1998 Perpetual Motion V Tournament
Packet by Sterile Dread (R. Robert Hentzel)

Tossups

1. The action begins on a street in Venice, moves to another street, and then to a council chamber where the new bride's father is more concerned about his daughter's interracial marriage than the impending Turkish naval invasion. The next act occurs on Cyprus, where the bride's Moorish husband prepares to drive off the invaders. For 10 points--which Shakespearean tragedy of Roderigo, Desdemona, and Iago begins thus?

answer: Othello

2. He argued that fringing reefs appear first, to be followed by barrier reefs, and then atolls as the sea floor sinks and the coral continually grows to reach the surface. This theory, articulated while in South America in 1832, brought him to the attention of Charles Lyell and the scientific societies of London. For 10 points--name this British geologist better known for biological works like The Descent of Man and The Origin of Species.

answer: Charles Robert Darwin

3. 5,000 citizens were to be ruled by 37 curators and a council of 360. The secret "Nocturnal Council" would live deep in the central fortress and form the "sheet anchor of the state." Poetry and music were to be forbidden and children subjected to a rigid and exacting education. For 10 points--identify this work describing the best way to found a Cretan polis, a political tract by Plato which would be called the Leges when translated by the Romans.

answer: Laws (Nomoi)

4. The westernmost of the Dartry Mountains is an impressive, flat-topped massif bounded by spectacularly steep slopes. The nearly straight-walled cornice at the top includes thick beds of limestone, both the massive, light-colored Dartry and the thinner, darker Glencar. The slopes are softer black shale. For 10 points--name this supposed resting place of Irish heroes and under which Yeats wrote and was buried.

answer: Ben Bulben or Benbulbin

5. Because it was held to be the art form most revealing of ones personality, it was used in the selection of executives to the Imperial court. Its elements are permanent and uncorrectable and must be planned and executed confidently--just the skills required of a good administrator. For 10 points--give the usual translation of the Chinese shu fa, an artistic discipline that adds creativity to the given structure of words and signs.

answer: calligraphy (accept shu fa until "Chinese")

6. Secretory proteins do not remain trapped within the endoplasmic reticulum; they are transported to another organelle where they undergo modifications such as the addition of carbohydrates and separation according to function and destination. This organelle consists of several flattened sacs called cisternae and may be directly connected to the endoplasmic reticulum. For 10 points--identify this organelle named for a 19th century Italian histologist.

answer: Golgi body or Golgi apparatus

7. Diotallevi was a student of the kabbalah who wanted desperately to be Jewish. Count Aglié was a student of the occult and claimed to be the immortal Comte de Saint-Germain, Signor Casaubon was a student of philosophy who wrote his thesis on the Templars. And Jacopo Belbo was the primary editor of Garamond Press. For 10 points--in what 1986 novel do these four people appear, tracking a secret society to the titular scientific experiment in the Paris Observatory, according to Umberto Eco?

answer: Foucault's Pendulum

8. The most famous dispatch boat in the Confederacy and practice ship of the Naval Academy earned that honor with a trip in 1851 around the Isle of Wight. It sailed again in 1871 at the request of James Ashbury in New York Harbor but finished fourth and its wine ewer passed to the Magic. For 10 points--name this schooner which brought a famous Cup to the United States for over 70 years.

answer: America

9. It opens by comparing fortune to the moon--first waning and then waxing--and continues with a singer's lament of how fortune has turned on him. Later on we are treated to a glorification of perfume and makeup, a glorification of the abbot of

Cockaigne and his heavy-drinking parishioners, and a glorification of boys and girls tarrying in a little room. For 10 points--name this collection of songs from the Beuron region of Germany set to music by Carl Orff.

answer: Carmina Burana (prompt on Songs of Beuron)

10. The first American one was "calculated for New England" by a Mr. Pierce. Another, compiled by Samuel Atkins--who billed himself as "a student in the mathematics and astrology,"--was called The American Messenger. Standard fare included prophecies, astronomical information, tide charts, and proverbs. For 10 points--name these publications typified by Nathaniel Ames' Astronomical Diary and Benjamin Franklin's Poor Richard's.

answer: almanacs

11. Pharaoh Necho was delayed at Megiddo by the army of King Josiah of Israel who was allied with the Babylonians. He destroyed them and killed Josiah, but reached the capital of Assyria too late to relieve it. Nebuchadnezzar destroyed the Egyptian forces just as he had leveled this Assyria city. For 10 points--name this 610 BCE battle which made Babylon the ruler of the ancient world.

