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PACKET-OF-THE-MONTH CLUB
v. 1.0/September, 1996
Questions submitted for CALIFORNIA INSTITUTE OF TECHNOLOGY
by Richard Mason <mason@robby.caltech.edu>.

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TOSS-UPS

1. His first published paper was "Boundary functions for function defined in a disk." His last paper was "The set of curvilinear convergence of a continuous function defined in the interior of a cube." At some point thereafter, he must have lost interest in complex analysis. However, it still has to be proved in court that he started filling pipes with match heads and leaving them lying around computer labs. For a quick ten points, name this mathematician, recluse, and prime suspect in the UNABOM case.

A. Theodore J. KACZYNSKI [ACC: UNABOMBER_ up to "filling pipes"]

2. This gas is used as a pressurant for rocket fuel tanks. When you consider that one of the most popular rocket fuels is liquid hydrogen, you realize that this is pretty much the only gas you COULD use. However, not everyone appreciates this and the many other valuable uses of this substance, and there was an attempt this year in the House of Representatives to sell off the government reserve. For ten points, name the gas.

A. HELIUM

3. The houses which were exemplary of this American style of architecture were generally low-lying two-story structures with single-story wings. Examples include Robie House and the house of the W.W. Willitses. For ten points, identify this style, of which Frank Lloyd Wright was the foremost practitioner.

A. PRAIRIE_ style

4. She attempted to become queen of the underworld by supplanting her older sister, Ereshkigal. But she failed and she was killed and turned into a piece of rotting meat. Enki managed to rescue her from the underworld and bring her back to life, but she had to send a substitute back to take her place. So Enki

chose her husband, Dumuzi. For ten points, name this Sumerian goddess.

A. INANNA

5. Her books generally have markedly Christian themes, so it's a little peculiar that Christian fundamentalists should try to ban them from libraries and schoolrooms. Probably it's because some of her books feature witches like the Happy Medium. For ten points, identify this author of "Arm of the Starfish," "An Acceptable Time," "Dragons in the Water," and, of course, "A Swiftly Tilting Planet," "A Wind In the Door," and "A Wrinkle in Time."

A. Madeline L'ENGLE

6. Along with Ethan Allen, he helped capture Fort Ticonderoga from the British. Later that year he marched through Maine with 700 men to attack Quebec, but the assault failed and he was severely wounded. He became a hero by constructing a fleet on Lake Champlain and delaying the superior naval force of General Carleton at Valcour Island. For ten points, name this American general who asked the British for a sum of 20,000 pounds in return for betraying West Point.

A. Benedict ARNOLD

7. "A good glass in the bishop's hostel in the devil's seat forty-one degrees and thirteen minutes northeast and by north main branch seventh limb east side shoot from the left eye of the death's-head a bee-line from the tree through the shot fifty feet out." These directions to the treasure of the pirate Captain Kidd are written in a substitution code and in invisible ink on a parchment which is discovered by William Legrand in, for ten points, what short story by Edgar Allan Poe?

A. THE GOLD BUG

8. The two islands Ilha da Taipa and Ilha da Coloane are connected by a causeway and a bridge to the peninsula on the mainland. This small territory relies on China for most of its food, fresh water, and energy imports, China has veto power over its administration, and in 1999 it will revert to China. However, until then it remains officially a Portuguese overseas colony. For ten points, name it.

A. MACAU

9. In 1395 their beliefs were summarized in the "Twelve Conclusions," including the statements that the existing priesthood was not the one ordained by Christ, that priests should not be celibate, and that transubstantiation was a "feigned miracle" that led men into idolatry. For ten points, identify these followers of John Wycliffe who were precursors of the Protestant Reformation that would come more than a century later, and whose pejorative name comes from the Dutch word for "mumbler".

A. LOLLARDS

10. He entered a paper in a competition in which the judges were Laplace, Biot, Poisson, Arago, and Gay-Lussac. Poisson pointed out an absurdity of the theory advanced in his paper; if it were true, then the shadow of a circular opaque

obstacle would have a bright spot at the center. Arago immediately showed that this was in fact the case. In fact, the shadow of a circular object consists of concentric light and dark rings. For ten points, name the developer of the wave theory of light after whom these rings are named.

A. Augustin Jean FRESNEL

11. When Ona is molested by her employer, her husband Jurgis [YOORGHIS] assaults him and goes to prison, and the family loses the house that they have worked for years to pay for. Ona dies in childbirth. The baby Antanas drowns in the deep mud of the unpaved street. The boy Stanislovas is eaten by rats. This is just a small sampling of the evils that befall the Lithuanian Rudkus family in the slums of Chicago's Packingtown, in, for ten points, what novel by that proverbial muckraker Upton Sinclair?

