1. The major target of this event was the loser at Moncontour who was advocating a war for control of the Low Countries with Spain. The ringing bell at Saint-(*),Germain-l'Auxerrois signified its start, and it fatally ended Gaspard de Coligny's influence on Charles IX. The Guise family and the king's mother Catherine de Medici conspired to perpetrate, for 10 points— what slaughter of Huguenots in France?
answer: Saint Bartholomew's Day Massacre

2. An early work of Ernst Mally has this plural word in the title along with "the object theory of measurement," while another philosophical work with this noun recommends philosophizing in the first person, attacks psychologism, and is the (*) "Logical" kind of these written by Husserl. For 10 points— give this noun, which also titles text about language games by Wittgenstein, its "philosophical" kind.
answer: "investigations"

3. The author of "I Will Go on Living" and "Confessions of Love" had a side career as a designer of these, and a fastener known as a (*) netsuke is used to attach carrying cases for official seals to these. Sometimes dyed with the paste resist technique, they are derived from the pao, and the belt that goes with one is the embroidered obi. Distinguished from yokufu, or western dress, for 10 points— name this traditional Japanese garment.
answer: kimono

4. He changed prison cells in Phylace, where he helped Iphiclus conceive an heir. This figure also discovered the need to remove a rusty knife from a tree, and his brother had to retrieve the cattle of (*),Phylacus in order to marry Pero. He helped Bias perform that task after earning both himself and Bias a third of Pylos through some secrets vultures told him. For 10 points— name this Greek prophet who could understand animals.
answer: Melampus

5. This reaction follows Michael addition in the Robinson annulation. For a crossed version of this reaction to occur, one reactant must lack an (*) alpha hydrogen, since an anion receptor must accompany the enolate ion. For 10 points—a beta-hydroxyaldehyde or beta-hydroxyketone is the product of what condensation reaction whose namesake product usually has properties of aldehydes and alcohols?
answer: aldol condensation
6. A woman who is drying her clothes by a fire in a shrine is spotted by the gossipy daughter of a lighthouse-keeper in this novel. Based on the story of Daphnis and Chloe, its last sections see two romantic rivals serve on a (*) merchant ship together to prove their worth, with the protagonist eventually winning Hatsue. For 10 points— name this novel about Shinji, by Yukio Mishima.

answer: The Sound of Waves or Shiosai

7. In one of this director's films, Whoopi Goldberg plays a detective and Tim Robbins is a Hollywood executive being blackmailed by an angry writer. Insecticide-spraying helicopters unify several (*) stories in another of his films, and he directed Elliott Gould as Philip Marlow in 1973's The Long Goodbye. For 10 points— name this director of The Player and Short Cuts, who inspired a long-running TV show with 1970's MASH.

answer: Robert Altman

8. William Ramsay and J.J. Thomson were among the adherents of this movement. Prior to its first congress, in Boulougne, its founder took the name "Doctor Hopeful." Improved upon by Louis de Beaufront as (*) Ido, it uses "oj" as a plural ending and lacks a person and number in verbs. The idea of Ludwig Lejzker Zamenhof, for 10 points— name this pan-European artificial language.

answer: Esperanto

9. Provinces of this country include Basse Kotto, Lobaye, and Ouaham, and it was once known as Dar al-Kuti. In its northeast, the Kotto River flows through the Bongos Mountains, and the (*) Ubangi River separates it from the DR Congo. The only country to border both Sudan and Cameroon, for 10 points— name this country whose capital is Bangui.

answer: the Central African Republic

10. One game in this series features a notable showdown at the end of "The Path to Zarkhan" and requires collecting golden scarabs. The first sequels in this series were The Dark (*) Sword of Chaos and The Ancient Ship of Doom. In the original game, the dying Walter Smith informs the player that he must fight the Jaquio. For 10 points— name this notoriously difficult series of games starring Ryu Hayabusa.

