1. An early battle here saw Quintus Catulus defeat the father of the triumvir Lepidus in a brief civil war in 77 BC. This structure was a component of the Flaminian Way, and was built in 109 BCE by Marcus Aemilius Scaurus. Shortly after a later battle here, the Edict of Milan was issued. For 10 points— name this battle at which Maxentius lost to Constantine, who allegedly saw a flaming cross in the sky beforehand.
answer: Battle of Milvian Bridge

2. When insertions occur in a sorted order, these structures perform better when later access is random. Like a structure invented by Tarjan and Sleator, it is self-balancing through a rotation operation, but unlike a splay tree a lookup does not modify its structure. At least as balanced as a red-black tree, for 10 points— identify this tree data structure in which the height of two subtrees of a node differs by at most one, named for the initials of its formulators.
answer: Adelson-Velskii and Landis tree

3. A leukemia patient recalls an educational birthday present in one of this man's poems. This author of "The Transparent Man" said his favorite of his own works was Venetian Vespers. A Polish man bleeds to death after digging a grave in one of his poems, and he also wrote about a girl "running to fat" who hangs out with Matthew Arnold. For 10 points— name this author of "More Light! More Light!" and "The Dover Bitch."
answer: Anthony Hecht

4. The first person to announce this action, David Berst, immediately fainted. It has been voted down the last 29 times it was proposed for those who reoffend in a five-year window. 1987 was the only time the Committee on Infractions voted to use it to punish the most severe recruiting violations. For 10 points— name this sanction which cancelled one and a half seasons of Southern Methodist University football.
answer: the NCAA football death penalty

5. The prominence of soldiers is discussed in the fragmentary sixteenth and last of these works. The fourth addresses the nobility's exemption from the justice system, and the sixth one, spurred by the engagement of Postumus, discusses the shortcomings of women. Written at the same time as Martial's epigrams and displaying a similar attitude, for 10 points— name these wry observations about Roman life by Juvenal.
answer: the Satires
6. Shortly after hearing a plan to earn money on Greek Street, one character in this play collapses of a heart attack and reveals that the unseen MacGregor had a sexual encounter with Jessie in a taxi. Earlier, a symbolic glass of water adds to (*) Lenny's long list of women he has turned down, and Ruth chooses not to return to America. For 10 points— name this Harold Pinter play that starts with Teddy's family reunion.

answer: The Homecoming

7. Totness is the center of the Coronie province in this country, which also includes Saramacca and Nickerie. Engaged in a long dispute with its western neighbor over oil rights in the New River Triangle, this country's northeast is dominated by the Brokopondo Reservoir. It borders (*) Brazil to the south, Guyana to the west, and French Guyana to the east. For 10 points— name this former Dutch colony.

answer: Republic of Suriname

8. He wrote biographies of Turgot and Voltaire, and he outlined nine past epochs and one yet to come in the Sketch for a Historical Picture of the Progress of the Human Mind. He may be best known for an eponymous type of (*) candidate who can best any other candidate in a one-on-one matchup. For 10 points— identify this namesake of a type of "winner" produced by instant runoff voting.

answer: Marie Jean Antoine Nicolas de Caritat, marquis de Condorcet

9. He led an army wielding scythes in one victory and was later given a pagan burial mound. His movement attempted to defend the Golden Liberty against the Confederation of (*) Targowica, but was unable to prevent the Third Partition. Earlier, he won the Battle of Ninety-Six and blockaded Charleston while serving under Gates and Greene. For 10 points— name this Polish patriot who fought in the American Revolution.

answer: Tadeusz Andrzej Bonawentura Kosciuszko

10. Like National Geographic, its original covers always had a black-and-white image against a yellow background. It argued against the "Tradition of Quality" after it was founded by Andre Bazin. The first issue reviewed (*) Give Us the Day and Miracle in Milan, and such writers as Jean-Luc Goddard went on to put their New Wave auteur theories into action. For 10 points— name this "world's most influential film magazine."