A. THE JUNGLE

12. *Heterocephalus glaber* has no external ears and its eyes are covered by skin, but it has huge incisors; its appearance has been compared to that of a sabre-toothed sausage. This unusual mammal congregates in large underground colonies, and each colony has a single female "queen" which does all the breeding, while the other members of the colony perform specialized chores. For ten points, give the common name of these animals which have been called "the social insects of the rodent world."

A. NAKED MOLE RAT

13. The University of Massachusetts earned its first NCAA Final Four berth last spring, presumably largely because of this player who received the Boost/Naismith Award and was named Player of the Year by the National Association of Basketball Coaches. For ten points, name him.

A. Marcus CAMBY

14. At his chief festival in August, the heads of Roman families would throw small fish into the fire. His name is Etruscan in origin, and two of his epithets were Quietus and Mulciber. Since he was a destructive god, his temples were always located outside cities. For ten points, name this Roman deity, husband of Venus.

A. VULCAN

15. The clock runs backwards from forty-five minutes to zero. An injury stops the clock. All drawn games are settled by a shoot-out. All these rules were adopted by this organization in an attempt to tailor its product for American consumption. For ten pretty easy points, name America's latest professional sports organization.

A. MLS or MAJOR LEAGUE SOCCER

16. As a child and young man, he lived under conditions of great poverty and hardship, causing him to choose a pen name meaning "bitter". Once he began to earn a lot of money as a successful author and playwright, he gave most of it to

the Bolshevik party, and he was one of the fledgling party's main sources of income. For ten points, name this patron saint of Soviet literature, the author of "The Artamonov Business" and "The Lower Depths".

A. Maksim _GORKY_ [ACC: Aleksey Maksimovich _PESHKOV_]

17. George Chakiris won Best Supporting Actor and Rita Moreno won Best Supporting Actress for their performances in, for ten points, what movie, which also won Best Film Editing, Best Costume Design, Best Art Direction, Best Cinematography, Best Director, Best Picture, and, not so surprisingly, Best Sound and Best Scoring of a Musical Picture in 1961?

A. _WEST SIDE STORY_

18. A good pair of boots has a mean lifetime of about one week if used to cross this slow-moving type of lava flow with a thick, rough and jagged skin covering a viscous interior. The Hawaiian name for this kind of lava flow is onomatopoeic and describes the sound you might make if walking on it with bare feet. For ten points, make that sound.

A. _AA_ [ah ah]

19. He was born John Rowlands, but he changed his name at age eighteen after leaving England and beginning a roving life as a soldier, seaman, and journalist. He received yet another name, Bula Matari, "Breaker of Rocks," while he was employed by the king of Belgium, Leopold II, directing roadbuilding and development of the Congo river basin. For ten points, name this man who explored much of Africa in his own right, but who is best known for his expedition to Ujiji on Lake Tanganyika to relieve another African explorer.

A. Henry Morton _STANLEY_

20. The new rules regarding their use will not go into effect for at least nine years, but after that time the rules will apply to both internal conflicts and international wars. If used outside marked, guarded areas, they must be equipped to deactivate or self-destruct after a set time. Non-detectable plastic ones will be banned outright. For ten points, identify these weapons which were regulated by 57 countries this year at a United Nations meeting in Geneva.

A. Anti-personnel _LANDMINES_

21. "Invitation to the Side-Show," "A Young Woman Holding a Powder-puff," "The Circus," "The Models," "The Asylum and the Lighthouse, Honfleur," "Une Baignade, Asnieres," and "Sunday Afternoon on the Island of La Grande Jatte" are all works by, for ten points, what French painter famous for inventing the technique known as pointillism?

A. Georges _SEURAT_

22. The Latin phrase "Hoc est corpus meum", meaning "this is my body", appears in the ritual of the Eucharist, or Holy Communion. An abbreviated form of the phrase is used in the diabolical rites of the Black Mass, and has become well-known as a sorcerous phrase. For ten points, identify these words of

Satanic magic, which are also the title of a book by Kurt Vonnegut.

A. HOCUS POCUS

23. He was a close friend of Mark Anthony and supported him against Octavian after the death of Julius Caesar, even though Cleopatra was using her influence with Anthony to take much of his land. However, after the battle of Actium he had good relations with Augustus, who returned to him the land that Cleopatra had taken and expanded his kingdom. In later life he suffered from physical disorders and mental instability and murdered many of his relatives, including his first-born son Antipater. For ten points, name this insane king of Judaea who ordered the slaughter of infants in Bethlehem.

A. HEROD I or HEROD THE GREAT (prompt for more on Herod)

24. A society does not have this property if a single person in the society could be made happier without making anybody else less happy. For ten points, name this concept originated by the Italian economist who also invented "curves of indifference."

