BYU 1995 Perpetual Motion Invitational Toss-ups by V. Jejjala and J. Molesworth Maryland Academic Quiz Team 2/97

- T-1. He is one of the officers on the \_Patna\_ who frantically flees to lifeboats deserting 800 mostly Muslim passengers. The ship however survives to port, and he becomes a wandering outcast. His life comes to a second crisis when his friend Dain Waris is killed by white men whom he has befriended. FTP name this title character of a Conrad novel.

  \_LORD JIM\_
- T-2. The bacterial disease produces the toxins which can damage nervous tissue and heart muscle; cardiac failure, paralysis of the palate, eye movement, and peripheral neuritis may follow. The now-uncommon disease is characterized by a "pseudomembrane" on the throat and pharynx. FTP name the disease from which children are immunized using the DPT vaccine.

\_DIPHTHERIA\_

T-3. They are the heraldic supporters of the old royal coat of arms of Scotland. A battle between it and the lion is prominent in an episode from \_Through the Looking Glass\_, and it is mentioned in \_The Faerie Queene\_. The earliest writer to describe it is Ctesias (c. 400 BC). Its body is white; head, red; and eyes, blue. FTP name the animal that is depicted by medieval writers as having the legs of a buck, the tail of a lion, the head and body of a horse, and a single horn.

\_UNICORN\_

- T-4. He succeeded the Viscount Castlereagh as foreign secretary and followed the same foreign policy as his predecessor but with a flair for public relations that made him seem much more liberal. He supported independence movements in the Spanish colonies leading to the British domination of Latin American affairs in the early nineteenth century. He tried and ultimately failed to win autonomy for the Greeks, then under Turkish rule. FTP name this Tory who became Prime Minister after turning the foreign office over to the eminently capable Lord Palmerston.

  \_George CANNING\_
- T-5. At its first production, it provoked a riot by Catholics offended by what they considered to be the author's theological irregularity in having God save the heroine's life at the end. The part of the title character was written for Maud Gonne. In her wanderings through Ireland, she is accompanied by an old nurse Oona and the poet Aleel who loves her in vain. FTP name this poetic drama by William Butler Yeats that describes how the heroine sells her soul to the devil in exchange for the souls of starving Irish peasants.

  \_The COUNTESS CATHLEEN\_
- T-6. This era saw the gradual weakening of the empire and the loss of its northern territories to the Jurched Chin in 1126. It was a period of cultural ferment in which great urban centers developed for the first time. Ch'an Buddhism became dominant, and Chu Hsi established a revitalized Confucianism as the principal political and moral force. FTP identify this Chinese dynasty in power from 960 to 1279 that succeeded the T'ang and was conquered by the Yuan.

  \_SUNG Dynasty\_
- T-8. It is very electropositive and is produced by electrolysis through the Downs process. Its high heat capacity and conductivity makes it a useful coolant in nuclear reactors in its molten form. A solid at room temperature, it is often stored in kerosene to prevent rapid oxidation in air. FTP name

this soft, silvery-white alkali metal that is the sixth most common element and has atomic weight 23.0 and atomic number 11.

SODIUM

- T-9. She is said to have slept with an entire Roman legion outlasting armies of prostitutes. Her name has since become a byword for lasciviousness and incontinency. FQTP name this woman, the mother of Octavia and Brittanicus and the third wife of the Emperor Claudius put to death for her adultery.

  \_Valeria MESSALINA\_
- T-10. The 1778 oil painting ensured the artist's appointment to the prestigious Royal Academy. The seemingly spontaneous poses actually were based on art historical precedents. One pose recalls Raphael's altarpiece of the Archangel Michael using a spear to drive Satan out of heaven. It was commissioned by its primary subject as a warning to swimmers. The portrait shows nine seamen rushing to help a naked boy immersed in bloody water--evidence that his right foot was bitten off. FTP identify this John Singleton Copley canvas now at the National Gallery of Art.

  \_WATSON AND THE SHARK\_
- T-11. Its entropy is defined based on the theorem that it has no hair. Its only practical physical observables are mass and angular momentum. The first law of its dynamics equates the product of the surface gravity and change in area of this body with the energy added to it. In any natural process the surface area of its event horizon always increases. FTP what is this object formed by the collapse of stars whose size is determined by its Schwarzschild radius.

