CARDINAL CLASSIC XII: Beware the Esker
Stanford University
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Packet by Texas A&M

Toss-Up Questions

1. The second narrator, shamed by his sister's wantonness, commits suicide. The third spends his energy tormenting his niece. The fourth, the family's maid (*) Dilsey, wraps up the story and in the end depicts, a pitiful Benjy and Jason, slouched in a carriage. FTP, name this novel focusing on the Compson family, a work by William Faulkner.

        Answer: _The Sound and the Fury_

2. Monomers of the compound are all in the beta configuration. The configuration flips every other molecule with respect to each other due to glycosidic linkages and chains to connect in parallel via hydrogen bonds. Lacking the enzyme to cleave the linkages, (*) humans are unable to digest it. FTP, name this polysaccharide that comprises about one-third of all vegetable matter.

        Answer: cellulose

3. Annulled by papal bulls in 1261 and 1262 and by Louis IX of France in the Mise of Amiens, it was first installed in the spring of 1258 by the Easter Parliament. (*) Yielding control of reform to a 24-man council, half of which chosen by the barons, in 1264 it was annulled for the last time by the Dictum of Kenilworth. Reluctantly agreed to by Henry III, FTP, name this document regarded as England's first written constitution.

        Answer: Provisions of Oxford

4. Their precursor is considered to be Nagarjuna, who founded what is known as the Madhamika philosophy or Middle Path. As opposed to its rival sect, its ideal goal is not to become an arhat, or perfected saint, but rather a (*) bodhisattva, a person who has attained Enlightenment and works towards the salvation of others. FTP, name this form of Buddhism that takes its name from Sanskrit for Greater Vehicle.

        Answer: Mahayana

5. After accidentally killing his brother Deliades he fled to Argos. (*) The son of Glaucus and husband of Philonoe, he was falsely accused of coming on to the King's wife and was sent to Iobates to be killed. Given a bridle by Athena before he killed his brother, he was able to tame Pegasus and used him in his most famous conquest. FTP, name this Greek hero who slayed the Chimera.

        Answer: Bellerophon

6. Beginning with a game in which the two characters are flipping a coin, they are met by a troupe of actors who offer sexual favors. They find themselves witnessing a performance of the _Murder of Gonzago_ (*) they take a boat to England with the troupe, are ambushed by pirates and lose their prisoner before resigning themselves to fate. Ending with deaths at Elsinore, FTP, name this play by Tom Stoppard featuring two characters from _Hamlet_.

        Answer: _Rosencrantz and Guildenstern are Dead_

7. The flow of energy through an intermediate system orders that system. Two systems in thermal equilibrium with a third (*) are in thermal equilibrium with each other. It is not possible to construct an

engine whose sole effect is the extraction of heat from a heat source at a single temperature. Mass and energy cannot be created or destroyed. FTP, these statements are known by what collective name?

Answer: laws of thermodynamics (accept equivalents)

8. Buried at Gur-e Amir, he was originally from Transoxania and grew up in the Chagatai khanate. He defeated his rival of Tokhtamysh in 1391. Defeating the Delhi sultan Mahmud Tughluq at Panipat, (*) his last quest was to revenge losses to the Mamluke sultan of Egypt and the Ottoman sultan Bayazid I. An ancestor of Mughal king Babur, FTP, name this Turkic Muslim conqueror featured in a Marlowe work.

Answer: Tamerlane

9. A student under Christian Wolff, his first position was as lecturer in Arnsdorf. In that time he completed three works: *On Fire, Monodologia physica*, (*) and *First Principles of Metaphysics*, an analysis of the principle of sufficient reason. According to this philosopher it was Hume who first awoke him from his dogmatic slumber. FTP, name this philosopher and author of *Critique of Pure Reason*.

Answer: Immanuel Kant

10. Used to construct the contract curve, it is drawn on two axes and consists of two indifference curves one convex to each axis. (*) A graph with quantities of available goods as dimensions, FTP, name this analytical tool that is named for a British economist and used to study the behavior of two economic agents based on preferences for goods and services when production of those goods is held constant.

Answer: Edgeworth Box

11. He journeys through the Orient after the *Judea* sinks. He works for a Belgian exporting firm in the Congo. A member of the crew of the *Patna* (*) that was carrying Muslim immigrants, he testified for the captain who abandoned the vessel. Finally, in the novel *Chance*, he attempts to rescue the story Flora de Barral. Featured in four Joseph Conrad works, FTP, name this character of *Lord Jim* and *Heart of Darkness*.

