1. His mother forbids him to read D. H. Lawrence, actually confiscating and returning the book he'd checked out from the library. Because he "likes adventure," he goes to the movies at midnight, returning at two in the morning; but by scene three, his sister Laura tells him she doesn't believe his story. FTP—name this character, the narrator of Tennessee Williams's *The Glass Menagerie*.

Answer: <u>Tom</u> Wingfield

2. "One can even set up quite ridiculous cases," begins a paragraph of a section entitled "Are the variables really blurred?" of a 1935 paper. Created to counteract the Copenhagen interpretation of its subject, it consists of a hammer, a relay, a flask of prussic acid, a Geiger counter, a radioactive source, and a steel chamber. FTP—name this infamous experiment involving mistreatment of a feline.

Answer: Schrödinger's cat

3. The sixth "loved his mother." The fifth was "illustrious." The third and eighth were "benefactors." The seventh was a minor who co-ruled with his mother. The second was Philadelphus, or "brotherly." The first, Soter, or "preserver," was a general of Alexander the Great who continued Egyptian traditions. FTP—name these Macedonian rulers of Egypt whose dynasty ended with the death of Cleopatra's son.

Answer: <u>Ptolemy</u> or <u>Ptolemies</u> or <u>Ptolemaic</u> Dynasty

4. Painters often added an enamel emulsion to a wood template, after which reheating fused the enamel with the cames. Examples at Chartres include the Tree of Jesse and one for Charlemagne. To create them, metallic oxides are added to ash or lime and fused with sand at high temperatures. FTP—name these pieces of decorative art given a color and joined together by narrow lead strips.

Answer: <u>stained glass</u> window(s)

5. NBC aired an animated version of this series from 1982 to 1985. Jack McGee is a reporter who suspects the title character's secret, the result of a massive radiation dose while doing experiments on the effect of stress on physical strength. FTP—name this show based on comic book character Bruce Banner, who, upon becoming angry, becomes huge and green.

Answer: The Incredible Hulk

6. Violators were subject to three-year prison terms, and their victims could collect triple their consequent losses. The Supreme Court used the so-called "rule of reason" to identify violations as this law was tested and upheld in the 1895 *E. C. Knight* case, and later against a New Jersey holding company. Named for an Ohio senator, the brother of a Civil War general—FTP—name this act used to break up Standard Oil.

Answer: Sherman Antitrust Act [do not prompt on "RICO"]

7. "I heard a wise man say, 'Give crowns and pounds and guineas/But not your heart away; Give pearls away and rubies/But keep your fancy free." "I heard him say again, 'The heart out of the bosom/Was never given in vain; Tis paid with sighs a-plenty/And sold for endless rue.' And I am two-and-twenty, And oh, 'tis true, 'tis true." FTP—these are lines from what A.E. Housman poem recalling a certain age?

Answer: "When I Was One-and-Twenty"

8. Water enters these organisms through small openings called *ostia*, and leave through larger ones called *oscula* [AH-skyoo-luh]. Undergoing both sexual and asexual reproduction, these sessile benthic organisms feed using flagellae attached to choanocytes [ko-AA-no-sites] or collar cells. FTP—name this phylum that includes the sponges.

Answer: **Porifera** or **Spongiaria** [accept **sponge**(s) on early buzz]

9. Peter Kurth has written a new biography of this woman, whom Balanchine called a "drunken, fat woman . . . rolling around like a pig." Remembered for arguing that the dance of the future would be like that of ancient Greece, she saw an omen when her children drowned in the Seine during an auto accident. FTP—name this dancer who died when her shawl got tangled in the wheel of her car, strangling her.

Answer: (Angela or) Isadora Duncan

10. Six men are at the bar of the Weary Gentleman saloon when Scratchy Wilson gets drunk and "turns loose with both hands." The town marshal, Jack Potter, who had gone to San Antonio to get married, arrives just in time to meet up with Scratchy as he's turning a street corner. Jack pacifies Scratchy by introducing his new wife, the title character of—FTP—what short story by Stephen Crane?

