

CARDINAL CLASSIC XII: Beware the Esker
Stanford University
February 2, 2002

Packet by Wisconsin (3)

Toss-Up Questions

1. This novel opens and closes with the letters of the Arctic seafarer Robert Walton, who rescues the title character and nurses him back to health. (*) The title character's boyhood friend Henry Clerval offers a contrast to the novel's moroseness, and Justine is accused of the title character's brother's death, even though it was really his creation that did it. FTP, identify this scary-ass novel by Mary Shelley.

Answer: Frankenstein

2. She was taught to paint by her father, Raymond, and from 1841 her works were regularly exhibited in the Salon. Her sympathetic pictures of animal life, such as *Sheep by the Sea* and *Plowing in Nivernais*, (*) were remarkably enlightened in their approach, and she became highly popular in England and America, even though she herself was French. FTP, who is this artist best known for *The Horse Fair*?

Answer: Rosa Bonheur

3. His recent guest appearances on *The West Wing* and *The Practice* have led to concerns that these shows will be canceled, as he is the patron saint of the "Jump the Shark" website. (*) He was Karl Reese on the *John Larroquette Show* and Clay Fillmont on *Dynasty*. FTP, name this actor, featured in several *Revenge of the Nerds* films, who also played Jefferson D'Arcy on *Married With Children*.

Answer: Ted McGinley

4. Created via the Chapman reaction, this compound can be used to break carbon double bonds and create new ketones, carboxylic acids, or aldehydes. It's unique absorption spectrum makes it easy to determine its presence, which is useful since it is toxic. (*) FTP, name this compound, that while dangerous at low levels, is essential in the upper atmosphere to filter out ultraviolet radiation.

Answer: ozone

5. Upon the advice of John Stuart Mill, he entered parliament where he focused on issues such as the repayment of the public debt and the repeal of the Corn Laws. His letters published in the *Morning Chronicle* were published as *The High Price of Bullion*, (*) and he later wrote *Principles of Political Economy and Taxation*. FTP, identify the inventor of comparative advantage and formulator of the Iron Law of Wages.

Answer: David Ricardo

6. Besides being NFL quarterbacks, Ken Stabler, Scott Mitchell, Cade McNown, Michael Vick, Mark Brunell, and Steve Young all possess a common trait. (*) As a result, their receivers have to adjust to the spin of the ball, and they must rely on the right tackle for blind-side pass protection. FTP, name this common trait, possessors of which are often called southpaws.

Answer: left-handedness (or obvious equivalents)

7. Its defensive walls were built following the San Saba massacre, and in 1803 it became the headquarters of the Spanish cavalry sent to defend New Spain (*) against the expansionist vision of Aaron Burr. Colonel James Bowie fell ill in 1836 and handed his command to William Travis, who led the defense against Mexican general Santa Anna. FTP, name this well-remembered site in San Antonio.

Answer: The Alamo or Mission San Antonio de Valero

8. In 1575, along with contemporary William Byrd, he was granted a royal monopoly for printed music and music paper by Queen Elizabeth. His extraordinary skill at counterpoint is represented well in *Miserere nostri*, a 7-part canonic work. (*) FTP, name this composer, most famous for the 40-part motet *Spem in Alium* and whose name appears in the title of a Vaughan Williams work.

Answer: Thomas Tallis

9. Minor characters in this drama include the milkman Howie Newsome and the town undertaker Joe Stoddard. The Stage Manager (*) remains unnamed throughout the play and assumes various roles. Taking place on May 7, 1901, this drama centers on the title location and the relationship between Emily Webb and George Gibbs. FTP, identify this play that centers on Grover's Corners and written by Thornton Wilder.

Answer: Our Town

10. The arrest of his tutor Judah Ibn Shoshan persuaded his family to move to Palestine. He turned to medicine and became court physician to Saladin. (*) The majority of his writings are on the codification of Jewish law and a creed containing thirteen articles for Jewish faith. FTP, name this Jewish medieval philosopher perhaps most famous for his *Guide to the Perplexed*.

