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

## Packet by Prasun "The Titan of Quiz Bowl" Ray

### **Toss-Up Questions**

1. The first scene of the second act of this drama finds the characters arguing over an unfulfilled vision of home. The maid Cathleen (\*) appears only briefly in this drama, and by Act III she is drunk. The eldest son is a boozer and womanizer named Jamie, while the younger son is romantic dreamer with tuberculosis named Edmund. Mary and James round out the Tyrone family. FTP, identify this drama by Eugene O'Neill.

Answer: Long Day's Journey Into Night

2. Its first real meeting was in 1302 when Phillip IV needed aid in his conflict with Pope Boniface VIII. It was also assembled in 1614 (\*) during the reign of Louis XIII, (\*) but its next assembly was much more significant, called by Louis XVI in 1789, from which a revolutionary National Assembly formed. FTP, identify this French body, made of three groups representing the nobility, the clergy, and the lower class.

Answer: Estates General

3. Critical for the conservation of energy in a cell, they are composed of a group of structural genes that are controlled by a (\*) promoter. First postulated in a work on *E. coli* in the 1960's, they allow protein synthesis to be controlled appropriately. FTP, identify this genetic regulatory system found in bacteria and their viruses.

Answer: operon

4. A drinking game based on this game has the one with the most marbles assigning drinks to the rest of the players. Its four characters are colored green, yellow, orange, and pink, (\*) and are named Henry, Harry, Homer, and Happy. FTP, identify this kick-ass game by Hasbro that has four players wildly slapping down hippo tails to collect marbles.

Answer: Hungry Hungry Hippos

5. Member of this school included Daniel Burnham, William Jenney, John Root, and Dankmar Adler. (\*) Representative buildings include the Auditorium building, the Montauk building and the Carson Pirie Scott store. FTP, identify this group of architects and engineers of the late 19<sup>th</sup> century who developed the skyscraper and were led by Louis Sullivan in its namesake city.

Answer: Chicago School

6. This playwright was best known in his own day for perfecting the auto sacramental. Supported by King Phillip IV, (\*) among his best known plays are *The Prodigious Musician* and *The Daughter of the Air* and. FTP, identify this writer who succeeded Lope de Vega as the leading figure of Spain's literary Golden Age, author of *Life is a Dream*.

Answer: Pedro Calderon de la Barca

7. Called the Magna Carta of Labor by Samuel Gompers, this act legalized strikes and restricted the use of (\*) injunctions against labor. It also prohibited exclusive sales contracts, local prince controls and interlocking directorates. FTP, identify this 1914 act which greatly strengthened the Sherman Anti-Trust Act. Answer: Clayton Anti-Trust Act

8. Polymer members of this class of organic compounds include Lucite and Plexiglass. (\*) The hydrolysis of these in the presence of alkalines is a reaction called saponification, which is used to prepare soaps. FTP, identify these compounds, most commonly produced by the reaction between a carboxylic acid and an alcohol.

Answer: ester

9. One of this Russian composer's two operas was performed under Hector Berlioz in 1845, and it was the first important performance of Russian music in the West. His lesser works include the orchestral composition, *Kamarinskya* and *Summer Night in Madrid*. (\*) The founder of the Russian nationalistic school, FTP, identify this composer whose two best known works are the operas *A Life for the Czar*, and *Ruslan and Ludmila*.

Answer: Mikhail Ivanovich Glinka

10. This idea, a restatement of concepts developed by Herder and Wilhelm von Humboldt, was substantiated by observations of the relationship between the Hopi (\*) and English languages and cultures. FTP, identify this concept which argues that the structure of a language conditions the ways in which the speaker thinks, developed under the guidance of Edward Sapir.

Answer: Sapir-Whorf hypothesis

11. Dedicated to Maecenas, one of Augustus's chief ministers, its most famous single passage is probably "Praises of Italy." (\*) Its four sections detail such pastoral tasks as agriculture, tending cattle, and beekeeping, and its nationalistic sentiments foreshadowed the author's *Aeneid*. FTP, identify this work which is superficially a practical guide to farming by Virgil.