Answer: "The Bride Comes to Yellow Sky"

11. They had apparently been influenced by Judaist Christians, who believed that Christians were still bound by the law of Moses and that circumcision was essential for salvation. In response Paul sent them a brief account of his life to establish that his apostleship stemmed from divine revelation, then strongly asserted the idea that salvation could be achieved by faith alone in a message that included the phrases "A little leaven leaveneth the whole lump" and "Whatsoever a man soweth, that shall he also reap." FTP name the people of Asia Minor to whom Paul addressed the epistle that follows II Corinthians and precedes Ephesians in the New Testament.

Answer: Galatians

12. Paul Ehrenfest first proposed a classification scheme for them in 1933. First-order ones have discontinuous first derivatives with respect to temperature, while second-order ones have continuous first derivatives, but discontinuous second derivatives. The onset of ferromagnetism, solid-solid, fusion, and vaporization are all examples of—FTP—what conversions of matter from one form to another?

Answer: phase transition(s) or phase change(s) or state change(s)

13. Its Skylight, Haystack, and Whiteface peaks are all over 4,000 feet tall, but the highest is Mount Marcy. Bounded to the south by the Mohawk River valley, they are a southern extension of the Canadian shield, and not part of the Appalachians. FTP—name this mountain range that also includes Algonquin peak in northeastern New York.

Answer: Adirondack Mountains [do not accept "Appalachians"]

14, He supported a 1909 revolt against José Santos Zelaya. In 1921, his uncle became President; after he seized power in a coup, he fled when the US sent troops to remove him from power. With Bryan, his name is attached to a treaty granting the US the option of a canal in Nicaragua. FTP—name this leader who shares his last name with the winner of Nicaragua's 1990 election, a widow whose husband was murdered.

Answer: Emiliano Chamorro

15. Formed in 1989 by Carl Bell, Jeff Abercrombie, and Brett Scallions, this band hit it big after a radio station picked up a song off their second self-produced album, *Porcelain*. That song became *Radio & Records*' number one Modern Rock track of the year in 1998 after it was released off their first studio album, *Sunburn*. FTP—name this band whose hits include "Shimmer," "Hemorrhage," and "Bad Day."

Answer: Fuel

16. Its major foreign interests were in Wisby, on the island of Gotland; at Novgarod; the Norwegian "counter" in Bergen, and in London. While its last official meeting was in 1669, it has never officially dissolved, and probably began with a mutually beneficial arrangement involving fish and salt between Lübeck and Hamburg in 1241. FTP—name this medieval German mercantile league.

Answer: Hanseatic League or Hansa or Hanse

17. His cult was centered in Khmunu, also called Hermopolis. An arbiter for the gods, one legend holds that he protected Isis during her pregnancy and healed Horus after Seth tore out his left eye. Usually depicted as a man with the head of either a baboon or an ibis, he was later identified with Hermes as Hermes Trismegistos. FTP—name this Egyptian moon god who invented writing.

Answer: Thoth or Thout or Dihowtey or Diehuti or Tehuti or Zehuti

18. Attributed after World War I to nearby changes in atmospheric pressures, by 1980, it was listed in the *DSM-III* [three] to describe its incidence in Vietnam veterans. Common symptoms include an inability to relax, depression, and flashbacks "outside the range of usual human experience." FTP—name this anxiety disorder some people develop after an event such as a natural disaster or combat.

Answer: PTSD or posttraumatic stress disorder [accept shell shock or combat fatigue]

19. Thomas Savery's broad patent prevented the eponymous inventor of this device from patenting his superior version. Steam at atmospheric pressure is admitted to a vertical cylinder; when a piston reaches the top, cooling water is sprayed into the cylinder to condense the steam and produce a vacuum, sucking the piston back down. FTP—name this first atmospheric steam engine, later improved by James Watt.