Answer: Moses Maimonides or Moses ben Maimon

11. A region with a slight excess of electrons next to a region with a slight shortage of electrons forms a P-N (*) junction, which creates a strong bias for one-directional current flow in these objects. If a voltage is applied in the wrong direction, a potential barrier builds up across the junction and only a minimal amount of current gets through. FTP, name this electric device, commonly seen in a "light-emitting" variant.

Answer: diode

12. Its third incarnation was cast by Pass and Stowe in Philadelphia in 1753, though it was first ordered two years earlier and cast in London. (*) It was used after the first public reading of the Declaration of Independence, but has not been used since 1835, when it cracked while tolling the death of Chief Justice John Marshall. FTP, identify this large bell that has served as an icon of American history.

Answer: Liberty Bell

13. In 1989, a theme park dedicated to her opened in Smaaland, where she was born in 1907. Her novels include *Mio, My Son* and *The Brothers Lionheart*. The creator of the mischievous farmboy Emil, and Ronia, the Robber's Daughter, in 1958 she won the Hans Christian Anderson medal for children's literature. FTP, name this author who died on January 28, 2002, creator of Pippi Longstocking.

Answer: Astrid (Ericsson) Lindgren

14. Although he was influenced by F.H. Bradley, his articles "The Nature of Judgement" and "A Refutation of Idealism" helped to undermine the influence of Kant and Hegel. His "A Defense of Common Sense" (*) and *Proof of the External World* provided his arguments against skepticism. FTP, name this friend of Bertrand Russell whose systematic approach to ethics was showcased in *Principia Ethica*.

Answer: G. E. Moore

15. After graduating from Indiana, he started a computer consulting firm without having owned a computer, and 12 years later started a company to broadcast radio feeds over the Internet. Today he has a weekly show airing on KTXA (*) in Dallas and pays the salaries of Michael Finley and Dirk Nowitski. FTP, name this often-fined owner of the Dallas Mavericks.

Answer: Mark Cuban

16. They are covalent bonds that are not symmetric about the bond axis. Usually resulting in systems with unpaired electrons, (*) examples of it occurring are in molecules with multiple bonds, such as the oxygen or nitrogen molecules, with two and three bonds respectively. FTP, identify this type of bond that results after sigma bonds.

Answer: π bonds

17. In 1973, a group of 200 armed men led by Russell Means and Dennis Banks captured it by force and held it under siege from U.S. Federal Marshals. Many years before, the Teton Sioux (*) nation responded to the teachings of Wovoka the prophet and fled here with Big Foot after the death of Sitting Bull. FTP, name this reservation site where in 1890 over 200 Sioux women and children were massacred.

Answer: Wounded Knee

18. It contains two failed marriages, one between an aspiring doctor and a spendthrift young woman, (*) the other between a young woman and an older, scholarly man. In the end the hero, after marrying Edward Casaubon and helping Tertius Lydgate during a scandal, marries Will Ladislaw. FTP, name this novel featuring Dorothea Brooke by George Eliot.

Answer: Middlemarch: A Study of Provincial Life

19. In this phenomenon, favorable p orbital overlap causes compounds to adopt planar conformations rather than the expected bond angles. Described mathematically by (*) Hückel in the early 1930s, this had been puzzling to chemists since Kekule had identified the structure of benzene. FTP, name this chemical property, named because many of these compounds have a strong odor.

Answer: aromaticity

20. This man's sister was the first female President of the United Nations General Assembly. As Prime Minister he occupied Goa, liberating the last European colony (*) in South Asia, and despite his policy of nonalignment voted for the Soviet invasion of Hungary and sought American aid in the Sino-Indian War of 1962. FTP, name this first Prime Minister of India.