Answer: Charles Marlow

12. It plays a role with benzene and aluminum chloride in the Friedel-Crafts Reaction, with lithium and pentane to form a Gilman reagent, (*) and with magnesium and ether to form a Grignard regent. The missing reagent in all of these reactions is this type of organic compound containing a parent alkane chain and one or more halogen substituents. FTP, identify this organic compound which contains chlorine, fluorine, bromine, or iodine.

Answer: alkyl halides

13. Prompted in part by Rhode Island's Gaspee Affair, in March of 1773 Dabney Carr proposed the formation of a permanent one before the Virginia House of Burgesses. (*) Samuel Adams organized the first group in 1772, and collectively they helped organize the constitutional convention. FTP, identify these bodies that maintained communication between the colonies before and during the American Revolution.

Answer: Committees of Correspondence

14. First appearing on "The One With the East German Laundry Detergent," she is married to a mattress salesman by the time her ex-boyfriend becomes interested. Once she is available, he tells her he is moving to Yemen and any hope of their relationship is ended later when he marries Monica Geller. Played by Maggie Wheeler, FTP, name this whiny character from TV's *Friends* with the absurd laugh.

Answer: Janice

15. In April 2001, he succeeded in gaining a guilty verdict in the trial of Mohammed Nawaz Sharif. (*) Awarded the Imtiazi Sanad medal for gallantry in 1965, his favorite personality as a child was Kemal Ataturk. Appointed head of his nation's armed forces in October 1998, he was dismissed while visiting Sri Lanka in 1999 and took power in a bloodless coup. FTP, name this military president of Pakistan.

Answer: Pervez Musharraf

16. Beginning with Elisabetta Gonzaga asking for a topic of conversation for the evening, the work is narrated by Ludovico da Canossa, Frederick Fregoso, (*) and Julian de Medici among others. An argument on day two between Lady Emilia and Lord Gaspar may have inspired *Much Ado About Nothing* and the discussion of Platonic love by Pietro Bembo may be its most famous part. FTP, name this 1528 treatise by Baldassare Castiglione.

Answer: *Book of the Courtier*

17. Applicable only to holomorphic functions, it can be defined for complex functions by the Cauchy integral formula. (*) The form may be taken over any number of real variables and may include a Cauchy or Lagrange remainder. Containing a special subset about the origin called Maclaurin series, FTP, name this series expansion of a function about a point named for a British Mathematician.

Answer: Taylor series

18. Exiled to Marseille for his part in the Carbonari, his first public gesture was an "open letter" to Charles Albert, the king of Piedmont. He served in the army under (*) Garibaldi but was called by Count Cavour the "chief of the assassins." He founded a new patriotic movement called "Young Italy." FTP, name this Italian revolutionary and champion of the Risorgimento.

Answer: Giuseppe Mazzini

19. Taking place on January 11, 1987, it took 5 minutes and 1 second and sent the game into overtime. Taking 15 plays, (*) it included 5 runs, 9 passes, and 1 sack. Getting 6 first downs along the way, it covered 98 yards and sent the game into overtime, where Rich Karlis sent the Denver Broncos to the Superbowl. FTP, give the moniker of this AFC Championship clutch performance over the Cleveland Browns by John Elway.

Answer: The Drive

20. A student of K.F. Zelter, in 1821 he met and played for Goethe and later dedicated to him his *Piano Quartet No. 3. in B Minor*. (*) Conducting the first performance *St. Matthew's Passion* since J. S. Bach's death, this composer also wrote *Elijah* and the *Song Without Words*. FTP, identify this German romantic composer of the *Hebrides Overture* and incidental music to *A Midsummer Night's Dream*.

Answer: Jakob Ludwig Felix Mendelssohn-Bartholdy

21. His works fall into two main categories: historical romances and domestic tragedies. During his lifetime his most popular work was *The Battles of Coxinga*, (*) which was based loosely on an adventurer who attempted to restore the Ming dynasty. A writer of bunraku dramas, he is best known today for his double-suicide plays. FTP, identify this Japanese playwright and author of *The Love Suicides at Sonezaki*.

Answer: Chikamatsu Monzaemon (Sugimori Nobumori)

22. It occurs in four varieties, the classic version being prevalent in older males of Italian or Jewish ancestry. Often treated with Vinblastine, (*) which tends to weaken the immune system, its modern incidence is believed to be associated with human herpes virus 8. Characterized by red-purple or blue-brown lesions of the skin, FTP, name this lethal cancer primarily associated with AIDS patients.