Answer: Newcomen steam engine

20. It is the one-word title of an autobiographical work by August Strindberg describing his interest in alchemy and the occult. Cuban Guillermo Cabrera Infante and Portuguese writer Bernardo Santareno both used the word in titles, the latter flaming controversy over national problems. FTP—what is this word, the title of the first book in a 14th century trilogy about a journey starting in Hell?

Answer: Inferno

21. There were 78 in the men's singles at the 2001 US Open, including four each between Ljubicic [LYOO-bih-chich] and Safin [SAA-fin] and between Agassi and Sampras. Introduced to the Grand Slams in 1970, it was invented by Jim Van Allen who saw a doubles match set run 96 games. FTP—name this scoring device used, except in the final set of a Grand Slam final, to resolve 6-6 ties.

Answer: (set) tiebreakers [that 1967 match went 3-6, 49-47, 22-20]

22. The 1913 murder of Leo Frank in Atlanta was one of the inspirations for Sigmund Livingston's founding this organization, which, in 2000, asked Joseph Lieberman to stop invoking God so often. Its recent efforts have included offering rewards for information on hate crimes, and curbing efforts to blame September 11 on Jews. FTP—name this group that fights anti-Semitism, bigotry, and extremism.

Answer: The Anti-Defamation League (of B'nai B'rith) or ADL

23. In the brain, this amino acid can cause neurotoxicity by over-excitation. Sickle-cell anemia results when it replaces the valine at position 6 of hemoglobin's beta chain. With a negatively-charged side group, it has one more carbon atom than aspartate. FTP—name this amino acid, a component of MSG.

Answer: Glutamate or Glutamic acid [prompt on "G"; do not accept "glutamine"]

- 1. Pulsating with a period of one hour to several weeks, Fabricius discovered the first one in the constellation Cetus in 1596. Answer the following FTPE.
- [10] Name this type of star with variable intensity.

Answer:

Cepheid [SEH-fay-id] variables

[10] What astronomer used Cepheid variables to calculate distances between galaxies in an attempt to measure the age of the Universe?

Answer:

Edwin Hubble

[10] Give the name of the Cepheid variable in Cetus that Fabricius discovered.

Answer:

Mira

- 2. Abraham Lincoln defeated three major opponents in the 1860 Presidential election. Given the party, name the candidate, FTPE. Answers will be given at the end of the bonus.
- [10] Northern Democrats

Answer:

Stephen Arnold Douglas

[10] Southern Democrats

Answer:

John Cabell Breckinridge

[10] Constitutional Union

Answer:

John Bell

- 3. Bet they didn't ask about these in high school. FTPE, give the authors of these controversial 20th century novels which were mostly about S-E-X:
- a) Tropic of Cancer

Answer:

Henry Miller

b) Fear of Flying

Answer:

Erica Jong

c) Portnoy's Complaint

Answer:

Philip Roth

- 4. He killed his brother for jumping over a defense of Palatine hill. FTPE.
- [10] Name this legendary first king of Rome.

Answer:

Romulus

[10] This shepherd discovered Romulus and Remus being nursed by a she-wolf.

Answer:

Faustulus

[10] This god fathered Romulus with Rhea Silvia.

Answer:

Mars

- 5. In 1952, he employed the first air lift used in an underwater excavation. FTPE.
- [10] Name this Frenchman exploring a Roman wreck off the coast of Marseilles.

Answer:

Jacques(-Yves) Cousteau

[10] In 1956 and 1964, Cousteau won Oscars for his documentaries. Name either.

Answer:

The Silent World or Le monde de silence or World Without Sun or Le monde sans soleil

[10] Cousteau's last documentary was on this "Stairway to the Sea."

Answer:

St. Lawrence Seaway

- 6. Name these movies about Nam—Vietnam, that is, FTPE:
- [10] Robert De Niro goes from a steel mill to witnessing the horrors of war in this 1978 Best Picture winner.

Answer:

The Deer Hunter

[10] Joker goes from Parris Island, where Private Pyle commits suicide, to a career as a military journalist, to combat experience in Hue City.

