1. (UNC/CS) It was written mostly in Aix-la-Chappelle [EYE la-sha-PELL], but finished in its namesake city. One of its authors was a future President, and another was an exile Frenchman who was the US Ambassador to Spain. This document was controversial as the territory it suggested obtaining was probably intended to be a stronghold of slavery. FTP, name this documents written in 1854 by Pierre Soule [soo-LAY], James M. Mason, and James Buchanan that advocated annexation or conquest of Cuba.

Answer: The Ostend Manifesto

2. (Sh/CS) Discovered and described in a manuscript by Ibn Sahl circa 984, it was rediscovered by Thomas Harriot in 1602. In 1637 it was derived in terms of sines by Descartes; it can also be derived from Fermat's principle. In 1621 it was discovered for keeps by the Dutch mathematician from whom the law takes its name. FTP, name this simple formula used to calculate the refraction of light traveling between two media of differing refractive index.

Answer: Snell's Law

3. (UNC/CS) This band's seer, upon seeing a dragon sneak up and eat a child on his celery bed, called him Archemoros, "the beginning of doom." Things went downhill for the expedition after this: Zeus toasted one member for his claim that no godhead could stop his attack, and another mortally wounded warrior was denied immortality after Athena spotted him eating his opponent's brains. The prophet, also killed in the attack, had foreseen the entire disaster -- but his wife had made him go after being bribed. The attackers' only survivor was Adrastus. Subject of an Aeschylus play, FTP name this doomed expedition that saw the deaths of Eteocles and Polynices, two brothers feuding over the fate of a city.

Answer: The Seven Against Thebes

4. (UNC/CS) In its introduction the author, Peter Shaffer says that he knew nothing of the crime that inspired this play except for the actual act, and explains that his goal was to build a "mental world in which the act was comprehensible." In a lead role that involves nudity, Daniel Radcliffe is reportedly planning to star in a stage revival next year. For ten points, name this 1973 play in which Martin Dysart tries to discover what led Alan Strang to commit the horrible act of blinding his beloved horses.

Answer: Equus

5. (UNC/CS) He performs the theme music for the news series *CBS Sunday Morning*. His first album contained concertos by Haydn, Mozart, and Hummel, and his first album to win a Grammy Award was titled Black Codes From The Underground. Other projects he has worked on include Blood on the Fields, Jazz at Lincoln Center, and Jazz for Young People. FTP name this trumpeter born in 1961, the younger brother of Branford.

Answer: Wynton Marsalis

6. (UNC/CS) They look alike because they were once the same! Within evolutionary science, vestigial structures in animals and the otherwise-inexplicable similarities between a whale flipper and a rat claw are easily explained by it. FTP, name this process by which members of a single species can change over time to fill *many* evolutionary niches.

Answer: <u>divergent evolution</u> or <u>adaptive radiation</u> [prompt on evolution or radiation]

7. (Val/CS) An unnamed sailor strangles a shipmate during a storm and is locked in the brig for two months, awaiting trial. He escapes by diving overboard in shallow water and is rescued by the captain of a nearby ship. He is assumed by all to have committed suicide and so, with the help of the kindly captain, he secretly sneaks off the other ship and swims to a nearby island to begin a new life. FTP so goes what novella by Joseph Conrad?

Answer: The <u>Secret-Sharer</u>

8. (NGC) Originating in September 1921, it originally awarded the Golden Mermaid Trophy. It had been nationally televised since 1954 but lost its contract with ABC after 2004. As a result, Deidre Downs held this title for 16 months because the competition was postponed for four months. For ten points, what is this scholarship contest now seen on CMT, which promoters insist is not a beauty pageant?

Answer: Miss America Pageant or Miss America Contest

9. (JK) This synthetic metal with no known uses was first synthesized by Russian scientists in 1964 and later in 1969 by researchers at Cal-Berkeley who did so by creating high energy collisions between californium-249 and carbon-12.