Answer: <u>Kaposi sarcoma</u>

23. This man started a successful lumber company at the age of 17 and by age 27, he owned his father's bank. Allied with Henry Frick (*) he founded Union Steel and Union Trust, and as Treasury Secretary under three presidents he reformed the U.S. tax structure during the 1920s. He also endowed the National Gallery of Art. FTP, name this man after whom a humanities foundation and a Pittsburgh university are named.

Answer: Andrew <u>Mellon</u>

24. Located on Ludgate Hill, it was once used as a marketplace and barracks. Built with the aid of ironworker Jean Tijou and sculptor Grinling Gibbons, its dome consists of three shells, (*) the innermost of which is decorated with frescoes and grisaille and may be viewed from the Whispering Gallery. Housing the graves of Lord Nelson and the Duke of Wellington, FTP, identify this landmark designed primarily by Sir Christopher Wren.

Answer: <u>St Paul's</u> Cathedral

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Bonus Questions

1. Identify the from college basketball FTPE.

    a) The all-time leading scorer, in 3 years at LSU he scored 3667 points.

    Answer: Pete <u>Maravich</u>

    b) The all-time leading rebounder, in 4 years at Wake Forest he collected 1570.

    Answer: Tim <u>Duncan</u>

    c) The all-time leading assist man, in 4 years at Duke he had 1076 to players such as Christian Laetner and Grant Hill.

    Answer: Bobby <u>Hurley</u>

2. Answer the following about Vaslav Nijinsky FTPE.

    a) Conceived by Théophile Gautier, this ballet was created in honor of Carlotta Grisi. It was performed in the second season of the Ballet Russes. Nijinski caused a scandal when he refused to wear shorts over his tights.

    Answer: *Giselle*

    b) A 1913 ballet choreographer by Nijinsky, it portrayed prehistoric pagan Russian rituals and ignited a riot in Paris.

    Answer: *Rite of Spring* or *Le Sacre du primtemps*

    c) A ballet choreographed by Fokine with music by Weber, one legend tells of a dramatic leap Nijinsky made through an open window as exited the stage.

    Answer: *The Specter of the Rose* or *Le Spectre de la rose*

3. Answer the following concerning fictional places in literature FTPE.

    a) *The Prisoner of Zenda*, by Anthony Hope Hawkins, is set in this fictional country.

    Answer: <u>Ruritania</u>

    b) This fictional city of *One Hundred Years of Solitude* that was founded in the 1830s by the Buendia Family.

    Answer: <u>Macondo</u>

    c) In this novel Charles Gould runs a silver mine of national importance in the imaginary nation of Costaguana.

    Answer: *Nostromo*

4. Answer the following concerning computer science FTPE.

   a) This is a model of computation consisting of a set of states, a start state, an input alphabet, and a transition function that maps input symbols and current states to a next state.

   Answer: <u>finite state</u> machine

   b) These are the two most common types of finite state machine. Identify both FFPE.

   Answer: <u>Mealy</u> machine and <u>Moore</u> machine

   c) This is a finite state machine with probabilities for each transition. It is named for a Russian scientist.

   Answer: <u>Markov</u> chain

5. Identify the following concerning rulers who died in battle FTPE.

   a) During the Thirty Years' War, this ruler died at the Battle of Lutzen.

   Answer: <u>Gustavus Adolphus</u> or <u>Gustav II Adolph</u>

   b) During this decisive 1526 defeat of Hungary by the Turks, Louis II was killed.

   Answer: Battle of <u>Mohacs</u>

   c) In 1485, Richard III was killed in a bog at Bosworth Field by this man who would found a new English dynasty.

   Answer: <u>Henry VII</u> or <u>Henry Tudor</u>

6. Name the following poems with a common theme FTPE.

   a) Included in A. E. Housman's *A Shropshire Lad*, this work notes that the title figure is fortunate to be dying in his Prime.

   Answer: *To An Athlete Dying Young*

   b) As he sees the titular bird, the author realizes that nature is guided by divine providence in this William Cullen Bryant poem.

   Answer: *To a Waterfowl*

   c) Published along with *Prometheus Unbound*, the poet longs to be the title figure and muses that it has never experienced the disappointment of human life.

   Answer: *To a Skylark*

7. Identify each of the following from physical chemistry FTPE.

   a) For a black body, the energy density of the electromagnetic field inside a container is proportional to the fourth power of the temperature. Identify this equation, named for two scientists.

   Answer: <u>Stefan-Boltzmann</u> law

b) This law was formulated by assuming an electromagnetic field was a collection of oscillators of all possible frequencies where the presence of radiation was signified by a certain frequency being excited. It is also named for two scientists.

Answer: Rayleigh-Jeans law

c) Because the Rayleigh-Jeans Law is very inaccurate at low wavelengths, this result predicts that oscillators of low wavelengths are strongly excited even at room temperature.