answer: Cahiers du Cinema or Notebooks on Cinema

11. Thomas Cowling proved in 1934 that this effect could not be both self-sustaining and have an axis of symmetry. The Glatzmaier-Roberts model is one computational model of this effect, which is believed to maintain itself through (*) Coriolis forces and to occur through the convective circulation of molten liquid in the outer core. Operating through self-induction of electric fields and opposing currents, for 10 points— identify this effect which is believed to generate the Earth's magnetic field.

answer: geodynamo effect (accept anything with dynamo)

12. The Hynyani and the Umniati aircraft were shot down in this country during the Second Chimuringa war. Until the Lancaster House conference led to Lord Soames taking over in its last year of existence, this country was led by the issuer of the (*) Unilateral Declaration of Independence, Ian Smith, who attempted to preserve white rule. For 10 points, name this country which lasted from 1965 to 1980, when it became Zimbabwe.

answer: Rhodesia (prompt on Zimbabwe before 1980 is read)

13. The protagonist of this show meets his boss's girlfriend after she puts her clothes through the dishwasher and patronizes his job at The Work Bench. Assisted by Josie and Sock, the title character pines for Andi and learns at age 21 that his (*) pampered life is due to his parents selling his soul to the devil. For 10 points— name this CW show in which Sam Oliver must serve as a gatherer of souls for Hell.

answer: Reaper
14. One of these people patronized the alchemist Geber and formed a court including the founders of the Mutazsili, Malikiyah, and Hanaiyah schools. Another, Al ar-Rida, was allegedly poisoned by his political rival. The last one underwent the (*) "ghaybah," often translated as "occultation," and is considered "hidden" by the Twelvers. For 10 points—name these original leaders of Shia Islam.
   answer: imams

15. The writings of Bridget of Sweden were the major source for this painting, which was commissioned by to illustrate the wings carved by Niclaus Hagnower. Now found in the Unterlinden museum in Colmar, France, it includes the Concert of Angels and the (*) Temptation of St. Anthony, the patron of the monastery where it was created. For 10 points—name this Matthias Grünewald-painted altarpiece.
   answer: Isenheim Altarpiece

16. This battle occurred shortly after a Frank Hastings-led fleet including the Karteria sank seven opponents in the Bay of Salona, and it was immediately followed by the Assembly of Troezene. Edward (*) Codrington's allied fleet defeated Tahir Pasha, an admiral of Muhammad Ali, in this 1827 clash, the last battle fought between wooden ships. For 10 points—name this key naval battle in the War of Greek Independence.
   answer: Battle of Navarino

17. Two weeks before its premiere, the setting of this opera was changed from Scotland. The ballad sung by Senta explains the title character's predicament and recalls the overture on the opening "Johohoe!" Including the "Spinning Chorus," the libretto of this (*) Norway-set opera is based on Captain Marryat's novel. For 10 points—name this Richard Wagner opera about Daland and his cursed ship.
   answer: The Flying Dutchman (or Der Fliegende Holländer)

18. Extending down the interventricular septum, they form desmosomes with muscle. They are responsible for the QRS complex and work by depleting tubular calcium stores. They are shaped like a (*) barrel, and reach up the walls of the ventricles to stimulate the epicardium. Stimulated by the SA and AV nodes, for 10 points—name these components that carry the conduction of the bundle of His to the rest of the heart.
   answer: Purkinje fibers (do not accept "Purkinje cells")

19. First appearing just before "Fire and Desire" on the album Street Songs, this song co-written by Alonzo Miller includes a saxophone solo by Daniel LeMalle and backing vocals by The (*). Temptations. The title figure is lodging in Room 714, and is someone "you read about in new-wave magazines" and "don't take home to mother." For 10 points—name this song by Rick James about a "very kinky girl."
   answer: "Super Freak"

20. The inhabitants of the Kalahari believe that Kaang used one of these to fashion the moon. People who sell the straw kind of them are protected by Liu Bei, one of the Three Musketeers of China, and the Dutch folk character (*) Zwarte Piet places candy into these objects. Skadi invented the type used on snow, while Vidar incapacitates Fenrir using the "thickmost" one. For 10 points—name these leather clothing articles.
   answer: shoes

