1. This man introduced the concept of "survivals," behavioral artifacts from past stages of a society. He became interested in archaeology when he ran into Henry Christy and assisted that man on a trip to Toltec ruins, which resulted in his book (*) Anahuac. In his major work, he laid out the then-revolutionary theory that societies become larger, more complex, and more scientific over time. For 10 points— name this author of Primitive Culture.
answer: Edward Tylor

2. This river is not consistently navigable north of Myitkyina, though good weather can allow ships to travel as far as Bhamo. Its delta stretches form the Arakan Mountains to the Pegu, and this river flows through (*) Mandalay. Formed from the confluence of the Nmai and the Mali, its name means "elephant." For 10 points— name this major river of Burma.
answer: Irrawaddy River

3. In one of this man’s short stories, a grown man walks in on his stepmother lactating and drinks her milk for thirty minutes. He wrote a novel about a waitress who tries to emulate Mary Pickford at the Diamond Cafe and ends up living with (*) Joji Kawai. Another of his works opens with news of a possible suitor for Yukiko, one of the four title characters in Osaka. For 10 points— name this author of The Makioka Sisters and Some Preferr Nettles.
answer: Junichiro Tanizaki

4. A common use of this reaction is to convert the product of a Friedel-Crafts acylation into an alkyl side-chain. This reaction typically takes place in a strong acid such as HCl, and a (*) zinc catalyst provides the reaction surface. Complementary to the Wolf-Kishner reaction, for 10 points— identify this reaction in which an unsubstituted aldehyde or ketone is reduced to the parent hydrocarbon.
answer: Clemmensen reduction

5. He was the first coach to pilot a team to victories over both UNC and Duke in the same NCAA tournament, in which his team ended up finishing second to Michigan State. Since succeeding Lon Kruger at his current job in 1996, he has won three (*) SEC tournaments and spent one day as the head coach of the Magic. For 10 points— name this two-time NCAA champion coach of the Florida Gators.
answer: Billy Donovan
6. He is shown "from three angles" in one painting, and on a white horse next to the red-clad painter in another. A yellow-maned horse is being tended on the right of another painting, in which this man wears a (*) big black hat, a white jacket, and red breeches while leaning on a stick. For 10 points—name this monarch, shown in several paintings by Anthony van Dyck including one "in hunting dress."
answer: Charles I

7. This man ended the Senate's control of Italian courts and gave them to the praetorian prefect, an office he filled with such men as Fulvius Plautianus and Papinian. This governor of Upper Pannonia revoked laws against marriage of soldiers and replaced the entire Praetorian Guard after he used the pretense of avenging the murder of Pertinax to seize power from (*) Didius Julianus. Succeeded by his sons Geta and Caracalla, for 10 points—name this emperor from the turn of the third century CE who founded a thirty-year dynasty.
answer: Septimius Severus

8. The protagonist of this novel loses seven hundred dollars investing in lard stocks and, for a time, is forced to escort the frail Rappaport. This book opens at the Gloriana Hotel, where a man who was recently fired from Rojax is meeting Dr. (*) Adler for breakfast. Maurice Valence and Dr. Tamkin both con Tommy Wilhelm. For 10 points—name this Saul Bellow novel, titled from an expression of Horace.
answer: Seize the Day

9. Ted Loden is one man held responsible for this incident in the Rossville Flats area, which involved people attempting to go to Guildhall Square. It was re-investigated by the Saville commission, which reversed Lord Widgery's opinion that the first shots came from the (*) demonstrators in a report ordered by Edward Heath, who was prime minister when it occurred. For 10 points—name this event of 1972 in Londonderry, in which fourteen Catholic demonstrators were shot by British troops.
answer: Bloody Sunday

10. Whether a particular output can be generated by one of these can be determined by the CYK algorithm. Every one of these that does not generate an empty string can be written in equivalent Greibach or Chomsky normal form, and Backus-Naur form is a syntax for writing one of these for a programming language. For 10 points—identify this type of grammar, so called because non-terminal symbols can be moved around at will.
answer: context-free grammar

11. Including music originally written for Stenka Razin and The Barber of Baghdad, the ultimate source for this story is the "Legend of the Arabian Astrologer" by Irving, which passed through Pushkin and Vladimir Belsky to this opera, which includes the "hymn to the sun" sung by the Queen of (*) Shemakha. For 10 points—Polkan, Guidon, and Dodon appear in what Rimsky-Korsakov work about a precognizant bird?
answer: The Golden Cockerel or Zolotoy Petushok or Le coq d’or

12. The majority of them were from the Centre-Ouest towns such as Saintonge and Aunis, and especially Poitou. On the pretense that they would not swear an oath to fight against England's enemies, this group aroused the ire of (*) Charles Lawrence, who, in 1755, began the "Great Derangement" of this group. For 10 points—name these French settlers of Nova Scotia, who were expelled from English Canada and became the ancestors of the Louisiana Cajuns.
answer: Acadians (prompt on Cajuns before it is read)

13. One of her characters enthusiastically proclaims "I just ate a whole can of sardines!" and is known for having Irritable Bowel Syndrome and (*) one leg. She was Agent Colby alongside Ian Roberts, Matt Besser, and Matt Walsh in The Upright Citizens Brigade, and now shares a desk with Seth Myers. For 10 points—name this co-host of SNL's Weekend Update.
answer: Amy Poehler
14. This god was able to shrink in size in order to pass through the spokes of a spinning wheel. This figure's mother once sold herself into slavery after losing a bet over the color of a horse, so this figure had to go to Patala with a cup of (*) amrita to free her. He was told not to eat Brahmins before being let loose to chow down on evildoers after being born to Kashyap and Vinata. For 10 points—name this king of birds and mount of Vishnu.
answer: Garuda