This led to a controversy as the Russian group wanted to call it Kurchatovium, but they were able to take some solace in that the fact that the next element in the periodic table, Dubnium, was named after the location this element was found. Known as Unnilquadium until 1997, FTP, identify this element with atomic number 104 that is named after a scientist famed for his gold foil experiment.

Answer: Rutherfordium (prompt on Unnilquadium)

10. (UNC/CS) On a deleted scene from *The Ali G Show*, this man had to explain that there is no scientific link between bilingualism and bisexuality. Recently acclaimed by a magazine poll as "the most important living intellectual in the world" and by another group as the most-cited living scholar, this member of the Industrial Workers of the World is well-known for his status in two significantly different academic fields. FTP, name this MIT professor, best known for his radical political views and being the creator of the generative-grammar school of linguistics.

Answer: Noam Chomsky

11. (AR/JV) This man's wealthy father was Olorus, named after a king of Thrace. Elected an Athenian general in 424 BCE, his failure at the Battle of Amphipolis led to his exile, which allowed him to view the conflict from both sides and provided an opportunity to do a great deal of research. Despite crafting most if not all of the speeches found in his work, his collection and comparison of evidence combined with a fairly consistent and rational account of events is highly regarded among historians today. FTP name this writer and statesmen, considered by many to be the first true historian, author of the *History of the Peloponnesian War*.

Answer: Thucydides

12. (UTK/SK) They are main components of cephalins and Leicithin and play an important role in the explanatory utility of the Fluid Mosaic Model due to their simultaneous hydrophobic and hydrophilic natures. Serine, choline, ethanolamine, and inositol are commonly found in these macromolecules, which are produced when one fatty acid chain of a triglyceride is attached to a to a polar "head" consisting of an alcohol and a group containing the chemical element from which the macromolecule gets its name. For 10 points, name these molecules that make up the majority of cellular membranes, consisting of two alcohols, a fatty acid, and a phosphate group.

Answer: Phospholipid

13. (NGC) Nearly six feet tall, she called herself "a bulldog running along at the feet of Jesus, barking at what he doesn't like." Between 1900 and 1910 she was arrested 30 times but paid her jail fines through speaking engagements and sales of souvenir hatchets. For ten points, name this member of the Women's Christian Temperance Union famed for attacking saloons.

Answer: Carrie Nation

14. (UTK/SK) In the lower left corner sits an old man aloof from the rest of the figures in this painting who is said to resemble an old advisor of the artist, while along the right side stand two men looking through books, most likely stock prices or sale values. The back left wall is filled with white-framed windows, allowing view into another room, and in the middle of the room a man sits in a chair reading a newspaper in front of a long table covered with a white-cloudlike material being tended to by several men. Created when its artist visited the American South and depicting a major industry of Louisiana at the time, for 10 points name this 1873 painting by Edgar Degas.

Answer: The Cotton Exchange in New Orleans

15. (AR/JV) With an annual fish catch of over 500,000 and nearly 2 million miles of shoreline, this body of water has 45,000 people from 800 sites working directly with the fishing industry which has had a significant impact environmentally on the endemic cichlid fish species. The major rivers that flow into this lake include Ruzizi and the Malagarasi, which is Tanzania's second longest. FTP name this lake in Southwestern Africa, the second largest and deepest lake in Africa.

Answer: Lake Tanganyika

16. (NGC) Of the first 24 defendants, only three, including radio commentator Hanz Fritzsche, were acquitted of all charges. Twelve were sentenced to hang, though Hermann Goering committed suicide before his execution. The majority of defendants claimed they were unknowing pawns or that they were following orders. For ten points, name this post-World War II war-crimes tribunal.

Answer:

The Nuremberg Trials (accept Nurnberg Trials)

17. (AR/JV/CS) Voltaire and Ezra Pound among others point to the description of the author in Chapter 10 of this work, in order to emphasize the mere humanity of the author. The book itself is organized into unconnected chapters based on relevant themes, such as righteousness, propriety, loyalty and filial piety. Begun during the Spring and Autumn Period and finally compiled near the end of the Warring States period, it was probably compiled by the author's students such as Mencius. FTP name this work, part of the Four Books, a selection of sayings and aphorisms attributed to Confucius.

