

Cardinal Classic XI  
Packet by CalTech Frosh  
Round 3

Tossups

1. His name is used by Albert Memmi to describe a colonizer who accepts yet despises a usurping position over the colonized, a complex named for his persecution of (\*) Britannicus. After murdering his wife Octavia and his mother Agrippina, he committed suicide after a revolt by his Praetorian Guard in A.D. 68. FTP, identify this stepson and heir of Claudius.

Answer: \_Nero\_

2. Members of this major league baseball team's 1995 roster included bullpen set-up man Julian Tavaraz, .300 hitter Paul Sorrento, Orel Hersheiser and (\*) Eddie Murray. Ending a 41-year long playoff drought, this team won the first American League Central Division championship. FTP, name the only AL franchise except the Yankees to appear in the World Series since 1994.

Answer: \_Cleveland\_ or \_Indians\_

3. In Stanley Kubrick's film A Clockwork Orange, this composer's Overture to the Thieving Magpie is played during the fight scene with Billyboy's gang in the dilapidated Opera House. More memorably, Alex (\*) has sex with two women in an accelerated sequence to what is often recognized as the Lone Ranger theme. FTP, identify this Italian composer of the William Tell Overture.

Answer: Gioacchino (Antonio) \_Rossini\_

4. The overbalanced wheel, closed-cycle water mill, and Gamgee's ammonia-filled "zeromotor" (\*) at first glance appear to be, but aren't. The self-winding clock would qualify, but is not a closed system. The French Academy of Sciences and numerous patent offices have refused to waste time on what device that, FTP, violates the first and second laws of thermodynamics?

Answer: \_Perpetual Motion\_ Machine

5. If you're looking to see if a world map is current, try examining this 9<sup>th</sup> largest country by area. Its capital is currently known as Astana (\*), but was called Aqmola before receiving its present name in 2000. Before being moved to Aqmola, the capital was at Almaty, itself renamed from Alma-Ata in 1997. FTP, identify this former Soviet republic.

Answer: \_Kazakhstan\_

6. This name has been commonly applied to two events occurring 67 years apart. The second resulted in the Widgery Tribunal (\*), which found the defendants not guilty of murder. The first touched off a revolution. Both involved soldiers shooting at unarmed civilian protesters. For 10 points \_\_give the two\_word name, by which is remembered both these acts of violence \_\_in 1905 in St. Petersburg, and in 1972 in Londonderry.

answer: \_Bloody Sunday\_

7. A character in this book is drawn from one of the author's childhood friends in Monroeville, Truman (\*) Capote. Receiving a Pulitzer Prize in 1961, it tells the story of Tom Robinson's rape trial and his defense by Atticus Finch. In a subplot, the reclusive Boo Radley is investigated by Jem, Dill, and the narrator Scout. FTP, name this novel by Harper Lee.

Answer: \_To Kill a Mockingbird\_

8. During November 2000 in this nation, beauty contest winner Kesraporn Duangsawan turned out to be (\*) male, greatly embarrassing the Pattaya selection committee. In 1999, the winner of its national pageant went on to win the Ms. Universe title. FTP, identify this nation where the first-place cash prize was 6,000 bhat.

Answer: \_Thailand\_

9. Er, the firstborn son of Judah, was put to death by the Lord. Judah then commanded this man to "raise up offspring for your brother," but he responded by (\*) spilling his semen on the ground whenever he went to see his brother's wife. FTP, identify this man whose disobedience has been reinterpreted as a scriptural injunction against masturbation.

Answer: \_Onan\_

10. Oishi Kuranosuke decided to petition the Shogun to reestablish the House of Asano with his late Lord's younger brother, Daigaku, as its head. When his petition failed, Oishi took fifty-nine loyal followers into the lands around (\*) Ako. Thirteen went home, and the rest traveled to Edo to attack Kira. FTP, identify this Japanese epic, dramatized in 1941 by Kenzo Mizoguchi.