21. One local affiliate of this organization replaces a word in its name with "social" and was long led by Franz Josef Strauss. One of its most important figures was the cabinet minister who oversaw the "economic miracle," (*) Ludwig Erhard, and its leaders have included Konrad Adenauer and Helmut Kohl. For 10 points—name this party of German chancellor Angela Merkel, more conservative than the Social Democrats.
   answer: CDU or Christian Democratic Union or Christlich-Demokratische Union
22. Rediscovering this phenomenon in guanine and thymine allowed Watson and Crick to formulate their base pairing model, and in one example, this state results when a hydrogen moves from the alpha carbon to the oxygen atom and back again. Most famously exemplified by its keto-enol variety, for 10 points—identify this type of isomerism in which a pair of molecules is readily interconvertible between themselves.
answer: tautomerism

23. Originally known as Timpanogos, its southeast portion is called Farmington Bay. It is bisected by the Lucin Cutoff and includes Antelope and Fremont islands. A peninsula containing the Promontory Mountains juts from the north into this largest remnant of Lake Bonneville. For 10 points—name this endpoint of the Weber, Bear, and Jordan rivers, a Utah body noted for its salinity.
answer: Great Salt Lake

24. Time-averaging this quantity and dividing by the speed of light yields the radiation pressure. Integrating this quantity over a volume gives the total energy flow through that volume, and its direction is along the direction of wave propagation. For 10 points—identify this quantity which represents the amount of energy in an electromagnetic wave and is given by the cross product of the electric and magnetic fields.
answer: Poynting vector

25. One of its namesakes was a Senator from Iowa who later became a member of "The Four," and its passage came alongside the renewal of the Resumption Act. It reversed the "Crime of '73," and twelve years after this bill's passage, it was rendered moot by the Sherman Silver Purchase Act. For 10 points—name this 1878 bill which restarted the coining of silver dollars at the amount of two million per month.
answer: Bland-Allison Act

26. She condemns "human sacrifice" after arriving at the Elephant Hotel in one book. Often identified with a certain Mrs. Kestner, she interacts with her creator in The Beloved Returns by Thomas Mann. Originally, she charms the narrator by leading the "counting game" and enjoys the poems of Ossian. For 10 points—name this woman engaged to Albert and adored by the title character in The Sorrows of Young Werther.
answer: Charlotte
1. For 10 points each— name these spices:
A. Made from the seed pods of a type of chili pepper, this spice is the source of the red dye oleoresin and is used in such Hungarian foods as goulash.
answer: paprika
B. Used in English comfits, this Mediterranean-originated spice is annoying to "supertasters" and dominates Chipotle's rice.
answer: cilantro or coriander
C. Derived from the pimento, this spice was named by English sailors who thought it contained cloves, cinnamon, and nutmeg.
answer: allspice

2. It was the result of an alliance between the archbishop of Toledo and Alfonso VIII of Castile. For 10 points each—
A. Name this 1212 victory for a coalition of Spanish kingdoms and the Knights Templar against the Almohads under Muhammad an-Nasir.
answer: Battle of Las Navas de Tolosa or Battle of Al-'uqab
B. The Battle of Las Navas de Tolosa marked the last major restart of this process of Christian rulers driving the Islamic kingdoms out of the Spanish peninsula.
answer: La Reconquista
C. Along with the Knights of Santiago, this Spanish military order created by Raymond of Fitero in 1158 played a large part in the Reconquista.
answer: Knights of Calatrava or Orden Militar de Calatrava

3. At the end of this novel, Esteban and Sofia meet up during the Third of May executions. For 10 points each—
A. Name this book which follows the attempts of Victor Hugues to profit off the Caribbean during a succession of French regimes.
answer: Explosion in the Cathedral (or Explosion in a Cathedral; or El siglo de las luces)
B. This Cuban author of Reasons of State and Manhunt wrote Explosion in the Cathedral.
answer: Alejo Valmont Carpentier
C. This Carpentier novel is set in Haiti, where Ti Noel's master Lenormand de Mezy flees the Bouckman rebellion.
answer: The Kingdom of this World or El reino de este mundo
4. It is similar to a reaction undergone by aldehydes and ketones, but can only be catalyzed by a base, rather than either a base or acid. For 10 points each:
   A. Identify this analogue of the aldol reaction, undergone by esters.
      answer: Claisen condensation
   B. The intramolecular form of the Claisen reaction typically leads to 5 or 6 membered rings and is known by this name.
      answer: Dieckmann condensation
   C. Like the Diels-Alder and the Friedel-Crafts reactions, the Claisen condensation is one of a class of reactions that results in a covalent bond between two atoms of this element.
      answer: carbon