answer: Ninja Gaiden

11. This statement is typically proven using the binomial expansion in a finite field, and it lies at the heart of RSA encryption. This statement is less restrictive than Wilson's theorem and as a test it fails for (*) Carmichael numbers. This statement is also generalized by Euler's theorem, which replaces the exponent in this theorem with the totient function. For 10 points— what is this theorem which states that for a prime \( p \) and natural number \( a \), \( a \) to the power \( p \) is congruent to \( a \) modulo \( p \)?

answer: Fermat's little theorem

12. Including the aria "The foal runs after the filly," this opera represents a seduction with a lusty trombone score. It opens with an inquiry about whether mushrooms will be served for dinner and turns on the murder of (*) Boris by rat poison and Zinovy by candlestick, after which the title character marries Sergey. For 10 points— name this opera which caused censorship troubles for Dmitri Shostakovich.

answer: Lady Macbeth of the Mtsensk District or Ledi Makbet Mtsenskogo uyezda

13. He was defeated in his first run for president by the National Progressive Party candidate, but he later won election and was succeeded by J.K. Passikivi. A strategic decision he made led to the loss of the Rybachy Peninsula, and it was as chairman of the defense council in the (*) 1930s that he suggested fortifying the isthmus of Karelia. For 10 points— identify this namesake of a "line" that was breached in the Winter War.

answer: Carl Gustaf Mannerheim
14. In one of this man's plays, a character compares the soul to a bladder, while another walks around with balloons tied to his belt. This author of "America Was Promises" wrote that play which uses a (*) circus to tell a modern version of Job, while Bernal Diaz looks back on his time with Cortes in one of this man's poems. For 10 points— name this author of "You, Andrew Marvell," J.B., and "Conquistador."

answer: Archibald MacLeish

15. In this team's last loss in the 2007 regular season, Kyle Vanden Bosch had three sacks for them, but that was not enough to stop them from losing in overtime due to a LaDanian Tomlinson touchdown for the Chargers. This team, whose leading rusher was (*) LenDale White, lost again to the Chargers in the wild-card round. For 10 points— name this team with Roydell Williams, Pacman Jones and Vince Young.

answer: Tennessee Titans (either or both names)

16. The measurement of this phenomenon was the goal of the Ulysses spacecraft. Its primary cause is the 2/7 power temperature decrease as compared to the inverse square decrease of gravity, and the co-rotating interaction regions associated with it cause (*) geomagnetic storms on Earth. Moving slower over streamers than over the coronal holes, it experiences a bow shock at the heliopause. For 10 points— identify this stream of charged particles being continuously ejected in an envelope from the sun.

answer: solar wind

17. The conditions for this war were laid by Benjamin Hawkins, who sparked a civil war that led to the emergence of Peter McQueen and William Weatherford. This war began when the (*) Red Sticks perpetrated the Fort Mims Massacre. For 10 points— the Battle of Horseshoe Bend ended what 1813 to 1814 war in Alabama, in which Andrew Jackson took land from the namesake Indian tribe?

answer: Creek War

18. One character in this novel is irked by a guest's desire for two bowls of soup. Mrs. McNab breaks a cup while checking in on the abandoned house in the middle of this book, which sees Andrew die in World War I. The titular (*) journey doesn't take place for several years on the Isle of Skye, even though James had been promised the trip by Mrs. Ramsay in, for 10 points— what Virginia Woolf novel?

answer: To the Lighthouse

19. A proposed new constitution in this country would create a ban on using its signature product in company names. Its current president came to power in a crisis over nationalization of energy, and had previously lost an election to (*) Gonzalo Sanchez de Lozada. That current leader encourages the traditional growing of coca leaf. For 10 points— name this country whose president is Evo Morales.

answer: Bolivia

20. Richard Crossman edited a later collection of essays expressing this group's principles, and Edward Reynolds Pease was its historian. The authors of Industrial Democracy and The History of Trade Unionism, (*) Sidney and Beatrice Webb, founded it along with George Bernard Shaw, and it was named for a Roman general who achieved success in the Second Punic War by delaying. For 10 points— name this socialist group.