Answer: The \_47 Ronin\_

11. Tom Lehrer said of this Yale dropout, "Here's a politician who can give the public a song and dance." He appeared with Ronald Reagan in (\*) *This Is the Army*, won an Academy Award in 1950 and served two terms as President of the Screen Actor's Guild. FTP, name this Republican who represented California in the Senate in 1965.

Answer: George \_Murphy\_

12. His first name probably comes from his father, his middle name from a clown, and his last name from his flat (\*) feet. Born in the Umbrian town of Sarsina around 250 B.C., he authored 21 comedies listed by Varro as authentic, and his *The Menaechmi* was the basis for Shakespeare's Comedy of Errors. FTP, identify this author of *Truculentus*, *The Asses*, *The Rope*, and *The Persian*.

Answer: Titus Maccius \_Plautus\_

13. Independently of Sommerfeld, he developed the rules of quantization and gave the complete theory behind the Stark effect (\*). He also developed the first exact solution to Einstein's general relativistic equations. Name this German physicist, who lent his name to a commonly used metric for gravitationally curved space and the distance  $2GM/c^2$ , the radius of the event horizon of a black hole.

Answer: Karl \_Schwarzschild\_

14. Though born in Indiana, it was Rhode Island that he served as governor and U.S. senator following the Civil War. Following First Bull Run, and led a successful expedition to the North Carolina coast, but he was also blamed for reverses at Petersburg (\*), and for the earlier defeat at Fredericksburg, which led to his replacement as head of the Army of the Potomac. For 10 points \_\_name this Union general.

answer: Ambrose Everett \_Burnside\_

15. "A day without a dark cloud. Almost a happy day." His simple determination contrasts sharply with the materialism of Tsezar and the faith of (\*) Alyosha - these are the thoughts of Shukov as he goes to sleep in the barracks of the 104<sup>th</sup> squad. FTP, identify this title character of a semi-autobiographical work by Alexander Solzhenitsyn.

Answer: \_Ivan Denisovich\_

16. Its modern columnists include Jackie Harvey, Herbert Kornfield, and Jean Teasdale, as well as radio anchorman Doyle Redland and astrologer Lloyd Schumner Sr., a (\*) retired machinist. FTP, identify this Madison-based newspaper that broke such headlines as "Bounty Introduces Third Ply" and "Bill Gates Patents Ones, Zeros," a website that will make you laugh so hard you might cry.

Answer: The \_Onion\_

17. To distract the unruly wolf Fenris, this god volunteered to (\*) stick his hand into the wolf's mouth, from which Fenris took a hearty bite. As a result, he falls at the day of Ragnarok, unable to defend himself fully. FTP, identify this son of Odin for whom Tuesday is named.

Answer: \_Tyr\_

18. The data consist of integer weights assigned to the edges of a finite complete graph; the objective is to find a Hamiltonian cycle of the minimum total weight. (\*) George Dantzig, Ray Fulkerson, and Selmer Johnson published a breakthrough solution involving 49 cities, but it still cannot be solved in polynomial time. FTP, identify this problem often abbreviated as TSP.

Answer: \_Traveling Salesman\_ Problem

19. This Cambridge-educated man was involved in difficulties there regarding the granting of his degree. The government intervened on his behalf, and the degree was granted, leading some to believe that he was in government service and that his death in a May 30, (\*) 1593 tavern brawl was a deliberate assassination. FTP, what man, born the same year as Shakespeare, wrote *Tamburlane the Great* and *The Jew of Malta*.

Answer: Christopher \_Marlowe\_

20. Along with lactate, abnormal levels of this acid are reported in a number of disorders, including liver disease, congestive heart failure, diabetes mellitus, (\*) muscular dystrophy, thiamin deficiency, and various neoplastic disorders. Formed when a molecule of glucose is split in half by the addition of phosphate groups, for ten points, what compound is used in the Krebs Cycle for the production of ATP?