Answer

Full Metal Jacket

[10] Philip Glass's music appears in this movie starring Don Cheadle about the Airborne Infantry's attempt to capture the namesake location.

Answer:

Hamburger Hill

- 7. Answer the following about a literary journal FTPE:
- a) Founded by five authors in 1840, it played a critical role in the Transcendentalist movement during its four-year run. Three subsequent journals of the same name, founded in 1860, 1880, and 1959, sought to recreate its preeminence as a literary review.

Answer:

The Dial

b) Among the five founders were Ralph Waldo Emerson, Bronson Alcott, and this woman, who served as editor for the first two years.

Answer:

Margaret Fuller

c) In 1842 Emerson took over editorship with substantial help from this friend, who later built a cabin on land owned by Emerson and lived there for two years, two months, and two days.

Answer:

Henry David Thoreau

- Name these musical terms, FTPE.
- [10] This five-letter word describes a chord built on the first note of a scale.

Answer:

tonic

[10] Moving from a dominant chord to a tonic is a "perfect" form of this progression of notes indicating the end of a section or work.

Answer:

cadence or cadency or cadenza

[10] From the French for "word," the Franconian is one form of this type of work that often used a standard cadence form in the 1200s.

Answer:

motet

- 9. Name the winning English generals at the following battles, FTPE:
- [10] Waterloo, 1815

Answer:

Arthur Wellesley, 1st Duke of Wellington [accept Wellesley]

[10] Blenheim, 1704

Answer:

John Churchill, 1st Duke of Marlborough [accept J. Churchill]

[10] Megiddo, 1918

Answer:

Edmund Henry Hynman Allenby

- 10. Many contain phycoerythrin, which captures light at great depths. FTPE.
- [10] Name this phylum of algae, which includes the palmaria and polysiphonia, the commercial sources of carageenan and gel agar.

Answer:

red algae or Rhodophyta

[10] In the five-kingdom system, red algae belong to what kingdom?

Answer:

Protista or protist(s)

[10] Carageenan is specifically obtained from this moss, named for a country.

Answer:

Irish moss or Chondrus crispus

- 11. It begins with the birth of Kunta Kinte in West Africa. FTPE.
- [10] Name this influential work by Alex Haley.

Answer:

Roots

[10] The third generation of the legacy is this accomplished gamecock trainer, the son of Kizzy.

Answer:

Chicken George

[10] Haley chronicles his travels to this West African country to learn the history of the Kinte family.

Answer:

The Gambia

- 12. Name these figures from Mexican history, FTPE.
- [10] This priest began the movement for independence with his Grito de Delores in 1810.

Answer:

Father Miguel Hildalgo y Castillo

[10] The French set this Hapsburg prince up as a dictator from 1864 to 1867.

Answer:

Maximilian

[10] He assumed the presidency after a successful revolt against Maximilian but was ousted by Diaz in 1876

Answer:

Benito Juarez

- 13. Name these game shows hosted by Dick Clark, FTPE.
- [10] This show's bonus round required giving *nondescriptive* lists for six categories in 60 seconds.

Answer:

The \$25,000 Pyramid or The \$100,000 Pyramid

[10] Adapted from the UK, Clark hosted this short-lived 2000 show on CBS, in which one lucky contestant faced the "Wonderwall" for a chance at one million dollars.

Answer: Winning Lines

[10] This early 1990s show, a revival of *The Who, What, and Where Game*, emphasized current events and started with a 60-second "Sprint."

Answer: The <u>Challengers</u>

14. Identify the following terms from classical and statistical mechanics, FTPE:

[10] This term, coined by Gibbs, describes a system in which the number of particles, the volume, and the temperature of the system are held constant.

Answer: canonical

[10] This principle implies that any classical, quadratic degree of freedom in an equation of motion contributes one-half times the Boltzmann's constant times the temperature to the internal energy of the system.

Answer: <u>equipartition</u> principle

[10] This quantity, denoted by capital lambda, represents the magnitude of translational fluctuations of a particle caused by its thermal background energy.