answer: Fabian Society

21. The artist referred to it as part of his "poesie" series, seven mythical scenes that also include The Death of Actaeon and Perseus and Andromeda. The two putti at the top are almost entirely upside down, and there is another at the bottom left. A (*) red garment and a white dress fly about and the woman holds on to the horn of a white bull in, for 10 points— what Titian painting of Zeus abducting a woman?

answer: The Rape of Europa
22. It has a variable region II with constant length rich in AT residues that associates with a H3 histone in a nucleosome. Its regions I and II contain conserved sequences that bind to proteins that interact with one (*) microtubule of the spindle apparatus. The location of kinetochore protein complex assembly, this sequence is the point where sister chromatids are joined. For 10 points— name this region of DNA crucial for mitotic segregation.

answer: centromere

23. He engineered a secret treaty to give Alsace to Spain in order gain Spanish approval for his succession of Matthias. This man was briefly deposed in (*) Bohemia in favor of the "Winter King." The deposition was announced when the city council threw two of his ministers out the window. For 10 points— name this Holy Roman Emperor at the start of the Thirty Years War.

answer: Ferdinand II

24. A banker's son is expelled from school and becomes the Master of Petitions in a novel by this man. In addition to The Abbess of Castro and the unfinished (*) Leucin Leuwin, this man wrote about the Duchess of Sanseverina, who hangs out with Count Mosca and patronizes her nephew Fabrizio del Dongo. For 10 points— name this creator of Julien Sorel, the author of The Charterhouse of Parma and The Red and the Black.

answer: Stendhal or Marie Henri Beyle

25. For the entire 1980s and through 1998, this state had the same governor, Terry Brandstad. His replacement, who once congratulated Canada on abandoning the twenty-hour clock, was one of the first men to drop out of the 2008 Presidential race, (*) Tom Vilsack. Its is currently represented in the Senate by Chuck Grassley and Tom Harkin. For 10 points— name this ethanol-happy home to an important caucus.

answer: Iowa

26. This particle was initially detected as missing energy in electron-positron annihilation experiments conducted using the SPEAR detector. Its associated neutrino was detected through (*) charmed meson decay by the DONUT experiment, and it's the only particle of its kind that can decay into hadrons. For 10 points— identify this particle which provides the third generation of leptons after the electron and the muon.

answer: tauon
1. It ended the second War of Italian Independence, three weeks after the Battle of Magenta. For 10 points each—
   A. Name this 1859 battle which secured most of Lombardy for Sardinia after the allied Victor Emmanuel II and Napoleon III defeated the Austrians.
   answer: Battle of Solferino
   B. Later ratified at Zurich, this peace conference was the immediate result of Solferino and saw the recognition of French and Piedmontese war gains.
   answer: Conference/Treaty/Peace of Villafranca
   C. The senseless killing at Solferino so shocked this witness to the battle that he founded the Red Cross.
   answer: Henri Dunant

2. For 10 points each— answer the following about the sociology of religion:
   A. This British Labour Party ideologue wrote Religion and the Rise of Capitalism, arguing for a connection between Protestantism and industry.
   answer: Richard Henry Tawney
   B. Tawney thus refined the thesis put forth by Max Weber in this book, which says that Calvinism shared certain ideological predispositions with capitalism.
   answer: The Protestant Ethic and the Spirit of Capitalism
   C. This author of Religion and Economic Action: A Critique of Max Weber says that Weber got the order of events wrong and failed to empirically support his thesis.
   answer: Kurt Samuelsson

3. For 10 points each— name these things with a common number:
   A. Vassar, Barnard, Mount Holyoke, and Smith are some of the institutions in this historical alignment of prestigious women's colleges.
   answer: the Seven Sisters
   B. Coronado spent some time wandering across the American Southwest looking for these legendary sources of gold.
   answer: the Seven Cities of Cibola
   C. This battle in the Peninsular Campaign saw McClellan defeat Johnston in a skirmish that ended on June 1, 1862.
   answer: Battle of Seven Pines
4. The first object belonging to this group was discovered in 1992 by David Jewitt and Jane Luu. For 10 points each—
A. Identify this source of short-period comets, a region of planetary debris orbiting the sun beyond Neptune.
answer: Kuiper belt
B. Similar in composition to comets but the size of asteroids, these Kuiper-born objects travel in unstable orbits in the region of the gas giants. Members include Pholus and Chiron.
answer: Centaurs
C. The Kuiper belt objects with more eccentric orbits are locked into a resonance with Neptune in which they complete this many orbits around the sun in the time Neptune completes three.
answer: 2