Answer: \_Pyruvic acid\_ or \_pyruvate\_

21. This artist's best known works are of the natural beauty of the wheat fields and pasturelands of his childhood. His naturalist paintings incorporate what he would have seen on his walks which would begin near "Stratford Mill." (\*) Other works include "The Leaping Horse" and "Hadleigh Castle." FTP, name this contemporary of Turner and painter of the "Hay Wain."

Answer: John \_Constable\_

22. Discovered in 1985 by Curl and Smalley of Rice University while doing experiments with (\*) carbon clusters in supersonic beams, evidence for the existence of these molecules remained indirect until 1990, when researchers in Germany used a carbon-arc plasma to produce the first directly observable quantities. Named molecule of the year by Science magazine in 1991, FTP, what 60-carbon structure takes its name from the fact that its shape is that of a geodesic dome.

Answer: \_Buckminsterfullerenes\_ (accept \_fullerenes\_ or \_buckyballs\_)

23. Three of the last four captains of this ship were DeVries, Maryk, and Keith. This ship was (\*) Ensign Keith's assignment after graduation from Naval Reserve officer training. Though Keith suspected that the fate of the minesweeper was to never sweep mines, it did accomplish this duty shortly prior to the Japanese surrender. For ten points, name this fictional destroyer, captained by Queeg which was the setting for a famous mutiny.

Answer: U.S.S. \_Caine\_

24. He refused to accept offers such as the professorship of poetry at Berlin that would have brought greater prestige. He preferred the peace of his native city (\*) in which to develop his own philosophy without the influence of the followers of Leibnitz. So, he stayed in Konigsberg, where the inhabitants could have set their watches by his daily walks. For ten points, identify this German philosopher and author of *Critique of Pure Reason*.

Answer: Immanuel \_Kant\_

25. In macroeconomics, this is the change in real national income divided by the change in desired expenditure (\*). Important to Keynesians, it means that the more money people spend, the more money will be created, and a large value is desired during a recession to help the nation recover. For 10 points\_\_ what is this term, which in math is a number used to determine the total number of objects that are broken down into numerous piles?

answer: \_multiplier\_

26. Born in 1623, this thinker and inventor was converted to Jansenism in 1646. He was converted again to Christianity on the night of November 23, 1654, a "Night of Fire."(\*) He began but did not finish an Apology for the Christian Religion. For ten points, name this French winner of the cycloid contest and author of Provincial Letters and Pensees.

Answer: Blaise \_Pascal\_

Bonuses

Things having to do with Dutch philosophers or theologians, for 10 points each.

(10) This 14th-century Christian devotional work originated among the Dutch Brothers of the Common Life, and is traditionally ascribed to Thomas a Kempis.

answer: The Imitation of Christ (or Imitatio Christi)

(10) Martin Luther's position on predestination was attacked by this scholar's widely circulated 1524 treatise ~On the Freedom of the Will~.

answer: Desiderius Erasmus (or Gerhard Gerhards)

(10) "Nature abhors a vacuum," is a translated quotation from Part I, proposition 15, of what 5-part masterwork which first appeared in 1677?

answer: Spinoza's Ethics

2. Answer the following about Pragmatic Sanctions. FTPE.

(10) Who issued the July 7, 1438 Pragmatic Sanction of Bourges? This decree asserted the supremacy of a council over the pope, making the pope's jurisdiction subject to the king.

Answer: Charles VII

(10) What Holy Roman Emperor issued the Pragmatic Sanction which caused the war of Austrian succession, and eventually upheld Maria Theresa's inheritance.

Answer: Charles VI

(10) In 1789 Charles IV revoked the Salic Law but neglected to publish. In 1830 this man made Charles' decision known so that his daughter Isabella II could take the throne.

Answer: Ferdinand VII

3. Given a description of *The Simpsons* episode in which they appear, identify the presidents . 5-10-15

(5) when Homer and Bart are planning their scheme, Homer refers to the Old Testament as "The Prankster's Bible." This real-life former one term president is plagued by locusts from Edmund Scientific.