Answer:

The Analects

18. (MM/SK) He is the namesake of a kind of adsorption which depends for cohesion between gas and solid on forces, actually discovered but not named for Fritz London. Realizing that the ideal model of fluids was inadequate, he observed that while the model assumes molecules to be ideal points, true molecules have an appreciable volume particularly at high pressures. This led to his realization that the forces between molecules in fluids can be non-trivial and must also be compensated for. Creating a namesake "Equation of State" to develop his theories, FTP name this Dutch scientist, winner of the 1909 Nobel Prize for Physics and namesake for all arbitrary intermolecular forces.

Answer:

Johannes Diderik van der Waals

19. (DU/JV) The story begins with the title character's parents, George and Hazel, sitting and watching TV, though George is wearing headphones and bags of weights. Just then, the title character appears disrupting the telecast, declaring himself an Emperor, and dancing all over the set of the television show. The US Handicapper General appears and shoots the two people, which George and Hazel really couldn't care less about as long as their show comes back on. FTP; name this dystopic short story by Kurt Vonnegut.

Answer:

Harrison Bergeron

20. (NGC) First developed by Ericsson, it was announced in May 1999 by a coalition including IBM, Intel, Toshiba, and Nokia. Named for the Danish King Harold I who unified Denmark, Norway and Sweden, it likewise unifies different technologies such as computers, cell phones, PDAs, and printers through a short-range radio frequency. FTP, name this device specification that sounds like a dentist's nightmare.

Answer:

Bluetooth

21. (TV/CS) In more recent times, this song has become associated with England Rugby after a break-out performance by Chris Oti. Historically, it is attributed to Wallis Willis who claimed inspiration from the Red River, which reminded him of the Jordan. In the song, Jesus is expected to wash the singer's sins away while a band of angels is coming after the singer, coming for to carry him home. FTP, name this spiritual folk song often associated with the Underground Railroad.

Answer:

"Swing Low, Sweet Chariot"

22. (UNC/CS) One characteristic of the Java programming language is platform independence. To achieve platform independence, the code is compiled to bytecode and run on this, a program written in native code on the host hardware that interprets and executes generic Java bytecode. FTP name this program sometimes abbreviated "VM" or "JVM."

Answer:

Java Virtual Machine [prompt on early buzz with initials]

- 1. (JV/CS) He composed Fanfare for the Common Man, a patriotic salute to the soldiers of World War II, but was later blacklisted during the Red Scare of the 1950's. FTPE:
- A. Name this 20th century American composer of the film scores *The Heiress* and *The Red Pony* and the ballet *Rodeo*.

Answer: Aaron Copland

B. Copland's most famous ballet is probably this orchestral suite set in a Pennsylvania farmhouse, located in the title region, that includes the Shaker melody "Simple Gifts."

Appalachian Spring

C. An earlier ballet of Copland's was this piece that begins with the song "The Open Prairie" and tells the story of a famous outlaw.

Answer: Billy the Kid

2. (Sh/CS) Given the chemical formula of a polyatomic ion, give me its common name F5PE and tell me its normal valence (or oxidation state, if you prefer) for another 5:

a) Bicarbonate

Answer:

HCO; 3 minus

b) Nitrate

Answer:

N O3; 1 minus

c) Ammonium

Answer:

N H4; 1 plus

- 3. (UNC/CS) FTPE answer the following questions about a poem.
- 10: Lord Byron wrote "The Vision of Judgment" as a parody of this Poet Laureate's "A Vision of Judgment," a hymn of praise for the recently deceased king of England.

Answer:

Robert Southey

10: Lord Byron decided to parody Southey because Southey accused Byron of living in a pool of incest, which Southey also referred to as the Satanic School, with this man, author of "Ozymandias."

Percy Bysshe Shellev

10-This is the king at the center of the "Vision of Judgment" poems. He was crazy as a bedbug before his death.