  \_BLACK HOLE\_
- T-12. The genre was closely associated with the magazine \_Black Mask\_ and with its editor Joseph T. Shaw. Its literature was closely akin to the writings of Hemingway and Dos Passos. Well known writers included W.R. Burnett, Raymond Chandler, and Dashiell Hammett. FTP name the type of American crime story infused with a sense of gritty realism that is generated by laconic, often crude, dialogue; the depiction of cruelty and bloodshed at close range; and the use of sordid environments.

  \_HARD-BOILED Fiction\_

\_\_HARD-BOILED FICTION\_ (ask for more on \_Mystery\_ or \_Detective Story\_)

- T-13. Its famous edifices include the Hofburg, Schonbrunn, and Belvedere Palaces as well as the Cathedral of St. Stephen and the Opera House. Originally a Roman town, it became the residence of the Hapsburgs in 1282 and was besieged by the Turks in 1529 and 1683. When you're there you can visit the grave of Ludwig Boltzmann. FTP name the city associated with Beethoven, Haydn, Mozart, and the Strauss that lies on the beautiful, blue Danube.

  \_VIENNA, Austria\_
- T-14. William Cullen Bryant wrote a poem about this hero of the American Revolution. On the 8th of September 1781, he participated in the battle of Eutaw Springs, South Carolina and fought at Charleston. After the war he served in his state's senate and on the state constitutional convention. FTP name this soldier known for his skill in retreating, Indian-fashion, to bogs and forests after quick and effective raids on British forces who was nicknamed "the Swamp Fox".

  \_Francis MARION\_
- T-15. Its aim was to convey inner, subjective experience through external, objective means. Films were characterized by highly stylized sets and acting and shot in studios where they could employ deliberately exaggerated lighting and camera angles to emphasize fear, horror, and pain. Aspects of this movement were adopted by Alfred Hitchcock and Orson Welles. FTP identify the reflective and contemplative technique introduced in Robert Wiene's \_The Cabinet of Dr. Caligari\_ that was brilliantly utilized by F.W. Murnau and Fritz Lang. \_\_EXPRESSIONISM\_
- T-16. He lives on Jeopardy Lane; he has carried on sexual liaisons with Pamela Anderson, Tracy Lords, and Jessica Hahn; his mother-in-law weighs

over 300 pounds and resembles a cow. These are some of the facets in the life of a certain man, whose favorite movie is \_Hondo\_, but still bursts into tears when he watches Jimmy Stewart's \_Shenandoah\_. Though he organized a civic group called "No Ma'am", he is probably better known for scoring four touchdowns in one game for Polk High. FTP name this character played by Ed O'Neill on \_Married...With Children\_.

\_Al BUNDY\_

- T-17. Its style is Racinian in its brilliance, lucidity, and precision, diabolical in its impassivity. It is essentially a study of the fascination and power of evil, and one is struck by the absence of frivolity and sentimentality in this humorless depiction of the battle of the sexes. It was made into a film directed by Stephen Frears. FTP identify the epistolary novel by Pierre Choderlos de Laclos that concerns the corruption of innocence and virtue by the profligate Valmont, and his equally vicious and immoral mistress Madame de Merteuil.

  \_Les LIAISONS DANGEREUSES\_ or \_DANGEROUS LIAISONS\_
- T-18. It emerged from the work of Jordan, Heisenberg, and Pauli and was formulated by Dirac from 1926-1934. The theory arose as a combination of the principles of quantum mechanics with special relativity, incorporating Maxwell's equations and a fundamental equation governing the motion and spin of electrons. The formalism was made workable by Bethe, Dyson, Tomonaga, Schwinger, and Feynman. FTP identify this theory that earned the 1965 Nobel Prize for Physics.

  \_\_QUANTUM ELECTRODYNAMICS\_ or \_\_Q.E.D.\_
- T-19. A son of Phlegyas, the Lapith king, he agreed to marry Dia, daughter of Eioneus. Having laid a pitfall in front of his castle with a great charcoal fire underneath, Eonieus fell and was burned to his death. Zeus purified him and invited him to dine at his table. Ungrateful, he tried to seduce Hera. Zeus, having read his intentions, fashioned a cloud into a false Hera which he bedded begetting the Centaurs. FTP name the man who was hounded by Hermes until he repeated the maxim "Benefactors deserve honor" and was ultimately bound to a fiery wheel which rolled without cease through the sky.

  \_IXION\_
- T-20. Two days before the opera's premiere, the overture was not yet written. According to tradition Mozart spent the evening writing it as Constanze kept him awake by giving him hot punch to drink and telling him amusing stories. The composer was rumored to be carrying on flirtations with all three leading sopranos and gossip had it that when Anna was disappointed with the maestro's appearance he bestowed his favors to the singers who played Zerlina and Elvira. FTP identify the opera whose male leads include Leporello, the Commendatore, and the title character, a young and especially licentious libertine.