answer: Battle of Carchemish

12. In 1925 the Navy dirigible Shenandoah was caught in a storm and destroyed. A brigadier general, already stationed at the remote post of San Antonio, Texas, publicly accused the War and Navy departments of criminal negligence and treasonable administration of the national defense. For 10 points--name this man, court-martialed for his remarks, who had been sent to San Antonio for his insistence that surface ships were vulnerable to air attack.

answer: Brigadier General William "Billy" Mitchell

13. She superseded Dione, who shared her husband's temple at Dodona, and assumed two primary roles. In the first role, she took the name "Eileithyia" as goddess of birth and the life of women. She was also the patron of Argos and Samos and held the cow, cuckoo, and peacock to be her sacred birds. For 10 points--name this queen of heaven, whose second role was as the consort and lawful wife of Zeus, king of the gods.

answer: Hera [do not accept or prompt on Juno]

14. New species arise by the splitting of lineages. A small sub-population of the ancestral form gives rise to the new species. The new species originates in a very small part of the ancestral species' geographic range--in an isolated area at the periphery of the range. New species develop quickly. So said Eldredge and Gould in a famous 1972 paper with a new explanation of the fossil record. For 10 points--what two-word name is given to this biological theory?

answer: punctuated equilibrium

15. As a teen she acted in Henrik Ibsen's Rosmersholm and was inspired to take her pen name from the play. That name later appeared on a famous study of culture and war in the Balkans, The Black Lamb and the Grey Falcon, a study of William Joyce and others called The New Meaning of Treason, and a report on the Nuremberg trials called A Train of Powder. For 10 points--name this British author and longtime lover of H.G. Wells.

answer: Dame Commander of the British Empire Rebecca West (Cicily Isabel Andrews, née Fairfield)

16. The area was supposedly named for a frog Nero vomited up, declared to be his own progeny, and hid within a vault on the site. A palace later built there was given by the Emperor Constantine to the popes. For 10 points--name this Roman locality of the Piazza, a palace-turned-museum, and the Basilica of St. John, the setting of the 1929 pact which guaranteed papal control over the Vatican.

answer: the Lateran (Palace, Basilica, etc.)

17. Sumptuary laws should be enacted to limit people's purchase of luxuries. Thrift and parsimony are the only means by which capital is created. All trade balances should be favorable and colonies should be established to create markets with a favorable trade balance; manufacturing should be prohibited in colonies. For 10 points--name this early economic theory of Mun, Serra, and Colbert that held that money was the sole source of a nation's wealth.

answer: mercantilism

18. Inside this building were a brown sack smelling of peppers, a trophy case, a bottle with a quantity of water, an elvish sword of great antiquity, a boarded front door, a dark staircase upwards where a grue lived, a dark chimney downward, and an

ajar window to the east. For 10 points--identify this structure with a mailbox where thousands of Zork players began their lives.

answer: the white house (prompt on "Zork I")

19. Some of the remaining mysteries include why the S-boxes are highly resistant to linear analysis but vulnerable to differential analysis, why there are exactly 16 rounds, and why the key length was chosen to be 56 bits. Many suspect the NSA of inserting a trapdoor into the design but no significant weakness has ever been found in this most popular symmetric cipher. For 10 points--name this standard algorithm.

answer: Data Encryption Standard (DES)

20. His belief in the supreme right of authority triumphed over his sympathies for fellow Eastern Orthodox believers when he condemned the Greek rebels for their war of independence. Speculators had thought he would be the first czar to make significant reforms, but this never came to pass. Instead he is remembered for Russia's role at the Congress of Vienna and the Napoleonic wars. For 10 points--name this czar of Russia from 1801-1825.

answer: Czar Alexander I Romanov

21. In 1689, he and his disciple Sora walked 1,500 miles over the course of five months. The manuscript of his journey, Oku no Hosomichi, has just been discovered and authenticated by Sakurai Takejiro--no light task when the author was arguably Japan's greatest poet. For 10 points--name this author of Narrow Road and a famous haiku about an old pond and a jumping frog.

answer: Basho Matsuo

22. Though written in England, its stories were published piecemeal in America due to the author's fear that, like most American works of the day, they would be ridiculed by the English press. With the help of Sir Walter Scott and Archibald Constable, it was brought together and published in 1819 bringing international fame to the author, Washington Irving. For 10 points--name this collection including "Roscoe," and "Rip Van Winkle."

answer: The Sketch Book of Geoffrey Crayon, Gent.