A. PARETO OPTIMALITY

25. He is thought to have been the Bishop of Myra, in southwest Turkey, in the fourth century A.D. His relics are enshrined today in Bari, Italy. One miracle attributed to him is the resurrection of three children who had been chopped up and put in a brine tub. In another story he provided three poor girls with gold marriage dowries. For ten points, identify this patron saint of Russia and Greece, whose feast day is actually December 6, not Christmas Eve as you might imagine.

A. St. NICHOLAS

BONI

1. (30-20-10) Identify the man from clues.

30: In World War I he was exempted from military service because he had a clubfoot, and his enemies later used this deformity when comparing him to the devil.

20: He joined the NSDAP in 1924 and rapidly rose through the ranks as a gifted orator and journalist, editor of "Das Reich" from 1940 to 1945.

10: On May 1, 1945, in a bunker in Berlin, he was chancellor of the Third Reich for a single day.

A. Paul Joseph _GOEBBELS_

2. (30) Two archangels are mentioned in the canonical Old Testament and two more are mentioned in the apocryphal Old Testament. You get five points per archangel and an additional ten points for all four correct.

A. _MICHAEL_, _GABRIEL_, _RAPHAEL_, _URIEL_

3. (30) Given the modern name of an African country, give its previous name for ten points each.

1) Benin A. _DAHOMY_ or _ABOMEY_

2) Lesotho A. _BASUTOLAND_

3) Zaire A. _CONGO FREE STATE_ (or _BELGIAN CONGO_, etc.)

4. (30) Identify these curves for ten points each.

1) The locus of a point on the edge of a wheel that rolls without slipping.

A. _CYCLOID_

2) The shape that a perfectly flexible cable assumes when suspended from both ends and acted upon by gravity alone.

A. _CATENARY_

3) The curve along which a body moves from one point to another under the action of an accelerating force in the least time possible.

A. _BRACHISTOCHRONE_

5. (30-20-10) Identify the poet from bits of verse.

30: I know I am but summer to your heart, / and not the full four seasons of the year.

20: My candle burns at both ends, / It will not last the night. / But ah, my foes and oh, my friends, / It gives a lovely light.

10: Euclid alone has looked on Beauty bare. / Fortunate they / Who though once

only ad then but far away/Have heard her massive sandal set on stone.

A. Edna St. Vincent MILLAY

6. (30-20-10) Identify the thinker from quotes.

30: The body politic, like the human body, begins to die from its birth, and bears in itself the causes of its own destruction.

20: In the strict sense of the term, a true democracy has never existed, and never will exist.

10: Man is born free, and everywhere he is in chains.

A. Jean Jacques ROUSSEAU

7. (30) It's a nuclear missiles bonus.

1) First, for five points per word, expand the acronym MIRV.

A. MULTIPLE INDEPENDENT REENTRY VEHICLE

2) For an additional ten points, name the first U.S. submarine-launched ballistic missile, which became the primary weapon of the British nuclear deterrent in the 1970s and 80s.

A. POLARIS missile

8. (30) From a partial plot summary, identify these stories from the "Canterbury Tales" for ten points each.

1) Two cousins, Palamon and Arcite, each assisted by a different god, fight a duel over Emily, the woman they both love.

A. The KNIGHT'S Tale

2) An astrologer named Nicholas manages to have sex with the wife of a carpenter by tricking the carpenter into believing that a second Great Flood is imminent.

A. The MILLER'S Tale

3) A child sings hymns to the Virgin Mary while walking through the Jews' quarter, and the evil Jews cut his throat and throw him in a cesspit. But the dead child keeps on singing and the murderers are brought to justice.

A. The PRIORESS'S Tale

9. (30) Given a celestial object, say what constellation it is in for ten points each.

1) Canopus

A. CARINA or the KEEL

2) Capella

A. _AURIGA_ or the _CHARIOTEER_

3) The Large Magellanic Cloud

A. _DORADO_ or the _GOLDFISH_ or the _SWORDFISH_
(also accept: _MENSA_ or the _TABLE_ Mountain. Part of the LMC strays from Dorado into Mensa).

10. (30) Given the commanding generals on both sides, identify the Civil War battle for ten points each.

- 1) A.S. Johnston vs. Ulysses S. Grant A. _SHILOH_
- 2) Robert E. Lee vs. A.E. Burnside A. _FREDERICKSBURG_
- 3) Robert E. Lee vs. John Pope A. _SECOND BATTLE OF BULL RUN_
(or _SECOND MANASSAS_)

11. (30-20-10) Identify the nation.

30: Its first king was Elros Tar-Minyatur. Its last king was Ar-Pharazon the Golden.

20: In the center of the kingdom was a tall mountain, Meneltarma, from which one could see the white tower of the Haven of the Eldar.

10: Survivors from this destroyed nation founded the kingdoms of Arnor and Gondor.

A. _NUMENOR_

12. (20) Identify the following chemical compounds for ten points each.