Answer: George Bush

(10) Attacked by foreign creditors days after her inauguration, she is saved by the intervention of a freeloading musical brother.

Answer: Lisa Simpson

(15) This character enslaves humanity and begins building a giant ray gun after winning the 1996 election.

Answer: Kang

4) 30-20-10 Identify the actor, given his role in a movie:

(30) Cardinal Richelieu in *The Three Musketeers* in 1993

(20) Wadsworth / Mr. Boddy in *Clue*

(10) Dr. Frank-n-furter in The Rocky Horror Picture Show

Answer: Tim \_Curry\_

5. Identify the particles from their use in forces FTSNOP.

(10) The particle which mediates the electromagnetic force:

Answer: \_Photon\_

(5 each) The two particles which mediate the weak force:

Answer: \_W\_ and \_Z\_ bosons

(10) The particles which mediate the strong force:

Answer: \_gluons\_

6. Identify the following from the works of H.P. Lovecraft from descriptions for 15 points each:

(15) This creature sleeps in the submerged city of R'lyeh. He is a giant anthropod, although he has wings and his face is that of an octopus, with a mass of feelers. When he wakes from his dreams he will help destroy the world.

Answer: \_Cthulhu\_

(15) Written by a mad Arab poet, this book, along with the Pnakotic Manuscripts, provides the source for most of the occult knowledge Lovecraft's characters possess. It talks of the Great Old Ones and their slaves the shoggoths, the other-worldly Yog-Sothoth, and other nasty creatures.

Answer: \_Necronomicon\_

7. Identify the following mathematicians:

(10) In his *The Problems of Mathematics* address to the Second International Congress of Mathematicians in Paris, he posed the 23 problems he felt should be top priorities in the 20<sup>th</sup> century.

Answer: David \_Hilbert\_

(10) In response to Hilbert's question of whether mathematics could be proven consistent, this Austrian showed that no mathematical system could be so proven.

Answer: Kurt \_Goedel\_ or \_Godel\_

(10) In the year 2000 a new list of problems was announced for the coming century. One of the problems dealt with the location of the zeroes in the "zeta function" of this German.

Answer: Bernhard(Georg Friedrich) \_Riemann\_

8. Identify the following things related to genetics FTPE:

(10) This is the collection of all alleles present in a given population at a given time.

Answer: \_Gene pool\_

(10) Assuming no disrupting factors, such as an unbalanced mutation or genetic drift, and assuming completely random interbreeding, this Law describes the distribution of genes within a gene pool.

Answer: \_Hardy-Weinberg\_ Law

(10) These are awarded every year, by definition posthumously, to those individuals who, by removing themselves from the gene pool, have indirectly increased the overall fitness of the human species.

Answer: \_Darwin\_ Awards

9. For ten points each, name these major league baseball players who changed teams at or shortly before the trading deadline on July 31, 2000. You will be given their position, old team, and new team.

A. Shortstop, from Baltimore to the New York Mets.

Answer: Mike \_Bordick\_

B. Outfielder/DH, from Tampa Bay to New York Yankees

Answer: Jose \_Canseco\_

C. Pitcher, from Philadelphia to Arizona

Answer: Curt \_Schilling\_

10. Answer the following questions about events in the Argonautica .

(10) For ten points, all or nothing, who is the hero of the Argonautica and what is he seeking?

Answer: \_Jason\_ and the \_Golden Fleece\_

(10) Medea murdered what brother to help them escape?

Answer: \_Apsyrtus\_ (accept reasonable variants)

(10) Identify, for ten points, the king who sent Jason on the quest and was later killed by his daughters.

Answer: \_Pelias\_

11. Classical music in films. FTPE, identify the pieces of music from how they appeared in films..

(10) It was written by J.S. Bach and forms the thematic backbone of the film *32 Short Films About Glenn Gould*, who was famous for performing this work.