23. For nearly a century, seven Iowa villages conducted the nation's most successful experiment in Communism. Then in 1932 a unanimous vote reorganized the 1,500 people as a joint stock company. It originated in Germany in 1714 as the Community of True Inspiration but crossed to the New World to avoid persecution. For 10 points--name this religious community associated with a major Midwest appliance manufacturer.

answer: The Amana Colonies

24. His theorem states that subgroup orders divide group orders, his physical quantity is the difference in kinetic and potential energies, and his points are the five equilibrium locations for small bodies in the three-body problem. FTP, name this 18th century French-Italian physicist and mathematician best known for his Analytical Mechanics and Theory of analytical functions.

answer: Joseph-Louis Lagrange, comte de L'Empire (Giuseppe Luigi Lagrangia)

25. It is the catalyst for nickel purification and can be reacted with water to make high-purity hydrogen or synthesis gas. It can also be reacted with methanol to produce acetic acid. These are three important industrial uses for a gas more famous for doing the dirty work of Mount Vesuvius. For 10 points--name this colorless, odorless gas with molecular weight 28.

answer carbon monoxide or CO

26. Frank was the oldest of the four and had a natural taste for crime. John was the leader and had a bloodthirsty temper. Simeon was a rugged man who sought fights. The fourth was William. Together they controlled Seymour, Indiana after the Civil War and pulled off the first American train robbery. For 10 points--name this criminal gang caught by Pinkerton detectives and lynched by the Vigilance Committee in 1868.

answer: Reno Gang

Bonuses

1. Given each opera, identify the ethnicity of the title character--for 10 points each:

A.   Turandot

answer: Chinese

B.   Carmen

answer: gypsy

C.   Fidelio

answer: Spanish

2. Identify these concepts associated with chaos theory--for 10 points each:

A.   This is a plot of generalized coordinates versus corresponding momenta; it is most often seen in its position-momentum variety. The plot cannot cross itself if there are no time-dependent external forces.

answer: phase space plot (diagram, etc.)

B.   This is a fractal pattern in phase space formed by nearly-periodic, chaotic trajectories.

answer: strange attractor

C.   Chaotic motion is characterized by exponential departure of trajectories from one another. This is the name given to that exponent characteristic of the system.

answer: Lyapunov exponent

3. Given each list of philosophers, identify the ancient school of though to which they belonged--for 10 points each:

A.   Ammonius Saccas, Iamblicus, Porphyry

answer: Neoplatonism

B.   Epictetus, Zeno of Citium, Chrysippus

answer: Stoicism

C.   Thales, Anaximander, and Anaximenes

answer: Milesian

4. Given each literary character, identify the medical condition that plagues him or her--for 10 points each:

A.   Dr. Pangloss

answer: syphilis or pox

B.   Edmund Tyrone

answer: tuberculosis (consumption)

C.   Pavel Rusanov

answer: neck cancer (tumor)

5. Identify these works by Emile Durkheim--for 10 points each:

A.   This 1897 work divided its subject into four types; it is primarily a secondary analysis of official statistics.

answer: Suicide

B.   This 1912 work focussed on the aborigines of Australia and argued that religion reaffirms communal values.

answer: The Elementary Forms of Religious Life

C.   This 1893 work drew the important distinction between mechanical and organic solidarity and introduced the term "anomie."

answer: The Division of Labor in Society

6. Anthony Burgess wrote a number of works about other writers. For 10 points each--identify the writer of which each of the following is a biography or study:

A.   Here Comes Everybody

answer: James Joyce

B.   Nothing Like the Sun

answer: William Shakespeare

C.   Flame into Being

answer: D(avid) H(erbert) Lawrence

7. One of the great elements of 20th century drama was an experimental theater established by a Russian actor and a Russian playwright in 1898. For 10 points each--name the actor, the playwright, and their company.

answer: Konstantin Stanislavsky (Konstantin Sergeyevich Alekseyev) and Vladimir Ivanovich Nemirovich-Danchenko,
     Moscow Open (Academic) Art Theater