\_DON GIOVANNI\_

T-21. He was implicated in a plot to rescue the earl of Strafford from the Tower of London in 1641 and died a fugitive in France, possibly a suicide, possibly the victim of a vengeful servant. In his poems he could play both the ardent lover and skeptic--although the latter pose gave more scope for the wit which distinguishes lyrics like the song "Why so pale and wan, fond lover?" from his play \_Aglaura\_. Other works include "Sessions of the Poets" and \_Brennoralt, or the Discontented Colonel\_. FTP name the Cavalier poet whose work was influenced heavily by John Donne.

\_John SUCKLING\_

BYU 1995 Perpetual Motion Invitational Bonus Questions by V. Jejjala Maryland Academic Quiz Team

Note: All bonus questions are valued at 30 points.

B-1. [30] Given a description of a physical effect name it for the stated

number of points. 5: The process by which electromagnetic radiation incident on a surface liberates electrical charge, which is detectable in an electric field. \_PHOTOELECTRIC Effect\_ 10: The increase in wavelength of electromagnetic radiation, observed mainly in the X-ray and Gamma-ray region, on being scattered by material objects. \_COMPTON Effect\_ 15: Recoil free gamma-ray resonance absorption. \_MOSSBAUER Effect\_ B-2. [30] Given a series of events, name the monarch who ruled England at the time they occurred FTP each. a. Battle of Lepanto is fought, Edict of Nantes is issued ELIZABETH I Pragmatic Sanction issued by Charles VI, St. Petersburg is founded c. Georges Boulanger fails to establish a dictatorship in France, Gold rush begins in Klondike \_VICTORIA\_ B-3. [30] Given a quote from a poem, identify the poet FTP. If you need the work 5 points are awarded. "Grow old along with me! The best is yet to be,
The last of life, for which the first was made." "Rabbi Ben Ezra" \_Robert BROWNING\_ 10: "Twas brillig and the slithy toves Did gyre and gimble in the wabe; All mimsy were the borogoves And the mome raths outgrabe." "Jabberwocky" \_Lewis CARROLL\_ "So 'ere's to you... at your 'ome in the Soudan; 10: You're a pore benighted 'eathen but a first-class fightin' man." "Fuzzy Wuzzy" Rudyard KIPLING [30] Given a work of Baroque art, name the artist who created it FFP B-4. each. \_Gianlorenzo BERNINI\_ a. \_David\_ (1623) \_Quince, Cabbage, Melon, and Cucumber\_ (c. 1602) \_Juan Sanchez COTAN\_ \_Jan VERMEER\_ \_The Letter\_ (1666) \_Marie de Medici, Queen of France, Landing in Marseilles\_ (1622-1623) d. \_Peter Paul RUBENS\_ \_The Calling of St. Matthew\_ (c. 1599-1602) \_Michelangelo CARAVAGGIO\_ Landscape with the Flight into Egypt\_ (c. 1603) Annibale CARRACCI B-5. [30] Now identify these baroque composers for the stated number of points. 5: At the end of his life, his music was regarded as an outdated vestige of the old contrapuntal style. It was not until Mendelssohn revived his \_St. Matthew Passion\_ in 1829 that he was recognized as among the greatest \_Johann Sebastian BACH\_ composers of the baroque. 10: A famous violinist, he wrote over 50 operas. J.S. Bach used many of his themes in his own compositions. FTP who wrote a famous \_Adagio in G minor\_ and is renowned for his \_Concerti for Oboe\_.

B-6. [30] Since I usually play with Mike Starsinic and Jesse Molesworth, I don't get as many mythology questions as I used to. Let's see if you or they can 30 this bonus about how some figures from Greek myth were born.

10: He is called the "twice-born" or the "child of the double door" in

reference to the six months he spent in Semele's womb and the three months he spent in Zeus's thigh. FTP who is he? \_\_DIONYSUS\_ 20: Hephaestus tries to ravish Athene and ejaculates on her thigh. She wiped off the seed with a handful of wool and throws it to the ground where it fertilizes Mother Earth who bears the child and gives the infant to Athene. F20P name the child. \_ERICHTHONIUS\_ or Erechteus \_

B-7. [30] Answer the following about the Jacobin Club FTP each. a. The Jacobin club was founded by liberal members of the National Assembly at Versailles in 1789. FTP what was its initial name?