5. This player is required to wear a distinctive uniform and may make unlimited substitutions for a back-row player. For 10 points each—
   A. Name this position created in 1999, which may not block or serve.
      answer: the libero
   B. The libero is a player in this gym sport, dominated by California schools in the NCAA, which also has a "beach" version played by Karch Kiraly and Misty May.
      answer: volleyball
   C. International men's volleyball has recently been dominated by this team, which won the 2004 Olympic gold and the last two world championships.
      answer: Brazil

6. For 10 points each— name these defense mechanisms of plants:
   A. These nitrogen-containing phyoalexins are usually bitter-tasting, and help protect plants from attack. They include quinine and codeine.
      answer: alkaloids
   B. Levels of this signaling molecule are reduced in plants carrying the nahG transgene. Aspirin is an acetylated form of this molecule.
      answer: salicylic acid or salicylate or SA
   C. This salicylic-acid-dependent mechanism, which precedes systemic acquired resistance, is triggered when a pathogen's virulence effectors interact with a plant's resistance genes.
      answer: hypersensitive response or HR

7. The title character tries to move away from his lover Ivy and undergoes an operation for stomach cancer. For 10 points each—
   A. Name this novel about an engineer who recovers a dead body from Guatemala while working for UNESCO.
      answer: Homo Faber
   B. Homo Faber is a novel by this Swiss author of The Firebugs and I'm Not Stiller.
      answer: Max Frisch
   C. This play by Max Frisch is set at the court of Shi Huang Di, where a time-travelling figure warns about the dangers of nuclear weapons.
      answer: The Chinese Wall or Die chinesische Mauer: Eine Farce

8. For 10 points each— name these French overseas possessions:
   A. This department, a member of the Mascarene Islands, is found to the east of Madagascar and includes the capital Saint-Denis.
      answer: Réunion
   B. This "territorial collectivity" includes Pamandzi and is a geographical part of the Comoros, but elected not to join the rest of the islands in independence.
      answer: Mayotte
   C. The many other names of this territory's components include Uvea, Alofi, and the Horne islands, and this doubly-named territory is centered on Mata-Utu.
      answer: Wallis and Futuna
9. For 10 points each— name these people besides Bear Bryant who received nomination votes at the 1968 Democratic National Convention.
   A. This incumbent Vice-President from Minnesota won the nomination and lost a close election to Nixon.
      answer: Hubert Horatio Humphrey
   B. This fellow Minnesotan dominated the early primaries with an antiwar platform and finished second in the convention balloting.
      answer: Eugene McCarthy
   C. Seventeen and a half votes were tossed to this outgoing North Carolina governor for some reason. He joined the state Supreme Court instead.
      answer: Daniel K. Moore

10. His later works include The Society of Individuals and Studies of the Germans. For 10 points each—
    A. Name this sociologist who wrote The Civilizing Process.
       answer: Norbert Elias
    B. This teacher of Norbert Elias discussed his concept of "relationism" and the "sociology of knowledge" in Ideology and Utopia.
       answer: Karl Mannheim
    C. Norbert Elias worked on the sociology of sports, and so did this fan of Balinese cockfights, who wrote The Religion of Java and The Interpretation of Cultures.
       answer: Clifford Geertz

11. It has units of pressure and its divergence represents the time-change of electromagnetic momentum of a system. For 10 points each:
    A. Identify this quantity formed from the components of the electric and magnetic fields.
       answer: Maxwell stress tensor
    B. The Maxwell stress tensor contains a part given by the sum of the electric and magnetic field strengths times this 2nd-rank tensor, which is 1 when its indices are equal and 0 otherwise.
       answer: Kronecker delta
    C. In relativistic electrodynamics, this operation applied to the field tensor gives zero, and the solutions to that equation are relativistic traveling waves.
       answer: box-squared or d'Alembertian