Answer:

George III

- (JV/CS) Name these Supreme Court cases of the mid-20th century FTSNOP.
- (5) This 1954 case overturned Plessy v. Ferguson in abolishing the "separate but equal" clause, allowing a black girl in Kansas to go to a white school.

Brown v. Board of Education of Topeka, KS Answer:

(10) This 1966 case overturned the conviction of a man based on a confession he made while in custody, without being told that he was entitled to have an attorney present during questioning.

Miranda v. Arizona

(15) This 1969 case upheld the right of several high school students to wear black armbands to protest the Vietnam War.

Answer:

Tinker v. Des Moines

- (UNC/CS) Name these figures of the Protestant Reformation for ten points each.
- [10] This French author of Institutes of Christian Religion started a second-wave Reformation movement in Geneva which took roots in Scotland, the Netherlands and Western areas of the Holy Roman Empire. His doctrine was characterized by the double decree of predestination.

Answer:

John Calvin

[10] A Dutch Christian humanist scholar who wrote biting satires of Roman Catholic religious practices, this author of The Praise of Folly also produced a new, more accurate Latin translation of the New Testament, which Martin Luther used for his German translation in 1522.

Answer:

Desiderius Erasmus of Rotterdam

[10] Swiss leader of a Reformation movement similar to Luther's, based in Zurich. Unlike Luther, he believed that good works and not just grace were necessary for salvation.

Answer:

Huldrych (Ulrich) Zwingli

6. (NGC) For ten points each, identify the words for which RPG is an acronym in the following cases.

A) A genre of video games.

Answer: Role Playing Game

B) An anti-tank weapon.

Answer: Rocket-Propelled/Powered Grenade

C) A basketball statistic.

Answer: Rebounds Per Game

7. (CS)Three resistors – respectively, 6 ohms, 4 ohms, and 2 ohms, are connected in a series with a 3-volt battery. FTPE:

a) How much current will flow through the circuit?

Answer: 0.25 amps, or $\frac{1}{4}$ amp [I = V/R = $\frac{3}{12}$]

b) What is the voltage across the 6 ohm resistor?

Answer: 1.5 volts, or 1 ½ volts

c) If the resistors were connected in parallel rather than in series, what would be the effective resistance of the circuit? Answer: 12/11 ohms, or 1 1/11 ohms, or roughly 1.1 ohms $(1/R = 1/R_1 + 1/R_2 + 1/R_3 = 1/6 + \frac{1}{4} + \frac{1}{2} = 11/12]$

- 8. (DF/SK) It was dedicated to Frank Merlo, the longtime companion of its author, and it contains more comedic elements than its playwright tended to include. Written specifically for the actress Anna Magnani, who won an Academy Award for her work in the film, it concerns an Italian widow in New Orleans who vows to remain celibate until she meets a truck driver who has the same marking as her husband did. For 10 points each:
- 1. Name this play, whose title comes from the body art which is so important to the widow.

Answer: The Rose Tattoo

2. Name the playwright behind the Rose Tattoo, also famous for The Glass Menagerie and Cat on a Hot Tin Roof.

Answer: Tennessee Williams

3. Four years before the film version of *The Rose Tattoo*, Vivien Leigh won an Academy Award for her portrayal of this Williams character, who comes to New Orleans to visit her sister and spirals into insanity after her rape by Stanley Kowalski in *A Streetcar Named Desire*.

Answer: Blanche Dubois

(AR/JV) Name these Russian rebellions FTPE:

(10) Also known as the October Revolution, this 1917 uprising led by Vladimir Lenin and the namesake faction of the Social-Democratic Labor party, was the first major successful Communist Revolution.

Answer: Bolshevik Revolution

(10) Named after the month in which it occurred, this failed 1825 uprising saw a number of Imperial Russian officers and 3,000 soldiers assemble in Senate Square to deny allegiance to Tsar Nicholas I.

Answer: Decembrist Revolt

(10) The largest peasant revolt to occur in Russia, this 1773-1774 rebellion is also called Pugachev's Rebellion, after the leader of this namesake group of horsemen who claimed to be Peter III.