5. Its Kaesong and Kangwon-Do provinces abut its southern border. For 10 points each:
A. Name this country whose capital lies on the Taedong River.
answer: North Korea or DPRK
B. This river supplies the Supung Reservoir and separates northwestern North Korea from China.
answer: Yalu River
C. Containing Nanam and Onsong, this northeasterly province of North Korea is the area of the country that borders Russia.
answer: Hamgyong-Bukto

6. For 10 points each— name these Indian independence leaders:
A. This leader of the Forward Bloc led the Indian National Army, allied with Japan and Germany, during World War II.
answer: Subhas Chandra Bose
B. Bose's mentor was this leader of the Bengali Sweraj who brought the Indian National Congress into the electoral process and died while mayor of Calcutta.
answer: Chitta Ranjan Das
C. This leader of the Muslim League became the first president of Pakistan. OR DID HE?
answer: Mohammed Ali Jinnah

7. She had received a mysterious case of food poisoning while traveling to Beslan in 2004. For 10 points each—
A. Name this Novaya Gazeta reporter and head of the journalists union in Russia who was assassinated in her Moscow apartment in October 2006.
answer: Anna Politkovskaya
B. Six weeks later, this former KGB agent died in London of polonium poisoning.
answer: Alexander Litvinenko
C. Several reporters killed in recent years were investigating conflict with warlords and religious separatists in this constituent Russian republic, the southeastern neighbor of Chechnya.
answer: Dagestan

8. It was raised in objection to Boltzmann's statement of the H-theorem. For 10 points each—
A. Identify this apparent paradox which held that the time-reversed evolution of a system would violate the second law of thermodynamics.
answer: Loschmidt's paradox
B. Loschmidt's paradox can be resolved through this theorem, which gives the relative probability of observing some time-averaged value of entropy.
answer: fluctuation theorem
C. Other results can be obtained by combining the fluctuation theorem with this statement, which holds that the sum of a large number of independent random variables will have a Gaussian distribution.
answer: central limit theorem
9. The title character's sister decides to establish a college for women in this book. For 10 points each—
A. Name this novel about an Abyssinian prince who leaves Happy Valley.
answer: Rasselas
B. Rasselas was written by this author of a noted dictionary who was biographized by James Boswell.
answer: Samuel Johnson
C. Loosely translating a Latin source to apply to contemporary England, this Johnson poem looks in a melancholy way on such ambitious figures as Thomas Wolsey.
answer: "The Vanity of Human Wishes"

10. The namesake people had been transported to the Basra area to work on draining salt marshes. For 10 points each—
A. Under the leadership of the Persian Ali ibn Muhammad, what rebellion of east African slaves took over large parts of Iraq in the 870s?
answer: the Zanj
B. The Zanj fought against this Baghdad-centered dynasty.
answer: Abbasids
C. The Zanj allied themselves with this puritanical Islamic faction, which had seceded from the followers of Ali and were confronted at the Battle of Nahrawan.
answer: Kharijites

11. For 10 points each— name these Louisiana politicians.
A. This Republican of Indian descent is the current governor.
answer: Bobby Jindal
B. This Republican Senator was involved in a prostitution scandal in summer 2007.
answer: David Vitter
C. This member of a noted Louisiana political family is the other Senator, a Democrat.
answer: Mary Landrieu

12. Three sardine boats are being tossed about by the title object, and Mount Fuji can be seen in the background. For 10 points each—
A. Name this ukiyo-e print.
answer: The Great Wave Off Kanagawa
B. The Great Wave Off Kanagawa is part of the Thirty-Six Views of Mount Fuji by this Japanese painter.
answer: Hokusai
C. In this ukiyo-e woodcut, created by Kunimaru, a fair is taking place in the foreground while one title object is exploding above another at the top.
answer: Fireworks at Ryogoku Bridge