Answer: \_Goldberg Variations\_

(10) The 1980 Best Picture Oscar winner, *Patton*, uses this Samuel Barber piece during a famous slow panning shot showing the corpses which are the price of war.

Answer: \_Adagio for Strings\_

(10) In the beginning of Kubrick's *The Shining* a theme from this famous 19<sup>th</sup> century symphony is heard.

Answer: \_Symphony Fantastique\_

12. Given a Roman deity, give his or her mother for ten points each.

A. Prosperine

Answer: \_Ceres\_

B. Vulcan

Answer: \_Juno\_

C. Vesta

Answer: \_Ops\_

13. 30-20-10. Identify the work from characters.

(30) Reverend Shields and Nelly Dean

(20) Hindley Earnshaw and Edgar Linton

(10) Heathcliff and Catherine Hareton

Answer: \_Wuthering Heights\_

14. Give the poet from lines for 10 points each, five if you need the poem:

- (A) (10) And you, my father, there on the sad height,  
Curse, bless, me now with your fierce tears, I pray.  
(5) *Do Not Go Gentle into that Goodnight*

Answer: Dylan \_Thomas\_

- (B) (10) The Sea of Faith  
Was once, too, at the full, and round earth's shore  
(5) *Dover Beach*

Answer: Matthew \_Arnold\_

- (C) (10) I have measured out my life with coffee spoons.  
It is never too late to be what we might have been.  
(5) *The Lovesong of J. Alfred Prufrock*

Answer: T.S. \_Eliot\_

15. Given two countries, give the country that they both border, FTPE.

(10) Tunisia and Morocco

Answer: \_Algeria\_

(10) Russia and Czech Republic

Answer: \_Poland\_ (note the Russian possession of Kaliningrad)

(10) Lesotho and Zimbabwe

Answer: \_South Africa\_



16. Answer the following about secret words on children shows.

(10) On Captain Kangaroo, saying the secret word would bring what objects falling from the ceiling?

Answer: Ping Pong Balls

(10) On Pee-Wee's Playhouse, what did Paul Reubens instruct the audience to do when someone said the secret word?

Answer: Scream really Loud! (or equivalents)

(10) What phrase would cause a cast member to be covered with green slime on Nickelodeon's *You Can't Do That on Television*?

Answer: "I don't know" (accept nothing else)

17. Answer the following related questions:

(10) For ten points, Alive, Revenge, Dynasty, and Love Gun are all albums by what band notorious for their face paint?

Answer: KISS

(5,5) For five points each, what Norwegian painter and printmaker and what French sculptor of sumptuous bronze and marble figures both created works called "The Kiss?"

Answer: Edvard Munch and Auguste Rodin (Do not accept Gustav Klimt; he's Austrian)

(10) For ten points, who wrote the music and lyrics for the musical *Kiss me Kate*?

Answer: Cole Porter

18. Answer the following Egyptian history questions for ten points each:

(10) What god replaced Amon, Re, and Osiris in Egyptian life during the 18<sup>th</sup> dynasty, creating a proto-monotheistic religion?

Answer: Aton or Aten or Vati

(10) Identify the king of Egypt of the 18th dynasty, who established a new monotheistic cult of Aton that quickly crumbled after his death in 1336 BCE.

Answer: Akhenaton or Akhnaton or  
AMENHOTEP IV or  
NEFERKHEPERURE  
AMENHOTEP or  
AMENOPHIS

(10) After a brief reign by Akhenaton's son-in-law Smenkhkare, this other pharaoh then took the throne and changed his name, dropping the Aton. He is best known for his intact tomb found in 1922.

Answer: Tutankhamen (prompt on TUTANKHATEN, his original name)

19. Identify the following about Bulgarian history FTPE.

(10) When the Bulgars first arrived in what is now Bulgaria, they encountered tribes of these people, comprised of Croats, Serbs, Slovenes and Macedonians.

Answer: \_Slavs\_

(10) The early Bulgars had a tribal structure similar to the Turks and early Mongols. Their chiefs were khans, while their nobles were called this, similar to nobles in Russia.