Answer: Cossack Rebellion

10. (JV) His works are marked by the effect of chiaroscuro, or a drastic use of light and shadow to create drama. FTPE:

A. Name this Italian artist, often seen as a response to mannerism during the Counter-Reformation, who painted many religious subjects like *The Crucifixion of St. Peter* and *The Conversion of Paul*.

Answer: Michaelangelo Merisi da Caravaggio

B. Caravaggio is considered one the first of this school of art, a dark, dramatic, and visceral style that replaced Renaissance and mannerist values and was later replaced by the Rococo.

Answer: Baroque art

C. One of Carravaggio's most famous pieces is this one which shows Jesus standing to the left, pointing towards the title figure who sits counting taxes.

Answer: The Calling of St. Matthew (many different titles, just accept St. Matthew)

11. (CS) When you say a disease has "flu-like symptoms", that doesn't exactly narrow it down much, does it? FTPE name these deadly diseases with such symptoms:

Similar to the St. Louis encephalitis virus, this flavivirus is relatively new to the U.S. While most people who get it suffer only mild symptoms, it can develop into neuroinvasive diseases such as its namesake encephalitis and meningitis.

Answer: West Nile virus

This rare virus, spread by deer mice and possibly other rodents, causes a pulmonary disorder that has a mortality rate of over 50%. A 2001 outbreak in South America got less attention than the 1993 New Mexico outbreak where it was first identified in the U.S.

Answer: hantavirus

Large changes occur in the antigen of the A strain of this virus about every ten years, accounting for deadly worldwide epidemics that began in 1775, 1847, 1857, and 1873. The 1918-1919 pandemic claimed more lives than the bubonic plague did during the "Black Death."

Answer:

influenza or flu itself

- 12. (NGC/CS) Name the poetry meter, for ten points each
- a) An accented syllable followed by two unaccented syllables, as in the lines "This is the forest primeval" from Longfellow's "Evangeline"

Answer:

dactyl (ic)

b) An unaccented syllable followed by an accented syllable as in Dickinson's "I heard a fly buzz when I died"

Answer: <u>iamb</u> (ic)

c) Two unaccented syllables followed by an accented syllable, as in the lines "The Assyrian came down like the wolf on the fold" from Byron's "The Destruction of Sennacherib"

Answer:

anapest (ic)

- 13. (UTK/SK/CS) Answer these questions about Colonial-era America, for 10 points each.
- 1. Name the colony founded mostly on Manhattan island in 1624, whose best known leader was Peter Stuyvesant.

Answer: New Netherlands or New Holland [accept New Amsterdam which is technically just one part]

2. This fell in a storm in 1856 but remains revered for its role in thwarting a 1687 attempt by the hated Sir Edmund Andros to reclaim the Connecticut colony's governing document.

Answer:

Charter Oak

3. Banished from Massachusetts in 1636, this man went to Narragansett Bay and established Rhode Island.

Answer:

Roger Williams

- 14. (NGC/CS) Given a list of recent American Olympic athletes, name the sport in which they competed FTPE
- a) Joey Cheek, Shawni Davis, Apollo Anton Ohno

Answer:

Men's **Speedskating** [prompt on *skating* or *ice skating*]

b) Sasha Cohen, Sarah Hughes,

Answer:

Women's Figure Skating [prompt on skating or ice skating; do not accept ice dancing]

c) Jeff Pain, Maya Pederson, Duff Gibson

Answer:

Skeleton

- 15. (OK/SK/CS) Identify each of the following island territories governed by the United States, 10 points each.
- 1. This island in the northern Pacific, about ¾ of the way from Hawaii to the Philippines, includes a strategically important military base. Its administrative capital is Hagatna or Agana.

Answer:

Guam

2. Purchased from Denmark in 1917, this Caribbean island group includes St. Thomas, St Croix [CROY], St. John, and Water Island, and lay very close to a similarly named British possession which included Tortola and Anegada islands.