13. In 2007 David Leigh used a “rotaxane” and a light-powered gate to mimic it to yield more evidence that it might exist. For 10 points each—
A. Name this hypothetical creature or machine that moves fast particles to one side of a gate and slow particles to the other.
answer: Maxwell’s Demon
B. Similar to Maxwell’s Demon is this machine, which raises the pressure of one partition by allowing only molecules traveling towards that partition to pass.
answer: Smoluchowski’s trapdoor or Smoluchowski’s valve
C. The Feynman ratchet-and-pawl, yet another similar machine, makes use of this phenomenon that was studied by Smoluchowski, and more famously, Einstein.
answer: Brownian motion
14. It laments a woman who "ain't messin with" those who are broke and suggests "get down girl, go head get down." For 10 points each—
A. Name this Kanye West song that features Jamie Foxx doing a Ray Charles impression.
answer: "Gold Digger"
B. Feel free to find "Diamonds from Sierra Leone" and "Touch the Sky" along with "Gold Digger" on this 2005 West album.
answer: *Late Registration*
C. The Game guests on this *Late Registration* track, which name-drops Ronald Reagan and Gil-Scott Heron to make an analogy to a certain substance.
answer: "Crack Music"

15. The title object can completely record a person's sensory experience in his *The Invention of Morel*. For 10 points each—
A. Name this author of *A Plan for Escape* who collaborated on several works with a fellow Argentinian.
answer: Adolfo Bioy Cesares
B. This aforementioned other Argentinian wrote Bioy Cesares into "Tlon, Uqbar, Orbius Tertius" and also wrote "El Aleph" and *Ficciones*.
answer: Jorge Luis Borges
C. The "Young Turks," led by Arturo, target the elderly, led by Isidro Vidal, in this novel by Bioy Cesares.
answer: *Diary of the War of the Pig* or *Diario de la guerra del cerdo*

16. For 10 points each— answer the following about anti-Catholicism in American politics.
A. Founded by Henry F. Bowers in 1887, this group blamed Catholic immigration for dwindling farm profits and had two million members at its peak.
answer: APA or *American Protective Association*
B. Beginning in New York as the Order of the Star-Spangled Banner, this party elected 43 Congressmen in 1854 and nominated Millard Fillmore for President.
answer: *American Party* or *Know Nothing Party*
C. Addresses by Mitt Romney and Barack Obama have both been compared to the speech JFK gave to the Ministerial Association of this city in 1960.
answer: *Houston*

17. First PCR is used to make a destructive construct containing a marker and nucleotides same as those flanking the gene to be disrupted. For 10 points each—
A. Name this method, in which a construct is transfected into the organism by crossing over, and its haploid viability is accessed.
answer: homologous recombination
B. These lab animals can be produced by making a resistant-sensitive double mutant construct to be put into stem cells, then injecting them into a blastocyst and getting chimera progeny mated mutants.
answer: *knockout mice*
C. This phenomenon is used in introducing double stranded RNA to block expression of genes giving rise to a complementary mRNA.
answer: RNA interference

18. For 10 points each— name these positions in Tibetan Buddhism.
A. This head of the Yellow Hat sect was the political leader of pre-Chinese Tibet, and the current occupant is the leader of an exile government in India.
answer: Dalai Lama
B. This head of the Tashilhunpo monastery is second in power to the Dalai Lama and is a reincarnation of Amitabha. China has tried to name its own candidate.
answer: Panchen Lama
C. The third-highest post and the only one of the three whose traditional occupant is recognized by China is this head of the Kagyu school.
answer: Karmapa Lama
19. As Loki was retrieving a wig for Sif, he came across Brokk and Eiti, two dwarves. For 10 points each—
A. Loki challenged the dwarves to make better gifts than the ones he was transporting, so they first made what speedy golden boar for Frey?
   answer: **Gullinbursti**
B. Next, the dwarves forged this ring for Odin. It could spit out copies every nine days.
   answer: **Draupnir**
C. Loki drew blood from Brokk's eyelid, forcing him to shorten the handle of this final item, a hammer which returned to the hand of Thor when thrown.
   answer: **Mjollnir**