\_CLUB BRETON\_

b. In spite of his early notoriety as a pleasure-seeker, his unusual gift for oratory won him a spot in the public spotlight as a leader of the Jacobins. In the first two years of the Revolution, he advocated a limited constitutional monarchy. No, he isn't Danton, Marat, or Robespierre. FTP \_Comte de MIRABEAU\_ name him.

c. The club was suppressed when Robespierre was overthrown and executed and the Reign of Terror ended. What name is given to these events of 27 July \_THERMIDOR REACTION\_ or 1794?

\_REBELLION of 9 THERMIDOR\_

B-8. [30] Name the diseases on a 15-10-5 basis.

15: It was the subject of a classic epidemiological study by John Snow in 1854.

10: Endemic in many parts of the east, this water borne infection is characterized by acute abdominal pain and diarrhea with rapidly developing dehydration and shock.

5: The disease figures in the name of a work by Gabriel Garcia-Marquez.

\_\_CHOLERA\_ 15: Vaccination by injection of the vaccinia virus into the bloodstream renders immunity to this disease.

10: It is characterized by fever, headache, general malaise, followed by a rash. Lesions start simultaneously.

5: This disease caused by the variola virus was proclaimed eradicated by the WHO in 1980. \_SMALLPOX\_

B-9. [30] Identify the Roman poet FTP each.

a. His fourth \_Eclogue\_ was often interpreted as a prophecy for the birth of Christ during the middle ages. His other poetic works include the \_Publius VIRGILius Maro\_ \_Bucolics\_ and the \_Georgics\_.

b. The great love of his life was "Cynthia". Both she and the poet were constantly unfaithful to each other, but demanded fidelity of the other.

Ezra Pound wrote an homage to him. \_\_Sextus PROPERTIUS\_
c. A native of Sulmo, he died an exile on the Black Sea. The Emperor
Augustus banished him because of a book and something he "saw". The book was the \_Ars amatoria\_, but what he "saw" is still unknown.

Publius OVIDius Naso

B-10. [30] Given a science fiction work, name the author FFP each.

a. \_Dune\_ \_The Skylark of Space\_ \_Frank HERBERT\_

c. \_Dandelion Wine\_

\_E.E. "Doc" SMITH\_

d. \_Stranger in a Strange Land\_

\_Ray BRADBURY\_ \_Robert A. HEINLEIN\_

e. \_Mona Lisa Overdrive\_

\_William GIBSON\_

f. \_Star Maker\_

\_Olaf STAPLEDON\_

B-11. [30] Given the protagonist from a work of literature and the type of work, name the work FFP each.

a. Gabriel Conroy, a short story
b. Pavel Chichikov, a novel
c. Gustav von Aschenbach, a novel
d. Willy Loman, a play
e. Portia Quayne, a novel
f. Joseph Vaillant, a novel

\_\_THE DEAD\_
\_\_DEATH IN VENICE\_
\_\_DEATH OF A SALESMAN\_
\_\_THE DEATH OF THE HEART\_
\_\_DEATH COMES FOR THE ARCHBISHOP\_

\_THE DEAD\_

B-12. [30] Given a pair of films, name the director FFP each.

a. \_The Birth of a Nation\_ (1915) and \_Orphans of the Storm\_ (1921)

- \_\_D.W. GRIFFITH\_ b. \_Strike\_ (1924) and \_Ten Days That Shook the World\_ (1928)
- c. \_L'Age d'or\_ (1930) and \_That Obscure Object of Desire\_ (1977)
  \_Luis BUNUEL\_
- d. \_Grand Illusion\_ (1937) and \_The Rules of the Game\_ (1939)
  \_Jean RENOIR\_
- e. \_Satyricon\_ (1969) and \_Casanova\_ (1976) Federico FELLINI\_
- f. \_Through a Glass Darkly\_ (1960) and \_The Magic Flute\_ (1975) \_Ingmar BERGMAN\_
- B-13. [30] Identify the scientist on a 30-20-10 basis.
- 30: Truly gifted as both an experimentalist and a theorist, by measuring the distance that slips of paper flew from his hand, he made a first order approximation regarding the power generated by the Alamogordo atomic bomb test. His estimate was confirmed as accurate a few months later by Los Alamos. 20: His outstanding contributions to physics include the theory of beta decay and the free electron theory of metals.
- 10: He won the 1938 Nobel Prize in Physics for producing the transuranic elements through neutron irradiation. He built the world's first fission reactor in 1942.