8. Complete each of the following triples--for 5 points apiece:

A.   subjunctive, imperative, and...

answer: indicative

B.   Clothos, Lachesis, and...

answer: Atropos

C.   abort, retry, and...

answer: Fail (or Ignore)

D.   electron, muon, and...

answer: tauon

E.   Nenya, Vilya, and...

answer: Narya

F.   Henry Valois, Henry Guise, and...

answer: Henry IV Bourbon of Navarre (accept Henry of Navarre)

9. Identify these literary characters that were enslaved--for 10 points each:

A.   He was enslaved by Moroccan pirates, but escaped, eventually becoming a Brazilian planter.

answer: Robinson Crusoe [accept either name] or Robinson Kreuzner

B.   He was sold into slavery in Constantinople, but escaped to join the Russian army.

answer: Don Juan [dohn JOO-uhn]

C.   She was captured by Barbary pirates and sold in Constantinople to her lover who had obtained the gold in Eldorado.

answer: Cunegonde

10. Given each of the following paintings, identify the number of people and the number of dogs in it--for 10 points each. Both numbers must be correct to earn points.

A.   Giorgione's The Tempest

answer: three humans and no dogs

B.   Titian's The Venus of Urbino

answer: three humans and one dog

C.   Manet's The Luncheon on the Grass

answer: four humans and no dogs

11. A common theme in movies is the mismatching of the gender of bodies and personalities. Identify the following in which this occurs--for 10 points each:

A.   This 1991 film features Kenneth Branagh and Emma Thompson as a modern day couple cross-reincarnated from a composer and his love.

answer: Dead Again

B.   This 1984 comedy features Steve Martin's body, the control of half of which passes to the soul of Lily Tomlin's character.

answer: All of Me

C.   This 1992 movie stars Meg Ryan as a nervous bride who swaps her soul with Sydney Walker in a pre-nuptial kiss.

answer: Prelude to a Kiss

12. The western frontier of medieval Poland was formed by two rivers; in 1945 this border was restored at a conference of Roosevelt, Stalin, and Churchill held in Germany.

A.   For 10 points each--name the two rivers that formed this boundary and the conference at which it was established.

answer: Oder-Neisse [NICE] and Potsdam Conference

B.   West Germany never accepted this boundary until 1972 as part of--for 10 more points--what general policy of Chancellor Willy Brandt that normalized relations between the two Germanies?

answer: Ostpolitik [prompt on "Eastern policy" or similar translations]

13. A rocketship with a friend of yours is moving past you at relativistic speeds. For 10 points each--

A.   Does the rocketship appear longer to you, your friend, or neither?

answer: your friend

B.   Does the rocketship appear more massive to you, your friend, or neither?

answer: you

C.   Does your friend's pendulum clock tick more frequently for you, your friend, or neither?

answer: your friend

14. Answer the following questions about Swiss sanitaria--for the stated number of points.

A.   5 points for one, 15 for both--name the novel and protagonist created by Thomas Mann and set in a tuberculosis sanitarium in the Alps.

answer: The Magic Mountain (Der Zauberberg) and Hans Kastorp (accept either name)

B.   5 points for one, 15 for both--name the novel and villain created by Ian Fleming and set in an allergy sanitarium in the Alps.

answer: On Her Majesty's Secret Service, Ernst Stavro Blofeld (accept either name)

15. Given two characters representing opposite personalities, identify the American drama in which they appear--for 10 points apiece:

A.   Blanche duBois and Stella Kowalski

answer: A Streetcar Named Desire

B.   Asagai and George Murchison

answer: A Raisin in the Sun

C.   Jamie and Edmund Tyrone

answer: A Long Day's Journey into Night

16. Answer the following questions about benzene chemistry.

A.   For 5 points each--name the three benzene derivatives created when amine, hydroxyl, and methyl groups are added to a benzene ring.

answer: aniline, phenol, and toluene

B.   For 5 points each--there are three conformations in which a benzene ring may have two different groups attached. Name these three ways, abbreviated o, m, and p.

answer: ortho, meta, and para

17. Answer the following questions about nerve cells:

A.   Besides the normal organelles, neurons contain specialized layers of granular endoplasmic reticulum that synthesize fibrils and minute microtubules. Name them--for 10 points.

answer: Nissl bodies

B.   Neurons are frequently clustered into groups, but these groups have different names depending on whether they are in the central or peripheral nervous system. For 10 points each--give the names for these clusters.

answer: nuclei (sing. nucleus) and ganglia (sing. ganglion)