12. For 10 points each— name these places where controversies over Islamic sensibilities have erupted.
    A. This Canadian news magazine was sued under crazy Canadian law for publishing Mark Steyn's article "The future belongs to Islam" in October 2006.
       answer: Maclean's
    B. The Jyllands Posten newspaper in this country touched off embassy burnings and boycotts by publishing cartoons of Mohammed in 2005 and 2006.
       answer: Denmark
    C. This producer of the film Fitna and leader of the Freedom Party in the Netherlands had his American website shut down in March 2008.
       answer: Geert Wilders

13. An early keyboard teacher of Alma Schindler, his own compositions include the 1900 Quintet in D Major for clarinet, piano, and strings. For 10 points each—
    A. Name this blind Bohemian organist who taught many prominent twentieth-century musicians.
       answer: Josef Labor
    B. One of Labor's students was this one-handed pianist who was the first performer of Britten's Diversions and Ravel's Concerto for the Left Hand.
       answer: Paul Wittgenstein (prompt on Wittgenstein)
    C. This atonalist composer of the Gurrelieder, Pierrot Lunaire, and Moses und Aron was another Labor pupil.
       answer: Arnold Schoenberg
14. For 10 points each—name this primary education reformers:
   A. This disciple of J.H. Pestalozzi renamed his Child Nurture and Activity Institute in Prussia the "kindergarten," thus inventing that level of schooling.
   answer: Friedrich Wilhelm August Froebel
   B. This Italian author of *The Absorbent Mind* and founder of the Children's House proposed that young children could self-educate with various knicknacks.
   answer: Maria Montessori
   C. This creator of the "ecology of human development" concept was a major force in the creation of Head Start and wrote *Making Human Beings Human*.
   answer: Urie Bronfenbrenner

15. For 10 points each—name these negative explanatory essays from philosophy:
   A. First delivered to the National Secular Society in 1927, this essay by Bertrand Russell analyzes various arguments for the existence and goodness of God.
   answer: "Why I Am Not a Christian"
   B. Originating in 1960's *The Constitution of Liberty*, this Friedrich Hayek essay outlines the difference between resistance to change and classical liberalism.
   answer: "Why I Am Not a Conservative"
   C. This John Searle essay argues against the separation of mental and physical qualities, though it warns that causal reducibility is not ontological reducibility.
   answer: "Why I Am Not a Property Dualist"

16. One of four distinguished brothers, he was the last Great Khan to rule from Karakorum. For 10 points each—
   A. Name this man who sent his brother Kublai Khan to China to found the Yuan Dynasty and dispatched another brother to conquer the Middle East.
   answer: Mongke Khan
   B. This was the brother of Mongke who overran the Abbassids, Syria, and Iran, founding the Ilkhanids.
   answer: Hulegu Khan
   C. This last of the four brothers put forth an ambitious program for creating grazelands that involved killing everyone in China, which Kublai vetoed by killing him instead.
   answer: Ariq Boke

17. The title character reflects on burglarizing a bakery during this story. For 10 points each—
   A. Name this short story in which Borstal inmate Smith throws a race.
   answer: "The Loneliness of the Long Distance Runner"
   B. "The Loneliness of the Long Distance Runner" was written by this Angry Young Man author of *Saturday Night and Sunday Morning* and *Snowstop*.
   answer: Alan Sillitoe
   C. This novel by Alan Sillitoe is about Paul Morton, who makes a car trip in 1983 to reconnect with people he saw on a 1945 bicycle journey.
   answer: *Down From the Hill*

18. This founder of a party advocating love among his nation's people first took office in February 2001. For 10 points each—
   A. Name this man whose business dealings with Singapore led to his overthrow in a 2006 military coup.
   answer: Thaksin Shinawatra
   B. Thaksin Shinawatra was the prime minister of this Southeast Asian country, whose king is all too happy to endorse regular military coups.
   answer: Thailand
   C. After the banning of the TRT, this new party affiliated with Thaksin won the first post-coup elections in December 2007.
   answer: People Power Party
19. This resident of The Beehive created such works as The Great Parade and The Seamstress. For 10 points each—
A. Name this formulator of Cubist "machine art" who worked on the film Mechanical Ballet with Man Ray.
answer: Fernand Léger
B. Scraps of billboards, pedestrians, and other elements from the title place populate this cluttered Leger work.
answer: The City
C. Shortly after his gassing at the Battle of Verdun, Leger painted some of these gamblers, also depicted several times by Paul Cezanne.
answer: The Card Players (or equivalents)