20. In C++, this concept is implemented through the “virtual” keyword, which allows for dynamic binding. For 10 points each—
A. Identify this central concept of object-oriented programming which allows method overloading in classes.
   answer: **polymorphism**
B. The advantages of polymorphism and dynamic typing are addressed in this notable software engineering text written by the Gang of Four.
   answer: **Design Patterns**
C. This other OOP technique is often combined with polymorphism and abstract classes to derive useful classes from more basic and generic ones.
   answer: **inheritance**

21. Each of the holes on its main course is named for a flowering plant. For 10 points each—
A. Name this Georgia club that hosts the Masters.
   answer: **Augusta National Golf Club**
B. Herbert Wind coined the name for this area of the course that goes from hole 11 to hole 13 and inspired a “miraculous” win by Arnold Palmer in 1958.
   answer: **Amen Corner**
C. Going from the 12th hole to the 13th over Rae's Creek, this passageway is named for the golfer who won 11 straight tournaments in 1945.
   answer: **Nelson Bridge**

22. For 10 points each— name these Roman emperors of the fourth century.
A. As indicated by his byname, this nephew of Constantine attempted to reverse the Christianization of the empire and was the last pagan emperor.
   answer: **Julian the Apostate**
B. This senior staff officer took command when Julian was killed fighting the Sasanians, made peace, and re-Christianized the empire in his seven-month rule.
   answer: **Jovian**
C. In 378, this eastern emperor of Arian faith attempted to defeat the Visigoths at Adrianople, where he was killed.
   answer: **Valens**

23. It is a free translation of some poems about Cynthia and a warning against writing epics from Maecenas. For 10 points each—
A. Name this twelve-section poem which concludes with the discovery that Lyneus has been cuckolding the title Roman versifier after all.
   answer: **“Homage to Sextus Propertius”**
B. “Homage to Sextus Propertius” was translated and/or written by this author of "Hugh Selwyn Mauberly" and some Cantos.
   answer: **Ezra Pound**
C. "The apparition of these faces in the crowd; petals on a wet, black bough" is the entirety of this super- Imagist poem by Pound.
   answer: **"In a Station at the Metro"**
24. Portrayed by Santiago Cabrera, he is the creator of 9th Wonders, a fictional comic book. For 10 points each—
   A. Name this character who tends to paint future events when high on heroin. 
   answer: Isaac Mendez (either or both names)
   B. Like Claire Bennet and Niki Sanders, the superpowered Isaac is the character on this NBC show. 
   answer: Heroes
   C. This Heroes character is played by Milo Ventimiglia and spends the first few episodes trying to fly, 
      eventually finding that he can absorb the abilities of others. 
   answer: Peter Petrelli (either or both names)

25. Based on the poem "The Gypsies" by Pushkin, this opera was a graduation assignment for the Moscow 
    Conservatory in 1892. For 10 points each—
   A. Name this opera in which the title character falls in love with Zemfira. 
   answer: Aleko
   B. Aleko was composed by this noted Russian piano player and composer of The Isle of the Dead. 
   answer: Sergei Rachmaninoff
   C. This Rachmaninoff choral symphony is based on an Edgar Allen Poe poem and purports to depict the 
      sacred background music of Russian cities. 
   answer: The Bells

26. At its end, the retired professor Stepan Verhovensky realizes that his liberal theories have allowed his son 
    to become a violent nihilist. For 10 points each—
   A. Name this novel in which Stavrogin tries to run off with Darya Shatov. 
   answer: The Possessed or Besy
   B. This author of The Gambler, The Idiot, and Crime and Punishment wrote The Possessed. 
   answer: Fyodor Dostoevsky
   C. The title character of this Dostoyevsky novel is Arkady Dolgoruky, who wants to "become a Rothschild" 
      and tries to deal with his two crazy fathers. 
   answer: A Raw Youth or Podrostok