Answer: Jawaharlal Nehru

21. The two main characters flee Athens and are held hostage by the titular creatures. When they are freed, Eulipedes and Pithetaerus convince said creatures to lay a stranglehold on Olympus by blocking the smoke from sacrifices with a city. Set in Nephelococcygia, or Cloud-Cuckoo-Land, this is, FTP, which play by Aristophanes?

Answer: *The Birds or Ornithes*

22. The protein bovine serum albumin is often used to prevent the product from this reaction from adhering to silane surfaces. Another chemical involved in this reaction is magnesium chloride, which is used as a chelating agent for (*) taq DNA polymerase. FTP, identify this procedure involving denature, annealing, and extension steps created by Kary Mullis.

Answer: polymerase chain reaction

23. The subject of the Martha Graham drama *Night Journey*, she was known to Homer as Epicaste, but in all traditions she was the daughter of Menoeceus and the sister of (*) Creon. A queen of Thebes, she had only one son with her first husband, Laius, but two decades later she had four more, Ismene, Eteocles, Polynices, and Antigone. FTP, name this mother of and wife to Oedipus.

Answer: Jocasta

24. Excavations of Boghazkoy have led to a revision of the narrative of this battle, in which Muwatallis sent out false messengers that he was in Aleppo. (*) His opponents learned the truth when they captured two of his scouts, but they had already extended themselves along the Orontes Valley Road, and the Hittites crushed their first division after fording the river. FTP, name this 1275 BCE military engagement involving Ramses II.

Answer: Battle of Kadesh

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Bonus Questions

1. Identify these Dickens novels from characters FTPE.

- a) Wilkins Micawber, Edward Murdstone

Answer: David Copperfield

- b) Charles Darnay, Madame Defarge, Sydney Carton

Answer: A Tale of Two Cities

- c) Thomas Gradgrind, Josiah Bounderby

Answer: Hard Times

2. FTPE, given a description of an enzyme utilized in DNA replication, name it.

- a) It is responsible for initiating the unwinding of the DNA helix in its supercoiled structure by releasing the tension on one of the antiparallel strands.

Answer: topoisomerase

- b) It catalyzes the formation of the phosphodiester bond between an adjacent 3' OH and 5' phosphate, filling in the gap left by removal of the RNA primer. It is needed to make the bond on the 3' end.

Answer: ligase

- c) It attaches a small RNA primer to single stranded DNA to act as a substitute for the 3' OH for DNA-polymerase to begin synthesizing from. It is actually part of an aggregate of proteins.

Answer: primase

3. Name the following about Anglo-Saxon England FTPE.

- a) Egbert, founder of the dynasty that would eventually unite England, was the ruler of this southern kingdom of the Heptarchy.

Answer: Wessex

- b) This king of the late ninth century began the compilation of the Anglo-Saxon Chronicle and defeated the Danes at the Battle of Edington.

Answer: Alfred the Great

- c) In 927, Athelstan the Glorious gained possession of this kingdom formerly ruled by Sihtric to become the first to rule a united England.

Answer: Northumbria

4. Given a title, identify the author of the work and the author from whom the title was lifted FFPE. For example, if I said *The Sound and the Fury*, you'd ideally respond with William Faulkner and William Shakespeare since the line comes from *Macbeth*.

a) *After Many a Summer Dies the Swan*

Answer: Aldous Huxley and Alfred, Lord Tennyson (from *Tithonus*)

b) *The Winter of Our Discontent*

Answer: John Steinbeck and William Shakespeare (from *Richard III*)

c) *Things Fall Apart*

Answer: Chinua Achebe and William Butler Yeats (from *The Second Coming*)

5. Name these art movements popular in the 1950s and '60s, F15PE.

a) An impromptu situation or performance, often designed to create audience participation. An Allan Kaprow work featured 18 of these in 6 days.

Answer: Happenings

b) Concerned with visual effects and illusions, many works of this style are in black and white, and exemplary painters include Albers, Vasarely, and Bridget Riley.