20. His pranks included throwing a skinned horse on the roof and defecating on his sister's chair. For 10 points each—
A. Name this brother of Amaterasu who was banished to Izumo.
answer: Susanowo
B. After turning a would-be victim of this serpent into a comb, Susanowo plied this eight-headed beast with liquor and chopped it up, finding a better sword inside.
answer: Yamata no Orochi
C. Susanowo was born from the nose of this sky god who helped create the islands of Japan with his similarly named wife.
answer: Izanagi

21. In these phenomena, the displacement of the medium is perpendicular to the direction of propagation. For 10 points each—
A. Identify these seismic surface waves.
answer: Love waves
B. Love waves involve this type of force, which produces a stress parallel to the surface of the material.
answer: shear
C. Like Rayleigh waves, Love waves experience an amplitude decay as they propagate that is proportional to this function of the distance from the origin.
answer: one over square root of distance (accept logical equivalents, e.g. "r to the -1/2")

22. It was headed by Erich Mielke from 1957 to 1989. For 10 points each—
A. Name this successor to the Kommissariat 5 which constituted the secret police of the East German state.
answer: the Stasi or Ministry for State Security or Ministerium für Staatssicherheit
B. This crafty foreign intelligence supervisor of the Stasi orchestrated such operations as placing the spy Günter Guillaume in the confidence of Willy Brandt.
answer: Markus Wolf
C. The Stasi funded this terrorist group which attacked various American interests in West Germany and participated in the Entebbe hijacking.
answer: Baader Meinhof gang or Red Army Faction or Rote Armee Fraktion

23. The central characters of this novel build a house in Citrabelle near a symbolic swamp. For 10 points each—
A. Name this 1948 novel about the marriage of Jim and Arvay Henson Meserve, which results from a not-exactly consensual act by a mulberry tree.
answer: Seraph on the Suwannee
B. Seraph on the Suwannee is a novel about unappealing white people by this author of Tell My Horse and Their Eyes Were Watching God.
answer: Zora Neale Hurston
C. Another Hurston novel with a protagonist who gets married three times is this Biblically named story of John Pearson, based on Hurston's own father.
answer: Jonah's Gourd Vine
24. For 10 points each—name these movies about or featuring Bob Dylan:
   A. Martin Scorsese directed this 1978 documentary about a concert at the Winterland in San Francisco which
      marked the final performance of The Band.
      answer: The Last Waltz
   B. Scorsese returned to the Dylanumentary in 2005 with this biopic, named after a line in "Like a Rolling
      Stone."
      answer: No Direction Home
   C. Richard Gere, Christian Bale, and Cate Blanchett are among the people who portray avatars of Bob Dylan
      in this 2007 film.
      answer: I’m Not There

25. It can be proven by considering the ideal sampler provided by the Dirac comb. For 10 points each—
   A. Identify this theorem which states that a continuous function should be sampled with at least twice the
      bandwidth of a continuous signal.
      answer: Nyquist-Shannon sampling theorem
   B. Sampling at the Nyquist frequency is necessary to prevent this phenomenon, exemplified by moire in video,
      in which sampled frequencies overlap and become indistinguishable.
      answer: aliasing
   C. During sampling, the sample values are multiplied by this function which is used in the Whittaker-Shannon
      interpolation formula.
      answer: sinc or sin x over x (or equivalents)

26. It began under the pretense of a diplomatic slight from John II of Poland. For 10 points each:
   A. Name this war which lasted from 1655 to 1660 and didn't accomplish very much for its instigator, Charles
      X.
      answer: First Northern War
   B. This affirmation of the earlier Treaty of Stolbovo was signed by Sweden and Russia to ended the First
      Northern War's eastern theatre in 1661.
      answer: Treaty of Cardis
   C. Charlex X wouldn't have gotten Sweden into such a pointless war if this previous ruler and Descartes-killer
      had not abdicated in order to convert to Catholicism.
      answer: Christina