Answer: Georgics

12. For an incompressible fluid, this vector operation applied to the velocity is zero. When applied to the curl of any vector, (\*) the result is zero. Due to the absence of magnetic monopoles, when it is applied to the magnetic field you get zero. FTP, name this operator, which, when combined with the gradient forms the Laplacian operator.

Answer: divergence

13. It began in October 1934 after a series of military campaigns by Chiang-Kai Shek's (\*) forces in southeastern China. Lasting until 1935, and shifting the base of the communist party to northwestern China, it was marked by the ascension of Mao Zedong to the leadership of the fleeing communists. FTP, identify this 6000 mile trek.

Answer: Long March

14. This god was the god of contract and mutual obligation. The primary deity of pre-Zorastrian (\*) Iran, he was also worshipped by Romans from the early second century through the reign of Diocletian. Also known as a sun god whose worship was marked by bull sacrifices, FTP, name this god who headed a cult during the Roman Empire.

Answer: Mithra

15. This hall of fame quarterback led Alabama to a victory in the 1952 Orange Bowl, and he would win five league championships and two Super Bowls in the NFL. He scored the winning touchdown in the Ice Bowl (\*) against the Cowboys. FTP, name this quarterback who led the Green Bay Packers to victory in the first two Super Bowls.

Answer: Bart Starr

16. Much of this 1961 novel is set in Hanuman House, where the title character must deal with the customs and rituals of his in-laws, the (\*) Tulsis. Later moving to Port of Spain, the protagonist becomes a journalist and finally is able to purchase the title object, which represents a symbolic post-colonialist freedom. FTP, identify this novel based on the life of the author's father, by V.S. Naipaul.

Answer: A House for Mr. Biswas

17. The title character in this poem, first published in 1807, sings a song which "No nightingale did ever chaunt." It contains the song of a "Highland lass," (\*) and discusses the song's impact on the narrator, who states, "The music in my heart I bore, Long after it was heard no more." FTP, identify this poem by William Wordsworth about a sickle-wielding chick.

Answer: The Solitary Reaper

18. Hatshepsut served as regent when this fellow was crowned king of the 18<sup>th</sup> dynasty in 1479 BCE. An important early military victory came at Megiddo, (\*) and later he conquered all of Syria. FTP, identify this king who also defeated the Mitannians and raised the power of the Egyptian empire to its highest level.

Answer: Thutmose III

19. This dynasty rose to power with the fall of the Scythians. The artistic accomplishments during its reign are marked by the presence of Kalidasa (\*) at the court of Chandra II. Lasting approximately from 320 until the late 6<sup>th</sup> century, FTP, name this Indian dynasty which was greatly expanded by Samudra and founded by Chandra I.

Answer: Gupta Dynasty

20. This thermodynamic quantity stays constant for constant pressure isentropic processes. The partial derivative of it with respect to temperature at constant pressure gives the constant pressure specific heat. (\*) It minus the product of temperature and entropy gives the Gibbs free energy. FTP, name this quantity defined as the internal energy plus the product of pressure and volume.

Answer: enthalpy

21. This German physicist's accomplishments include deriving a model relating emissive power to absorptivity in thermal radiation and demonstrating that (\*) electric current propagates at the speed of light. A principal developer of spectrum analysis, he used the method to determine the composition of the sun. FTP, name this guy who generalized Ohm's law into two circuit rules.

Answer: Gustav Robert Kirchoff

22. Comprised of nine sections, the 4<sup>th</sup> section is a collection of aphorisms including such gems as, "Where neither love nor hatred is in the game, a woman's game is mediocre." A clearer presentation of the author's comprehensive philosophy than (\*) *Thus Spake Zarathustra*, this 1866 work is referred to as a critique on modernity in *Ecce Homo*. FTP, identify this Nietzsche work which attacks, among other things, dualistic thought.