Answer: Op Art or Optical Art

6. FTPE, identify the new team for the following baseball stars.

a) Chan Ho Park

Answer: Texas Rangers (accept either)

b) Moises Alou

Answer: Chicago Cubs

c) Robin Ventura

Answer: New York Yankees

7. Given a formula for a function of x, name the function 30-20-10.

a) (30 points) Hyperbolic sine of x plus hyperbolic cosine of x

b) (20 points) One, plus x, plus x squared over 2 factorial, plus x cubed over 3 factorial, and so on

c) (10 points) The limit as n approaches infinity of the quantity: one, plus x over n, raised to the n power.

Answer: e to the x

8. Identify the following folks who have something in common FTPE.

- a) The full name of 'Hawkeye' from M*A*S*H.

Answer: Benjamin Franklin Pierce

- b) The naturalist author of *McTeague*, *The Octopus*, and *The Pit*.

Answer: Benjamin Franklin 'Frank' Norris

- c) The Second Continental Congress' envoy to France.

Answer: Benjamin Franklin

9. Given a cabinet member, identify the president under whom he served FTPE.

- a) Cyrus Vance, secretary of state

Answer: Jimmy Carter

- b) Hannibal Hamlin, vice president

Answer: Abraham Lincoln

- c) Dean Acheson, secretary of state

Answer: Harry S Truman

10. Identify the following about Theseus FTPE.

- a) Identify Theseus' mother.

Answer: Aethra

- b) Identify the daughters of King Minos that Theseus meets before entering the Labyrinth FFPE.

Answer: Ariadne and Phaedra

- c) Herakles, in his 12th labor, failed to rescue this close friend of Theseus from the Chair of Oblivion.

Answer: Pirithous

11. Name these authors whose works are associated with the Kabbalah F15PE.

- a) His works include *Foucault's Pendulum* and *The Name of the Rose*.

Answer: Umberto Eco

- b) This author's works include *Satan in Goray* and *Gimpel the Fool*.

Answer: Isaac Bashevis Singer

12. FTP each, given the value in an RLC circuit, give its mechanical analogue.

- a) Inductance

Answer: mass

- b) Resistance

Answer: damping coefficient

- c) The inverse of capacitance

Answer: spring constant

13. FTPE, given a major key, you provide the relative minor.

- a) F major

Answer: D minor

- b) E major

Answer: C-sharp minor

- c) D major

Answer: B minor

14. Name these ancient peoples of the Middle East FTPE.

- a) In the 7th century BCE, this group conquered the Persians. Their capital was at Ecbatana.

Answer: Medes

- b) Although their only famous literary figure was Sanchuniathon, these Mediterranean traders had a 22-letter alphabet that is the ancestor of our own.

Answer: Phoenecians or Kena'ani or Kinahna

- c) These ancestors of the Arabs carved the amazingly cool and indescribable city of Petra in southern Jordan. Their wealth was based primarily off the Indian Ocean spice trade.

Answer: Nabataeans

15. Identify the following about Henri Bergson FTPE.

- a) Bergson posited this two-word concept, which he defined as the impetus behind all organic evolution.

Answer: élan vital or vital force

- b) This was Bergson's doctoral dissertation. It presented his theories on the freedom of the mind and on duration, or the succession of conscious states.

Answer: Time and Free Will

- c) The concept of the élan vital was posited in this 1907 work.

Answer: Creative Evolution

16. Identify by number these notable Super Bowls from years past given a description FTPE.

- a) This was Miami's most recent trip to the Super Bowl, a 38-16 loss to the San Francisco 49ers.

Answer: 19

- b) Joe Namath and the Jets strike a blow for the AFL in a 16-7 victory over Johnny Unitas and the Baltimore Colts.

Answer: 3

- c) The biggest blow-out in Super Bowl history was this 55-10 49ers victory over the Broncos.