Answer: U.S. Virgin Islands or Danish West Indian Islands

3. Established as a US territory by the Treaty of Berlin in 1899, this group of islands south of the Independent Nation of the same name contains Rose Atoll, the southernmost bit of American territory. Wikipedia insists that its capital is Fagotago and not Pago Pago, as the CIA World Factbook maintains.

Answer:

American Samoa [prompt on Samoa; do not accept Western Samoa]

- 16. (OK/SK) As it was enlarged it later acquired two additional complexes, including Monowitz which employed slave labor for I.G. Farben. It is, however, more notorious for its extermination facilities as well as the medical experiments conducted by Josef Mengele there. For 10 points each:
- 1. Name this death camp, the largest used by the Nazis, located some 60 miles west of Krakow in Poland.

Answer: Auschwitz

2. The first addition to the original Auschwitz was this camp, later the site of most of the actual exterminations and of Mengele's torture chambers.

Answer:

Birkenau

3. Auschwitz, like many other camps, bore this infamous three-word German phrase over its gates, meaning "Work will set you free".

Answer:

Arbeit macht frei

- 17. (NGC/CS) For ten points each, identify the chess terms.
- a) This maneuver involves moving the king two spaces to the left or right and moving the rook on that side to the square on the other side of the king.

Answer:

Castle or Castling

b) This term comes from an ancient Persian phrase meaning "the king is defeated"

Answer:

Checkmate

c) This specific type of draw occurs when an opponent's king is not in 'check' but cannot move without being in check and no other piece can move.

Answer:

Stalemate

- 18. (JK) Identify the following ideas and techniques of boolean algebra FTPE.
- [10] This type of mathematical table expresses whether or not a statement is valid for all possible values of the variables.

Answer:

truth table

[10] One of the laws named after this British mathematician states that the negation of p and q is equivalent to the negation of p or the negation of q.

Answer:

Augustus De Morgan

[10] This map diagram created by a Bell Labs engineer can be used to simplify a boolean logic expression. This is done by grouping the true values together to obtain the expression as either a product of sums or sum of products.

Answer:

Karnaugh map (also accept Veitch diagram or map, K-map, or KV-map)

- 19. (BB/SK) For 10 points each, answer some stuff about minerals.
- 1. Composed of a discontinuous and continuous branch, this Y-shaped diagram shows the progression of minerals produced by cooling magma.

Answer:

Bowen's reaction series

2. This mineral, which crystallizes first in the discontinuous branch of the Bowen's series, has end members forsterite and fayalite. In gem form, it is the birthstone for August

Answer:

olivine (accept peridot)

3. Following Feldspars on the discontinuous branch of Bowen's series is a polysilicate mica-based rock named for this French scientist, the first to study the optical properties of mica. His investigations into the relationship between electrical current and magnetism led to a law named for him and Felix Savart.

Answer:

Jean-Baptiste **Biot** [bee-yo, but accept plausible variants]

20. (OU/DM) Two Japanese authors have earned Nobel Prizes in literature. Identify them from works F15PE.

A. The Day He Himself Shall Wipe My Tears Away, Nip the Buds, Shoot the Kids, Rouse Up O Young Men of the New Age!, and A Personal Matter

Answer:

Oe Kenzaburo or Kenzaburo Oe

B. The Dancing Girl of Izu, Thousand Cranes, The Sound of the Mountain, and The Master of Go

Answer:

Kawabata Yasunari or Yasunari Kawabata

- 21. (AR/SK) Among his accomplishments is his mammoth work *Novum Organum*, in which he laid out principles for the proper use of inductive reasoning. For 10 points each:
- 1. Name this English scientist whose name is practically synonymous with the so-called "Scientific Method".

Answer:

Francis Bacon

2. Novum Organum also described four sets of common mistakes made by people in drawing inferences, name respectively for the Tribe, Cave, Marketplace, and Theater and all under this common label.

Answer:

Idols of the Mind

3. Bacon is also responsible for this utopian novel written in 1626 named for the mythological land of Bensalem, an island nation located somewhere off the coast of the New Continent of America and not in the Mediterranean like is ancient counterpart, and famous for its grand temple of Science called Solomon's House.

Answer:

The New Atlantis