Answer: Beyond Good and Evil

23. Greatly influenced by the *Decretum* of Gratian, this work, composed during the mid-12th century, is divided into four parts (\*) that deal with various aspects of Christian doctrine. It quickly became the standard theological text at most European universities. FTP, identify this work by Peter Lombard.

Answer: Four Books of Sentences or Sententiae in quattor libris distinctae

24. This 1966 album was largely inspired by the Beatles' *Rubber Soul*, and in turn, served as a catalyst for *Sgt. Pepper*. Its biggest commercial hits were "Sloop John B" (\*) and "Wouldn't it be Nice". FTP, identify this masterwork of Brian Wilson and the rest of the Beach Boys.

Answer: Pet Sounds

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

## Packet by Prasun "The Titan of Quiz Bowl" Ray

#### **Bonus Questions**

- 1. Identify these existentialist philosophers from brief descriptions FTPE.
- a) The main proponent of existentialism, he wrote Being and Nothingness.

Answer: Jean-Paul Sartre

b) Along with Heidegger, one of the two Germans considered major contributors to the school, he wrote a 3-volume work entitled *Philosophie*.

Answer: Karl Jaspers

c) This French philosopher and dramatist, often referred to as a Christian existentialist, wrote *Being and Having* as well as *Presence and Immortality*.

Answer: Gabriel Honore Marcel

- 2. Answer these questions about linguistics FTPE.
- a) This Danish scholar was a principal founder of modern comparative linguistics. His primary work is Investigations of the Origin of the Old Norse or Icelandic Language.

Answer: Rasmus Rask

b) Based on the work of Rask, this law is a description of regular correspondences in Indo-European languages. It was published in the work *Germanic Grammar*.

Answer: Grimm's law

c) This law posited by a Danish linguist in 1875 is an explanation of exceptions to Grimm's law.

Answer: Werner's law

- 3. Answer these questions about Midnight's Children FTPE.
- a) Who wrote it?

Answer: Salman Rushdie

b) In what year was the narrator, Saleem Sinai, born?

Answer: 1947

c) This guy with the lethal knees is Saleem's rival and nemesis.

Answer: Shiva

4. Identify the following early ecumenical councils FTPE.

a) This 381 CE council promulgated the Nicene Creed, which enlarged the creed of Nicea.

Answer: Council of Constantinople

b) This 431 CE council condemned Nestorianism.

Answer: Council of Ephesus

c) This 451 CE council saw the condemnation of the Monophysites and the approval of Leo I's works.

Answer: Council of Chalcedon

- 5. Answer these questions about waves FTPE.
- a) This quantity can be defined as 2 times pi divided by the wavenumber.

Answer: wavelength

b) Give the general formula for the group velocity in terms of the angular frequency and wavenumber.

Answer: partial derivative of angular frequency with respect to wavenumber (accept equivalents)

c) This quantity, a measure of the speed with which disturbances propagate, is defined as the angular velocity divided by the wavenumber.

Answer: phase velocity

- 6. Answer these questions about World Cup soccer FTPE.
- a) This Argentinian's hand of god goal helped eliminate England from the 1986 World Cup.

Answer: Diego Maradona

b) Losing twice in the championship game in the 1970's, this country claimed to play total football.

Answer: Holland or the Netherlands

c) This German revolutionized the sweeper position and captained West Germany to the 1974 title.

Answer: Franz Beckenbauer

- 7. Identify the following artsy stuff FTPE.
- The famous works of this Spanish painter, born in 1746, include The Disasters of War and The Nude Maja.

Answer: Francisco de Goya

b) Perhaps Goya's most famous work is this 1815 painting depicting the execution of Spanish civilians by a French firing squad.

Answer: The Third of May, 1808 (accept equivalents)

c) This Goya work, which pays homage to Las Meninas, was painted for his royal patron.