Answer: 24

17. Name these linguistics terms FTPE.

- a) This is the smallest unit of speech distinguishing one word element from another.

Answer: phoneme

- b) This type of consonant is made when the mouth partially blocks the air passage.

Answer: fricative or spirant

- c) This is the term for the smallest units of sound that carry meaning.

Answer: morpheme

18. Identify these things from English literature FTPE.

- a) This fellow would grow up to write entertaining children's novels, such as *Fantastic Mr. Fox* and *The Twits*, but also his childhood autobiography, *Boy*.

Answer: Roald Dahl

- b) These two young men (name either) were placed in the care of a forgetful professor with the onset of World War I along with their two sisters, and had an interesting mishap with the "countries in the cupboards", or more accurately, wardrobes.

Answer: Peter or Edmund

- c) This young orphan and Dickens title character spent most of his time hanging out on the streets of London with Fagin and the Artful Dodger.

Answer: Oliver Twist

19. FTSNOP, identify the following related to Biblical pseudonyms.

- a) (5 points) The Greek name meaning 'Rock' given to Simon.

Answer: Peter or Petros

- b) (10 points) The Aramaic equivalent of Rock, another name for Simon Peter.

Answer: Cephas

- c) (15 points) Thomas is called The Twin; what single word is used in transliteration in the King James Version to represent 'Twin'?

Answer: Didymus

20. Name the following physical constants FTPE.

- a) Recent data indicates that this constant, a function of pi, Planck's constant, the speed of light, the permittivity of free space and the permeability of free space and symbolized by alpha, may change slowly over time.

Answer: fine structure constant

- b) Discovered by a schoolteacher whose goal was a government stipend, this constant gives the separation of energy levels in a hydrogen atom and is derived from alpha.

Answer: Rydberg constant

- c) Designated by mu naught, this constant is equal to 12.566 times ten to the negative seventh newtons per ampere squared.

Answer: permeability of free space

21. Identify the following about the Women's Rights "Schism" of the late nineteenth century FTPE.

- a) Identify the two main leaders of the National Woman Suffrage Association FTPE.

Answer: Elizabeth Cady Stanton and Susan Brownell Anthony

- b) Name the other main women's rights group, created by Lucy Stone, which tried to make the movement less radical and focused on the state rather than federal level.

Answer: American Woman Suffrage Association

- c) A candidate for President in 1872, one year earlier she argued before congress that as citizens, women could not be deprived of their rights as protected by the Constitution.

Answer: Victoria Woodhull

22. Answer these questions about a form of non-western theatrical performance FTPE.

- a) Marked by slow movement and elaborate poetic allusions, this classical Japanese form was written about extensively by Zeami Motokoyo.

Answer: Noh

- b) This famous Noh drama deals with the longing of two poor fisher girls in Suma for the poet Yukihiro.

Answer: Matsukaze or *The Wind in the Pines* or *Pine Wind*

- c) Who originally wrote *Matsukaze*?

Answer: Kan'ami Kiyotsugu

23. Identify these different types of geological features from descriptions FTPE.

- a) This is a crescent-shaped lake formed when a meander of a slow-flowing river is cut off from the main channel after the river, in flood, crosses the neck of land between two bends.

Answer: oxbow lake

- b) This is a steep semicircular hollow formed on a mountain slope by the erosive action of a glacier. Many fill with water to form lakes called tarns.

Answer: cirque basin

- c) This is a structural basin in the earth's crust in which a zone of water-bearing rock known as an aquifer is confined between impermeable beds.

Answer: artesian well

24. Given a Civil War battle, identify the Union and Confederate commanders FFPE.

- a) Battle of Chancellorsville

Answer: Joseph Hooker and Robert E. Lee

- b) Battle of Chickamauga

Answer: William Rosecrans and Braxton Bragg

- c) First Battle of Bull Run

Answer: Irvin McDowell and P. G. T. Beauregard