  \_Enrico FERMI\_
- B-14. [30] Identify these possibly related historical figures FTP each.

  a. An actress noted for her beauty, she was the wife of Justinian I.

  \_THEODORA\_
- b. He defeated and murdered Odoacer in AD 493 after which he set up an Italian kingdom that he ruled with justice and toleration.

  \_THEODORIC the Great\_
- c. An important opponent of Arianism, in AD 388 he invaded Italy, defeated the usurper Maximus and restored Valentian II to power. Becoming Emperor himself four years later, upon his death the Roman Empire was divided between his sons Arcadius and Honorius.

\_THEODOSIUS I, the Great\_

- B-15. [30] Name the American philosopher FTP each.
- a. He gave a series of lectures on pragmatism at the Lowell Institute and later Columbia University that was published as \_Pragmatism\_ (1907) and \_The Meaning of Truth\_ (1909). \_\_William JAMES\_
- b. He outlined his aesthetic theory in \_The Sense of Beauty\_ (1896) and his materialistic view of nature in the 5 volume \_Phases of Human Progress\_ (1905-1906). \_\_George SANTAYANA\_
- c. In such works as \_Beyond Freedom and Dignity\_ (1971) he applies his behaviorist theories to argue that autonomy and free will do not exist.

  \_B.F. SKINNER\_
- B-16. [30] It's time to play the name game. Combined the titles of two literary works to create a tangled phrase. Each part is worth 5 points. Note: It may be necessary to ignore articles at the beginning of a title. a. A poem by Walt Whitman in which the poet walks on the beach in the moonlight and hears the mourning song of a bird and a short story by D.H. Lawrence in which a boy rides himself to death on a demonic toy.

  \_OUT OF THE CRADLE ENDLESSLY ROCKING-HORSE WINNER\_
- b. A novel featuring Eustacia Vye and the novel with Bigger Thomas.
  \_The RETURN OF THE NATIVE SON\_
- c. The first novel in Marcel Proust's \_A Remembrance of Things Past\_ and a comedy by William Congreve.

\_SWANN'S WAY OF THE WORLD\_

- B-17. [30] Name the American explorer on a 10-5 basis.
- 10: En route to Washington, he was found dead in 1809 at a Tennessee inn, either by murder or suicide.
- 5: A governor of the Louisiana Territory, he led an expedition west with William Clark.

  \_Meriwether LEWIS\_
- 10: His \_Report of the Exploring Expedition to the Rocky Mountains\_ (1843) which he wrote with his wife Jessie was widely read.
- 5: In 1856, he ran for President on the Republican anti-slavery platform.

From 1878 to 1883, he was the territorial governor of Arizona.

\_John C. FREMONT\_

- 10: He was a guide for exploring parties and led the Fremont expeditions of 1842, 1843, and 1845.
- 5: He played an important role in the conquest of California during the Mexican War and fought in New Mexico during the Civil War rising to the rank of Brigadier General.

  \_Kit CARSON\_
- B-18. [30] Arrange the following quantities in order of size from smallest to largest FFP each and a five point bonus for all correct: tangent of Pi over 3 radians, the natural log of 2, seven factorial over eight factorial, the golden ratio, and the first perfect number. You have 30 seconds.

  \_7!/8! (=0.125)\_, \_ln 2 (=0.693...)\_, \_GOLDEN RATIO (=1.618...)\_, \_tan Pi/3 (=1.732...)\_, \_PERFECT NUMBER (=6)\_
- B-19. [30] 30-20-10 Name the American writer.
- 30: In return for his campaign life of Abraham Lincoln, he was awarded a consulship in Venice where he spent the Civil War. He wrote "Poems of Two Friends" at about the same time.
- 20: President of the American Academy of Arts and Letters, his \_A Hazard of New Fortunes\_ and \_A Traveler from Altruria\_ are studies in American social institutions.
- 10: This writer for the \_Atlantic Monthly\_ and \_Harper's\_ illustrates his theory of realistic fiction in \_A Modern Instance\_ and \_The Rise of Silas Lapham\_. \_William Dean HOWELLS\_
- B-20. [30] Name the country from a list of nations that border it FTP each.
- a. Bangladesh, China, India, Laos, and Thailand

BURMA

b. Afghanistan, Iran, Khazakstan, and Uzbekistan

\_TURKMENISTAN\_

c. Namibia, Zaire, Zambia

\_ANGOLA\_