18. In the Odyssey, the king of Sparta offers Odysseus' son a gift. Odysseus' son refuses it because of the smallness of his home island. For 5 points each--name the two men involved, and--for 10 points each--the gift and the island.

answer: Menelaus and Telemachus; a chariot and team of horses (need both parts) and Ithaca

19. You have a 2-kilogram bob on a massless rod of length 2.5 meters. Assuming that the acceleration due to gravity is 10 meters per second per second:

A.   For 15 points--what is the angular frequency of the pendulum?

answer: two radians per second

B.   For 15 points--what is the cyclical frequency of the graph of kinetic energy versus time?

answer: 2/pi ("two over pi") cycles per second

20. Name these agricultural organizations--for 10 points each:

A.   Founded in 1867 by Oliver Hudson Kelley and associates, it fought low commodity prices, high freight charges, and political corruption.

answer: Patrons of Husbandry (the Grange)

B.   The Grange lost membership in the 1880s to this group of organizations which were perceived as more radical. They were eventually submerged into the Populist movement.

answer: Farmers' Alliances

C.   Founded by Newt Gresham at Point, Texas, in 1902, this was seen as the natural successor to the Farmers' Alliances. It has fought to preserve the family farm and for a closer relationship with labor groups.

answer: National Farmers Union

21. Identify the following Greeks who made important contributions to ancient mathematical astronomy--for 10 points apiece:

A   This man devised the system of nested concentric spheres that became the basis of orreries everywhere.

answer: Eudoxus

B.   This man put forth the epicycle-on-deferent model and proved the mathematical foundations necessary for its use in astronomy.

answer: Apollonius of Perga

C.   This man created the equant concept and studied the results of allowing for uniform angular motion around a point other than the earth.

answer: Hipparchus

22. Identify the following Algerian leaders--for 10 points apiece:

A   This man led the resistance against French colonialists in the 1830s and 1840s and is revered today as a founder of Algeria.

answer: Abd al-Qadir (1808-1883)

B.   This man founded the Algerian National Liberation Front and helped end French occupation. He became the first president of Algeria in 1963.

answer: Ahmed ben Bella (1919-)

C.   This man is the current president of Algeria. [July, 1997]

answer: Liamine Zeroual

23. Identify these incidents from the War for Texan Independence--for 10 points each.

A.   This was the first battle of the war. The Mexicans demanded the surrender of a cannon from this town. It refused and repulsed an armed attempt to seize it.

answer: Battle of Gonzales

B.   After James W. Fannin surrendered 400 soldiers near this town, the Mexicans decided to treat them as pirates rather than prisoners and executed all of them. This massacre was second only to the Alamo in terms of things to be remembered.

answer: the massacre of Goliad

C.   Six weeks after the Alamo, Sam Houston won the decisive victory over the Mexicans. Santa Anna was captured and independence assured. Name this battle.

answer: Battle of San Jacinto [ha-SEEN-toh]

24. There are two major accounts of the location and time period of the evolution of modern man; both are given simple names. One holds that modern man evolved slowly over 2 million years over a substantial fraction of the earth's surface, the other takes its name from a popular 1985 movie and holds that man evolved recently in a single area and then emigrated.

A.   For 5 points each--name these two theories.

answer: multiregional and Out of Africa

B.   For 10 points each--name the acknowledged leader of each faction; one is an anthropologist at the University of Michigan, the other a director at the Natural History Museum, London.

answer: Millard Wolpoff and Christopher Stringer

25. Given the list of prominent Italian families of the Middle Ages and the Renaissance, identify the city in which they competed for power for 10 points apiece.

A.   Orsini, Colonna, Savelli, Frangipanni, Annibaldi

answer: Rome (Roma)

B.   Piccolomini, Rinaldi, Salvini

answer: Siena

C.   Spinola, Grimaldi, Doria

answer: Genoa

26. Answer the following questions about the Cambodian political scene--for 10 points each:

A. This longtime leader of the Khmer Rouge was reportedly apprehended by his own men sometime in June, 1997.

answer: Pol pot (Saloth Sar)

B. This son of King Norodom Sihanouk was co-premier until his ouster; he is now seeking U.S. help for restoration.

answer: Prince Norodom Ranariddh

C. This man ousted Norodom and has been condemned by the United States for initiating the fighting that will probably lead to civil war.

answer: Hun Sen