1) It is the principal inorganic constituent of teeth and bones.

A. _CALCIUM PHOSPHATE_

2) It is the principal constituent of eggshells, pearls, coral, and oyster shells.

A. _CALCIUM CARBONATE_ or _CALCITE_

13. (30-20-10) Identify the leader from clues.

30: In 1628 he was elected as a Member of Parliament for the borough of Huntingdon.

20: He distinguished himself militarily at the battles of Marston Moor, Naseby, and Langport.

10: He was one of 135 members of the High Court of Justice that tried King Charles I, and he was the one who signed the death warrant.

A. Oliver _CROMWELL_

14. (30-20-10) Identify the group from songs.

30: Flexible, Everything Counts

20: Strangelove, Fly on the Windscreen

10: People Are People, Master and Servant

A. _DEPECHE MODE_

15. (30) It's a bonus about the Anglo-Boer War.

1) For five points each, name the two Afrikaner republics which went to war with Great Britain at the turn of the century.

A. _SOUTH AFRICAN REPUBLIC_ (or _TRANSVAAL_), _ORANGE FREE STATE_

2) For ten points, name the commander in chief of the British forces during the last eighteen months of the war, who crushed the guerilla resistance by burning Boer farms and herding Boer women and children into concentration camps.

A. Lord Horatio Herbert _KITCHENER_

3) For ten points, name the treaty which ended the war and brought the two Boer republics under British military administration.

A. Peace of _VEREENINGING_

16. (30) Bosh! Identify creatures from the nonsense poems of Edward Lear for ten points each.

1) This creature sold a ring to the Owl and the Pussycat for one shilling.

A. _PIG_

2) These creatures have green heads and blue hands, and they went to sea in a sieve.

A. _JUMBLIES_

3) This creature has no toes.

A. _POBBLE_

17. (25) It's positivism time!

1) First, for ten points identify the French philosopher who was the founder of positivism and who coined the term "sociology".

A. August _COMTE_

2) August Comte believed that human intellectual development had passed through three stages. For five points each, identify these three stages.

- A. THEOLOGICAL stage (explanations in terms of gods and spirits)
METAPHYSICAL stage (explanations in terms of abstractions like "essences")
POSITIVE stage (scientific explanations)

18. (30) If created, it would have a population of around twenty-six million people with a GDP of over \$20,000 per capita. That would leave thirty-two million people with a per capita GDP of around \$14,000 in the southern part of Italy. For thirty points, name the new country that the Northern League, the largest political party north of the Po, wants to carve out of northern Italy.

A. PADANIA

19. (30-20-10) Identify the artist from clues.

30: He gave up concentrating on sculpture after his work "The Sacrifice of Isaac" failed to win him the commission to make the bronze reliefs for the door of the Baptistery of Florence.

20: He developed the methods and machines necessary to build the enormous dome of the Florence Cathedral.

10: He rediscovered the principles of linear perspective which had been known to the ancient Greeks and Romans.

A. Filippo BRUNELLESCHI

20. (30) The Tertiary Period of the Cenozoic Era, lasting from 66.4 to 1.6 million years ago, is comprised of five epochs. List them for five points each with a five point bonus for getting them all in order from oldest to youngest.

A. PALEOCENE, EOCENE, OLIGOCENE, MIOCENE, PLIOCENE

21. (30) This demon king ruled in the kingdom of Lanka, which some people identify with the modern country of Sri Lanka. In modern times Tamil groups have regarded him as a symbol of the south and sympathize with him rather than Rama, the northern Indian hero who defeats him in the epic Ramayana. For thirty points, name this ten-headed king of the rakshasa.

A. RAVANA

22. (30-20-10) Identify the composer from works.

30: Giulio Cesare, Floridante

20: Almira, Agrippina

10: Water Music, Music for the Royal Fireworks

A. George Frideric HANDEL

23. (30-20-10) Identify the island.

30: This island was known to the Romans as Caesarea, not to be confused with

the city of Caesarea in Palestine.

20: It is a dependency of the British crown, but the official language is actually French.

10: It is the largest and southernmost of the Channel Islands.

A. JERSEY

24. (30) How well do you know your operation code names? Identify the operations for ten points each.

1) The U.S. extraction of Manuel Noriega from Panama.

A. Operation JUST CAUSE.

2) The Israeli retaliation in the spring of this year against Hizbullah targets in Lebanon.

A. Operation GRAPES OF WRATH.

3) The U.S. rescue of American citizens and other foreign nationals from the war-torn Liberian capital this year.

A. Operation ASSURED RESPONSE.

25. (30-20-10) Identify the movie from cast members.

30: Carol Kane, Robin Wright

20: Christopher Guest, Chris Sarandon

10: Cary Elwes, Mandy Patinkin

A. THE PRINCESS BRIDE