Answer: ultraviolet catastrophe

8. Identify the following religious mentors of European monarchs FTPE.

a) He mentored the young Louis XIV through his regent and mother, Anne of Austria.

Answer: Cardinal Jules Mazarin

b) The immediate cause of this man's fall from power was his failure to persuade Pope Clement VII to grant Henry VIII an annulment of his marriage to Catherine of Aragon.

Answer: Cardinal Thomas Wolsey

c) The first of the validos, this Spanish cardinal was in charge of the affairs of Philip III.

Answer: Francisco Gomez de Sandoval y Rojas, Duke of Lerma

9. Name the television game shows FTPE.

a) An MTV show, the guest has two dates and eventually gets rid of one of them.

Answer: "Dismissed"

b) A UPN show, a woman selects four men from 100 prospects. The finalists are actually chained to her wrists and ankles for a week before she selects her dream date.

Answer: "Fifth Wheel"

c) A WB show, it simultaneously pits four suitors against one another for the hand of one lucky single on a group date.

Answer: "ElimiDate"

10. Name the following works by Friedrich Nietzsche FTPE.

a) This work discusses the Apollonian and Dionysian aspects of drama as performed by the ancient Greeks.

Answer: The Birth of Tragedy

b) A series of three essays, in this work Nietzsche questions the value of our morality. He argues that our present morality is harmful to the future prosperity of our species.

Answer: On the Genealogy of Morals or Zur Genealogie der Moral

c) This autobiographical work was published posthumously.

Answer: *Ecce Homo*

11. Answer the following concerning a German literary movement FTPE.

    a) This 18th century movement was influenced by Rousseau and Johann Hamann and it took its name from a work by Frerich Klinger.

    Answer: Strum und Drang or Storm and Stress

    b) Along with Johann von Herder, he wrote the group's manifesto, *Vin deutscher Art and kunst*. Another of this works is *The Sorrows of Young Werther*.

    Answer: Johann Wolfgang von Goethe

    c) This Schiller work focuses on the rivalry of brothers Karl and Franz both of him decide to live outside the law after justice is denied.

    Answer: *Die Rauber* or The *Robbers*

12. Answer the following about physics FTPE.

    a) This is the term used to describe the complete disappearance of electrical resistance in various solids when they are cooled below a characteristic temperature.

    Answer: superconductivity

    b) This effect explains the expulsion of a magnetic field from the interior of a material that is in the process of becoming a superconductor.

    Answer: Meissner effect

    c) This effect explains the flow of electric current between two pieces of super conducting material separated by a thin layer of insulating material.

    Answer: Josephson effect

13. Answer the following concerning the legal history of labor unions FTPE.

    a) The alternate name of Loewe vs. Lawler, in this case the Supreme Court held that labor unions were subject to anti-trust laws.

    Answer: *Danbury Hatter's Case*

    b) This act of 1947 preserved the right of unions to collectively bargain but restricted the use of strikes and union political contributions.

    Answer: Taft-Hartley Act

    c) Both the *Danbury Hatter's Case* and Taft-Hartley Act barred this process, an attempt to induce a third party to withhold patronage from a given entity.

    Answer: secondary boycott

14. Identify each of these musical compositions for children FTPE.

a) These six pieces were written by Debussy for his daughter. Pieces include Jimbo's Lullaby, Serenade for the Doll, and Snow is Dancing.

 Answer: The *Children's Corner*

b) This is a suite of 12 piano pieces for duet performance written by Bizet. Numbers 2, 3, 6, 11, and 12 were orchestrated in his *Petite Suite*.

Answer: *Jeux d'enfants* or *Children's Games*

c) Written by Benjamin Britten for an instructional film about the orchestra, it is sometimes known by its subtitle, *Variations and Fugue on a Theme by Purcell*.

Answer: The *Young Person's Guide to the Orchestra*

15. Answer the following about Indian mythology FTPE.

a) This preserver god rides on Garuda, a bird deity, and during creation slept on the coils of Shesh Nag, the serpent God.

Answer: Vishnu

b) This former sky god, he became a god of the sea and his mount was Makara: part crocodile, part shark, part dolphin.

Answer: Varuna

c) Every Shiva temple has the figure of this white, humped bull facing the entrance so that he may perpetually gaze on the lord in his symbolic form.

Answer: Nandi

16. Name these Shakespearean plays F15PE from sources, or FFPE if you need characters.

a) (15 points) It is based on *Diana* by Jorge de Montemayor.

(5 points) Its characters include Valentine and Proteus.