Answer: \_boyars\_

(10) Russia forced the Turks to grant independence to the Bulgars with this treaty, which ended the Russo-Turkish war of 1877-78.

Answer: Treaty of \_San Stephano\_ (prompt on Stephano)

20. Identify the following works by Aristophanes for ten points each.

(10) This comedy mocked the litigiousness of Athens in the person of the mean, old man Philocleon, who loves serving on juries.

Answer: The \_Wasps\_

(10) The women of Athens seize the Acropolis and the treasury and, together with all the women of Greece, declare a sex strike until the men stop fighting.

Answer: \_Lysistrata\_

(10) Its farmer-hero, Dicaeopolis, is tired of war and arranges a private peace treaty with the Spartans for himself in spite of the violent opposition of the embittered charcoal burners of the title city.

Answer: \_Acharnians\_

21. Identify the following about Philip II of Spain on a 5-5-10-10 basis.

(5) Name this royal family, originally from Austria, from whom Philip claimed descent..

Answer: \_Hapsburgs\_

(5) Philip defeated the infidel Ottoman Turks in what 1571 naval battle?

Answer: \_Lepanto\_

(10) Philip attempted to install his daughter as Queen of France when it became clear that France was about to fall to Protestantism. When Philip was about to attack, what Protestant switched to Catholicism and became king of France?

Answer: \_Henry of Navarre\_ (or \_Henry IV\_)

(10) Philip was an efficient ruler, writing out all his orders from this palace, a gloomy monastery-like castle that looked like a grill.

Answer: El \_Escorial\_

22. He announced "four great measures" as the goals of his presidency: tariff reduction, restoration of the

independent treasury, settlement of Oregon's boundary, and acquiring California. For 10 points each\_\_

(10) Name this president, who accomplished all four goals.

answer: James Knox \_Polk\_

(10) Name the treaty by which the United States acquired California.

answer: Treaty of \_Guadalupe Hidalgo\_

(10) Polk ultimately settled for the 49th parallel as Oregon's northern boundary. To the minute, what was the specific latitude for which he first campaigned?

answer: \_Fifty\_ four Forty\_ or \_54 degrees 40 minutes\_

23. Not counting Albert Camus (cah-MOO), three Africans have won the Nobel Prize in Literature. For 10 points each\_\_

(10) The first was this author of ~A Dance in the Forest~ and ~Death and the King's Horseman~.

answer: Wole \_Soyinka\_ (or Akinwande Oluwale \_Soyinka\_)

(10) This author of ~Miramar~ and ~Children of the Alley~ is the only one of the three who does not write in English.

answer: Naguib \_Mahfouz\_ (of Egypt, who writes in Arabic)

(10) The third was this South African cited in 1991. She wrote July's People.

answer: Nadine \_Gordimer\_

24. Some of you probably used internal combustion engines to get to this tournament. This bonus is for you.

(5,5) For 5 points each\_\_ name the two cycles of a two\_\_cycle engine.

Answers: \_power\_ and \_exhaust\_

(10) For 10 points, in a diesel engine, this object, which is connected to the distributor cap in a gasoline engine, is missing from the cylinder.

answer: \_sparkplug\_

(10) For 10 points\_\_ this type of engine consists of a triangle shaped piston, and can produce large amounts of power but functions poorly at high temperatures.

answer: \_Wankle\_ engine

25. Name these laboratory techniques, for 15 points each:

(15) This genetic lab technique is used to amplify small amounts of DNA. It uses an enzyme found in hot springs bacteria to replicate the DNA. It can be employed in criminal cases.

answer: \_polymerase chain reaction\_ or \_PCR\_

(15) This technique uses a plate of glass, metal or plastic coated with a layer of silica gel and aluminum oxide to separate mixtures into their components based on polarity. Substances are separated based on their differing affinity to the substance on the plate.

answer: \_thin\_layer chromatography\_ or \_TLC\_