Answer: Family of Charles IV

- 8. Identify these John Donne works from brief descriptions FTPE.
- a) This is the one where the dude says that you don't need to ask who the bell tolls for because it tolls for thee.

Answer: Meditation 17 or Nunc lento sonitu dicunt, Morieris

b) In this one, two soon-to-be parted lovers are compared to a compass – the kind you use to draw circles and stuff.

Answer: A Valediction Forbidding Mourning

c) This one has the narrator asking the supposedly holy trinity to "break, blow, burn, and make me new."

Answer: Batter my heart, three-personed God

- 9. Identify the following battles FTPE.
- a) This 405 BCE battle saw Sparta destroy the last remnants of the Athenian fleet, and it effectively ended the Peloponnesian war.

Answer: Battle of Aegospotami

b) This 371 BCE battle saw the Spartans receive their comeuppance at the hands of those crazy Boeotians. It resulted in Thebes gaining control of Greece.

Answer: Battle of Leuctra

 In this 48 BCE battle, Julius Caesar defeated Pompey the Great as celebrated in an epic poem by Lucan.

Answer: Battle of Pharsalus

- 10. Identify the following types of cells FTPE.
- These cells of the immune systems of vertebrate animals mediate inflammatory responses such as allergic reactions.

Answer: mast cells

b) These cells are found in the digestive and respiratory tracts where they secrete mucus.

Answer: goblet cells

c) Platelets are formed in the bone marrow by segmentation of the cytoplasm of these cells, the largest cells in the marrow.

Answer: megakaryocytes

- 11. Name these Swedes from the world of tennis FTPE.
- a) He won 5 straight Wimbledon titles from 1976-80, plus 6 French opens.

Answer: Bjorn Borg

b) He won 3 Australian and 3 French Open titles in the 1980s, reaching the #1 spot briefly in 1988.

Answer: Mats Wilander

c) He was fairly obscure before winning the 2002 Australian Open final over Marat Safin.

Answer: Thomas Johansson

- 12. Answer these questions about the Mahabharata FTPE.
- He is the tutor to both the Pandavas and the Kauravas and surrenders in battle after being tricked into thinking his son Aswatthaman is dead.

Answer: Drona

b) The third Pandava, this is the guy that Krishna counsels in the Bhagavad Gita.

Answer: Arjuna

c) The epic battle between the Kauravas and Pandavas took place at this site.

Answer: Kurukshetra

- 13. Answer these questions about Persian poetry F15PE.
- a) Nearly 26,000 stanzas long, name this didactic epic, the most famous work of Rumi.

Answer: Spiritual Couplets or Masnavi-ye Ma'navi

b) This 13<sup>th</sup> century fellow is best known for two works, *Bustan* and *Gulistan*, translated as *The Orchard* and *The Rose Garden*.

Answer: Sa'di

- 14. Identify the following about the 1859 Battle of Solferino FTSNOP.
- a) (5 points each) Name the Austrian emperor, the French emperor, and the Piedmontese king who commanded the armies at the battle.

Answers: Franz Joseph I; Napoleon III; Victor Emmanuel II

b) (10 points) After the battle, a preliminary peace was arranged at this July, 1859 conference.

Answer: Conference of Villafranca

c) (5 points) The heavy bloodshed at the battle inspired Henri Dunant to lead the movement that formed this organization.

Answer: International Red Cross

- 15. Answer these questions about electrochemistry FTPE.
- a) This constant, named after the guy who was a principal developer of the principles of electrolysis, is 96,485 Coulombs of charge per mole of electrons.

Answer: Faraday constant

b) This equation relates the cell potential to the concentrations of the cell components.

Answer: Nernst equation

c) This phenomenological equation relates the cell current to the component concentrations.

Answer: Butler-Volmer equation

- 16. Answer the following questions related to music FTPE.
- a) This 1731 novel by Abbe Prevost is about a young man from a good family who ruins his life for a courtesan and has also served as the basis for two famous operas.