Answer: thermal de Broglie wavelength

- 15. 30-20-10. Name the artist from works.
- [30] The Wayfarer and The Extraction of the Stone of Madness
- [20] The Ship of Fools and The Temptation of Saint Anthony
- [10] The Garden of Earthly Delights

Answer: Hieronymus <u>Bosch</u> or Jerome van <u>Aken</u> (or <u>Aquen</u>) or Jeroen <u>Anthoniszoon</u>

- 16. Name these members of the House of Saud [sod], FTPE.
- [10] The 11th son of King Ibn Saud, he became king in 1982 after the death of his half-brother King Khalid.

Answer: King Fahd

[10] After King Fahd had a stroke in 1995, he passed power to this 72-year-old man.

Answer: Crown Prince Abdullah

[10] This smooth-talking former fighter pilot was named Ambassador to the US in 1983 at 34.

Answer: Prince Bandar

- 17. Name these title heroines, FTPE:
- [10] The daughter of Chris Christopherson, she falls in love with an Irish sailor named Matt Burke in a 1922 play.

Answer: Anna Christie

[10] Torn between her need to be faithful to her older husband, Alexis, and her love for Count Vronsky, she finds solace in suicide.

Answer: Anna Karenina

10] A section of Finnegans Wake that was published separately bore the name of this female character, who represents the river Liffey.

Answer: Anna Livia Plurabelle(prompt on ALP--it was published under her full name)

18. Answer the following about enzyme kinetics FTP each.

[10] In a reaction, enzymes reduce this, the energy required to form the transition state.

Answer: activation energy

[10] This equation, which relates the rate of an enzymatic reaction to the concentration of substrate, the maximum rate of the reaction, and its eponymous constant, is derived using the steady-state approximation.

Answer: <u>Michaelis-Menten</u> equation

[10] The rate of enzyme catalyzed reactions is also affected by the presence of these, which are compounds that combine with the enzyme thereby lowering its efficiency.

Answer: inhibitors

19. Given a phrase, name the specific Article or Amendment of the US Constitution that so states, FTPE. "The ratification of the conventions of nine States shall be sufficient for the establishment of this Constitution." [10] Answer: Article VII [7] "The terms of the President and Vice-President shall end at noon on the 20th day of January". [10] Amendment XX [20] Answer: "Full faith and credit shall be given in each State to the public acts, records, and judicial proceeding of every other [10] State." Answer: Article IV [4] 20. Given an African country and a river, name the country to its south that shares the river as part of their common border, FTPE. Ravuma River, Tanzania [10] Answer: Mozambique Orange, Namibia [10] Answer: South Africa Mbomou, Central African Republic [10] Answer: Democratic Republic of the Congo [accept Zaire] 21. It is the largest of Japan's Volcano Islands. 10 points per answer. [10] Name this location of a February 1945 battle. Answer: Iwo Jima A photograph of four Marines planting a flag immortalizes the Battle of Iwo Jima. Name the mountain where this [20] flag was placed, and the photographer who took the picture. Mount Suribachi; Joseph "Joe" Rosenthal 22. Name these baseball players who have the same names, FTPE. One had an 8-19 record for San Diego, while the other, a former Met, spent time with three of their affiliates. [10] Answer: Bobby Jones One spent his third season as a White Sox catcher, while the other primarily pinch hits for the Mets. [10] Answer: Mark Johnson One spent his second season with the Brewers after being an infielder for the Padres and Mets. The other made his [10] major league début with Toronto.

Answer: Luis Lopez

23. This religion's first written record is the *Kojiki*, or records of ancient matters, completed in AD 712.

[5] Name this religion of Japan.

> Answer: Shintoism

[10] This name is given to the decorative portal used to enter Shinto temples.

Answer:

Junichiro Koizumi visited this shrine dedicated to Japan's war dead, angering its Asian neighbors. [15]

> Answer: Yasukuni Jinja Shrine