity in Space

5. Given a description of a polymerization reaction, name the class of polymer that results.

A. For 5 points, React a di-acid with a di-alcohol to make this type of polymer commonly used in clothing.

Answer: polyester

B. For 10 points, React a di-ol with a di-isocyanate to make this type of polymer, common in making foam cushions.

Answer: polyurethane

C. For 15 points, React a di-isocyanate with a di-amine to make this type of polymer, used to make coatings and films.

Answer: polyurea

6. Identify these characters in *Titus Andronicus*, FTP each:

A. After Titus returns to Rome from defeating the Goths, this man is declared emperor. He later kills Titus before he himself is killed by Lucius.

Answer: Saturninus

B. Saturninus' brother, he abducts Lavinia and is murdered by Tamora and a fellow character.

Answer: Bassanius

C. Other than Othello, this Moor is believed to be the only person of color in a Shakespearean play.

Answer: Aron

7. Name these 20<sup>th</sup> century British prime ministers, FTP each:

A. Prime minister from 1902 to 1905, he is best-known for a 1917 statement as foreign secretary.

Answer: Arthur James Balfour

B. Following the nationalization of the Suez Canal in 1956, he sent troops to take the canal back and resigned over the debacle that followed.

Answer: Anthony Eden

C. Prime Minister for eight non-consecutive years, he secured British membership in the EEC in June 1975.

Answer: Harold Wilson

8. Identify these things concerning the coaching of Phil Jackson:

A. For 5 points, Jackson's Lakers and Bulls were characterized by this offensive scheme, which is sometimes referred to as the Triple Post.

Answer: Triangle Offense

B. For 10 points, The "Triangle" was created by this Jackson assistant coach.

Answer: Tex Winter

C. For 15 points, Winter developed the Triangle from the Center Option offense that he learned at this university while under Sam Berry

Answer: USC OR Southern California

9. Answer the following concerning a character from Hindu mythology, FTP each:

A. Considered the remover of obstacles, he is the first god invoked at the beginning of worship and is often positioned near thresholds and gateways.

Answer: Ganesha

B. Ganesha is the legendary scribe who wrote down this work from Vyasa's dictation.

Answer: Mahabharata

C. Ganesha's consort is this sometimes Hindu goddess of sacrifices.

Answer: Bharathi

10. Identify the following related to cell communication, FTP each:

A. When a receptor protein in the membrane is activated by a signal molecule, it displaces a GDP molecule with a GTP molecule, activating this protein, which activates enzymes that lead to a cellular response.

Answer: G protein

B. Much of our body's communication occurs via this "second messenger," a derivative of ATP.

Answer: cyclic AMP or cAMP or cyclic adenosine monophosphate

C. This enzyme converts ATP to cyclic AMP in response to an external signal, such as epinephrine.

Answer: adenylyl cyclase

11. Identify the following concerning a British work of the mid 17th century, FTP each:

A. Dedicated to George Berkeley, it has the partial subtitle, "What it is...In Three Maine Partitions With Their Several Sections, Members, and Subsections, Philosophically, Medicinally, Historically Opened and Cut up, by Democritus Junior"

Answer: Anatomy of Melancholy

B. *Anatomy of Melancholy* was written by this Anglican Clergyman.

Answer: Robert Burton

C. Following its publication, *Anatomy of Melancholy* was used extensively in this better-known, a somewhat confusing novel by Laurence Sterne.

Answer: *Life and Opinions of* Tristram Shandy



12. Identify the following things about Marcus Garvey:

A. For 5 points, Garvey was criticized for meeting with leaders of this hate group, which shared his views on racial integration.

Answer: Ku Klux Klan

B. For 10 points, Garvey founded this steamship company, intended to facilitate international trade among black-owned businesses.

Answer: Black Star Line

C. For 15 points, The black, red, and green bars of this flag designed by Garvey represent unity, struggle, and hope for the future.

Answer: Bendera

13. Name these Dmitri Shostakovich works, FTP each:

A. This ballet portrays a Communist hero falsely accused of causing a factory incident.

Answer: The Bolt

B. Based on a Nikolai Leskov work, this opera portrays Katerina Ismailova who with her lover, Sergey, kills her husband's father and then her husband. The work really has nothing to do with Shakespeare

Answer: Lady Macbeth of the Mtensk District

C. This work is based on five poems by Yevgeny Yevtushenko, though it is the first of these that gives this symphony its subtitle of "Babi Yar."