Answer: Manon Lescaut

b) The leading French operatic composer of his day, in addition to Manon, his works include Thais and Le Cid.

Answer: Jules Massenet

c) This Italian composer of Manon Lescaut also composed Tosca and Turandot.

Answer: Giacomo Puccini

- 17. Answer the following questions about the best show on television, Gilmore Girls FTPE.
- a) On which network does Gilmore Girls air?

Answer: WB or Warner Brothers

b) Give the first name of the mother or the daughter who are the main characters.

Answer: Rory or Lorelai

c) This actress garnered a Golden Globe nomination for her performance as Lorelai Gilmore.

Answer: Lauren Graham

- 18. Identify the following about a poet and some poetry FTPE.
- a) This Chilean dude is the giant of 20<sup>th</sup> century Latin American poetry. He won the 1971 Nobel for literature.

Answer: Pablo Neruda or Neftali Ricardo Reyes Basoalto

b) Neruda's first popular success came with this 1924 collection of poems inspired by an unhappy love affair.

Answer: 20 Love Poems and a Song of Despair or Veinte poemas de amor y una canción desesperada

c) This 1943 poem, inspired by a trip to Peru, is the centerpiece of his epic Canto General.

Answer: Heights of Macchu Pichu or Alturas de Macchu Pichu

- 19. Identify these Ex Partes U.S. Supreme Court decisions from the 1860s FTPE.
- a) This was an 1869 refusal of the Supreme Court to hear a case involving the Reconstruction Acts.

Answer: Ex Parte McCardell

b) This case contested the right of the president to suspend habeas corpus during a national emergency. Taney wrote an opinion stating that only Congress had the right to suspend habeas corpus.

Answer: Ex Parte Merryman

c) In this case, the court ruled that military courts could not be used to try civilians when civil courts were functioning.

Answer: Ex Parte Milligan

- 20. Identify the following about an early civilization F15PE.
- a) The first elaborate culture of Mesoamerica, the artistic accomplishments of these guys can be traced to San Lorenzo and its giant stone heads which have been dated to 1150 BCE.

Answer: Olmec

b) This ancient Olmec settlement was the most important settlement of Mesoamerica from 800 to 400 BCE. It is dominated by a 100-foot high clay mound shaped like a fluted cone.

Answer: La Venta

- 21. Identify these commonly encountered functions FTPE.
- a) In its simplest form it is the exponential of minus x squared where x is some independent variable.

Answer: Gaussian

b) This function evaluated at x is two over the square root of pi times the integral of a Gaussian from zero to x.

Answer: error function

c) More appropriately termed a functional and commonly used to model point sources, it is infinite at some reference point and zero everywhere else.

Answer: Dirac delta function

- 22. Identify these 19th century American writers from works FTPE.
- a) Pierre, Mardi, Redburn

Answer: Herman Melville

b) Democratic Vistas, Specimen Days

Answer: Walt Whitman

c) A Modern Instance, A Hazard of New Fortunes

Answer: William Dean Howells

- 23. Identify the following historically important works of science FTPE.
- This work on cosmology by Galileo, completed in 1630, is in the form of a conversation between two men.

Answer: <u>Dialogues Concerning the Two Chief World Systems</u>, Ptolemaic and Copernican (accept equivalents; punch anyone that gives the Latin title)

b) This 1661 work by Boyle rejected the Aristotelian theory of the 4 elements and posited a corpuscular theory to replace it.

Answer: The Sceptical Chymist

c) This 2-volume work, published in 1877 and 1878, by Lord Rayleigh is the cornerstone of modern acoustics.

Answer: The Theory of Sound

- 24. Answer these questions about Orestes FTPE.
- a) Orestes was harassed by the furies after killing this woman, his mother.

Answer: Clytemnestra

b) Orestes was avenging the murder of his father Agamemnon by this lover of Clytemnestra.

Answer: Aegisthus

c) Aeigisthus also killed this man who raised him, the brother of Thyestes.

Answer: Atreus