Answer: *Two Gentlemen of Verona*

b) (15 points) It is based on *Pandosto* by Robert Greene.

(5 points) Its characters include Florizel, Perdita, and Leontes.

Answer: A *Winter's Tale*

17. Identify the following about mRNA F15PE.

a) It is added at the beginning of the mRNA strand to prevent degradation by hydrolytic enzymes. It is part of the molecule is this which serves as the attachment site for ribosomes during translation and is composed of a guanine nucleotide enhanced by a triphosphate.

Answer: 5 prime cap or 5 prime methyl-Guanine

b) Added to the end of the mRNA strand also to prevent degradation, this region, composed of 30 to 200 adenine molecules, facilitates the mRNA's exit from the nucleus.

Answer: <u>poly-A tail</u> or <u>poly-Adenine tail</u>

18. Identify each of the following slogans from early American history FTPE.

    a) A Democratic rallying cry during the 1840s, this slogan demanded the US annexed the entire disputed Oregon territory.

    Answer: <u>54-40 or Fight</u>

    b) This was the campaign slogan of the Whig presidential campaign of 1840. It combined a nickname of the presidential candidate with the name of the vice-presidential candidate.

    Answer: <u>Tippecanoe and Tyler Too</u>

    c) This term was used by opponents of the Embargo Act of 1807. The slogan was derived from the word Embargo.

    Answer: <u>O grab me</u> (embargo spelled backwards)

19. Name the following people who were struck down by that God in the Bible FTPE.

    a) She was turned into a pillar of salt after she looked back at Sodom.

    Answer: <u>Lot's wife</u> (also accept <u>Lot's bitch</u>)

    b) He was killed and buried by God atop Mount Nebo.

    Answer: <u>Moses</u>

    c) He reached out to steady the Ark of the Covenant while it was being improperly transported. He touched the Ark and died.

    Answer: <u>Uzzah</u>

20. Name the following American lakes FTPE.

    a) Oval in shape, this lake contains Ometepe Island and is fed by the Tipitapa River. It is the largest lake in Central America.

    Answer: Lake <u>Nicaragua</u>

    b) Fed by the Catatumbo River, it is the largest lake in South America.

    Answer: Lake <u>Maracaibo</u>

    c) Fed by its namesake, Saskatchewan, and Red rivers it is drained by the Nelson River and contains Hecla, Deer, and Black islands.

    Answer: Lake <u>Winnipeg</u>

21. Answer the following about a Latin American author FTPE.

    a) Mexico's ambassador to India from 1962 to 1968, his first published work was a book of poetry, *Luna silvestre*, or *Forest Moon*.

Answer: Octavio <u>Paz</u>

b) Paz's most famous work, in it he addresses the nature of political power in post-conquest Mexico, the relation of Native Americans to Europeans, and the ubiquity of official corruption.

Answer: *Labyrinth of Solitude* or *El laberinto de la soledad*

c) In 1956 and 1957 Paz published two studies of contemporary Spanish American poetry. Name either.

Answer: The *Bow and the Lyre* or The *Pears of the Elm*

22. Answer the following about the work of scientist in the news FTPE.

a) This man completed a famous theorem, that any compact real manifold is diffeomorphic to a component of a real-algebraic variety, in 1952.

Answer: John Forbes <u>Nash</u>

b) Nash won the 1994 Nobel prize for his development of his namesake equilibrium, the cornerstone of this discipline.

Answer: <u>game theory</u>

c) Following his work in game theory, Nash worked this company, a splinter of the Douglas Aircraft Company, attempting to apply game theory to military and diplomatic strategy of the Cold War.

Answer: <u>RAND</u>

23. Name the following African nations from their despots FTPE.

a) In 1966, Jean-Bédel Bokassa led a coup against President David Dacko and became president. He was overthrown and Dacko was reinstalled in 1979.

Answer: <u>Central African Republic</u>

b) This nation's dictator from 1982 to 1990 was Hissène Habré. He is in the midst of a legal struggle over issues similar to those of Pinochet.

Answer: <u>Chad</u>

c) Mengistu Haile Mariam ruled this nation from 1974 to 1991. His "Dergue" regime is believed responsible for thousands of murders.

Answer: <u>Ethiopia</u>

24. Name the food, 30-20-10-5.

a) (30 points) It is the staple food of the Maori people of New Zealand.

b) (20 points) Also known as *Ipomoea batatas*, it comes from the morning glory family.

c) (10 points) It may be served as a cooked vegetable, in whole or mashed form, and can be used as pie filling.

d) (5 points) It is botanically unique of the Yam (genus Dioscorea).

Answer: <u>sweet potato</u>