Answer: Symphony No. 13 in B flat Minor

14. Answer the following concerning African strips:

A. For 5 points, A nation, this strip is no more than 30 miles wide and is surround by the Senegal

Answer: Ghana

B. For 15 points, Located in the Sahara between Libya and Chad, the Tibesti Mountains intersect this area near its namesake town

Answer: Aozou Strip

C. For 10 points, A long narrow extension of Namibia, this strip is located on the northern edge of the Kalahari

Answer: Caprivi Strip

15. Identify the following laws concerning solutions, FTP each:

A. This law states that the ratio of the partial vapor pressure of each component of a solution to its vapor pressure as a pure liquid is approximately equal to the mole fraction of the component in the mixture.

Answer: Raoult's Law

B. This law also states that the vapor pressure of a solute is proportional to its mole fraction, but the constant of proportionality is not the pure substance's vapor pressure.

Answer: Henry's Law

C. This equation states that osmotic pressure is equal to the product of the solute's molar concentration, the temperature, and the constant R.

Answer: Van't Hoff Equation

16. Name these things about a member of the Harlem Renaissance, FTP each:

A. One of the foremost members of the Renaissance, this man's work includes *God's Trombones*.

Answer: James Weldon Johnson

B. James Weldon Johnson published this pioneering novel anonymously in 1912 but it did not receive attention until it was published under his own name in 1927.

Answer: Autobiography of an Ex-Colored Man

C. Johnson's *God's Trombones* was cited as a heavy influence by this author of *Banjo* and *Banana Bottom*.

Answer: Claude McKay

17. Name these influential revisionist historians, FTP each:

A. This Progressive historian offered a new but fraudulent explanation of our founding fathers' motives in his *An Economic Interpretation of the Constitution*.

Answer: Charles Beard

B. In his groundbreaking study *Atomic Diplomacy* this author claimed that Truman dropped the bomb not to save American lives but to intimidate the Soviets in postwar negotiations.

Answer: Gar Alperovitz

C. In his *The Tragedy of American Diplomacy* he argued that the Cold War was simply a U.S. creation to prevent complete closure of Eastern European economic markets.

Answer: William Appleman Williams

18. Name these philosophers who influenced Karl Marx and the Young Hegelians, FTP each:

A. Marx joined the Doctor Club, led by this man, who developed the idea that the Gospels were a record not of history but of human fantasies arising from emotional needs.

Answer: Bruno Bauer

B. Marx supported the views of this man's *Essence of Christianity*, which criticized Hegel and led to the evolution of dialectical materialism.

Answer: Ludwig Feuerbach

C. Marx spoke out against this socialist philosopher's *The Philosophy of Poverty*, which sought to unite the best features of competition and monopoly.

Answer: Pierre-Joseph Proudhon

19. Answer the following concerning theories of inflation, FTP each:

A. Expounded in the mid 18th century by Hume and others, this theory held that with frequency of wage payments, structure of the economy, and saving and shopping habits constant, the price level will be directly proportional to the supply of money and inversely proportional to the physical volume of production.

Answer: Quantity Theory

B. This theory states that assuming that prices of goods are determined by their costs, whereas supplies of money are responsive to demand, increasing costs create an inflationary pressure that becomes continuous through the operation of the price-wage spiral.

Answer: Cost-Push Theory

C. Not an entirely independent theory, it emphasizes the maladjustment in the economy. Inflationary tendencies in some Latin American countries have been attributed to mechanisms of these kinds.

Answer: structural OR demand-pull inflation

20. "Say it loud, and there's music playing. Say it soft, and it's almost like praying." Answer these questions about a character from *West Side Story*, FTP each:

A. She is character who is the subject of Tony's lines, which introduced this bonus.

Answer: Maria

B. This actress was criticized for her Puerto Rican accent and excessive use of Coppertone as Maria.

Answer: Natalie Wood

C. Identify Maria's cousin, for whose portrayal Rita Moreno won a Best Supporting Actress Oscar

Answer: Anita