15. In the late twentieth century, this company owened Agfa-Gevaert, a photo technology firm. This company first brought to market polyurethane and sulfa drugs, and it also discovered efficient ways to manufacture heroin in (*) 1898, a year before its researcher Felix Hoffmann introduced a more suitable pain reliever. For 10 points—name this German company, the first to sell aspirin.
answer: Bayer AG

16. One character in this play is the tailor Needle Nugent, who reclaims his suit when it is not paid for. It ends with the main character's son being taken away as a spy, and it opens with the reading of (*) Robbie Tancred's obituary. Charlie Bentham announces a two-thousand-pound inheritance, which never materializes, in this play about the Boyle family. For 10 points—name this play by Sean O'Casey.
answer: Juno and the Paycock

17. After each generation of reproduction, they get smaller. Though some put them in Stramenopila or Chromista, they, along with golden algae, are in the phylum (*) Chrysophyta. Bound by the frustule, two glassy silicate walls that overlap like top and bottom of a petri plate, these protists are the leading photosynthetic producers in oceans. For 10 points—name these members of Bacillariophyta whose sediments make up a kind of earth.
answer: diatoms

18. This state used the sakdi na rank system which assigned specific point values, such as 5 to a slave and 100,000 to a prince. It adopted the Nanchao state's laws, and this polity was taken over by Suphan Buri for nine years near its start. Founded by (*) Ramthibodi in 1451, an army from this kingdom turned back the Toungoo dynasty at the Battle of Nong So Rai, ending this kingdom's submission to Burma, though a later Burmese invasion allowed it to be displaced by the Chakri dynasty. For 10 points—name this state which ruled for four centuries in Thailand.
answer: Ayutthaya

19. A woman signals her interest in one man in this novel by sending cookies and rosewater along with a borrowed umbrella. One episode shows the funeral of (*) Pavli, at which a woman held responsible for his death is lynched. The title character theorizes that men who let women sleep alone go to hell and is hired as both cook and foreman by "the boss." For 10 points—name this book about a passionate lover of Madam Hortense, written by Nikos Kazantzakis.
answer: Zorba the Greek or Vios kai politela tou Alexe Zormpa

20. It can be represented graphically as a circle on Framm's paraboloid, and it can be derived from a solution that is guaranteed to be unique by Bikhoff’s theorem. It represents a singularity (*) that can be removed by transforming to Kruskal coordinates and it can also be derived by setting the escape velocity to the speed of light. For 10 points—identify this length which gives the “characteristic” size of a black hole.
answer: Schwarzschild radius

21. One character in this movie saves himself from a faux pas by changing the word "ass" to "asthma." Possibly the worst-ever movie to feature both Terence Howard and Paul Giamatti, the plot hinges on an attempt to find Lester Vasgow, which necessitates (*) Malcolm Turner disguising himself as Hattie May Pierce. For 10 points—name this 2000 film in which Martin Lawrence dons a fat suit and a dress.
answer: Big Momma's House
22. Charity given in preparation for this festival should be in the form of actual food. It always occurs in Shawwal, and involves wearing (*) new clothes and having communal prayers and meals. For 10 points—name this three-day festival whose name means "breaking the fast" and which follows the end of Ramadan.
answer: Eid al Fitr

23. Two abortive corruption investigations were started over this man's chairmanship of IRI. In the late 1990s, he led the Olive Tree coalition, and he later served five years as European Commission president. Known as (*) "la mortadella" or "the sausage," this man was felled by the Udeur Party's withdrawal from his coalition in January 2008. For 10 points—name this rival to Silvio Berlusconi as Italian prime minister.
answer: Romano Prodi

24. For a map between Banach spaces, having this property for a compact subset of the domain implies that the function satisfies the Lipschitz condition on that subset. The Weirstrass function(*) is continuous everywhere but does not have this property anywhere, and in the complex plane, being analytic is equivalent to having the complex version of this property. For 10 points—identify this property which a function possesses if the inverse of an integral exists for it.
answer: differentiability (accept word forms, e.g. differentiable)

25. This city's history of strong guild activity is reflected in the names of such streets as Saddlemakers Lane and Furriers Lane, while its main avenues include Univii Boulevard. The Village Museum here shows folk housing from around the country. Found on the (*) Dâmbovita River, it also includes the IL Caragiale Theater and the House of the People or Casa Poporului. For 10 points—name this Wallachian city, the capital of Romania.
answer: Bucharest

26. The execution of the Bandiera brothers after the seizure of information sent to this man led to the revelation that the British government was opening private mail. He outlined his political philosophy in "On the Duties of Man," an essay published in his newspaper Apostleship of the People. Disdained by (*) Cavour as the "chief of assassins," he was such staunch Republican that he did not participate in the constitutional monarchy under Victor Emmanuel. For 10 points—name this founder of Young Italy.
answer: Giuseppe Mazzini
1. It is set in Talnovo, a village near the collective farm known as Peatproduce. For 10 points each—
A. Name this short story about a woman who marries Efim because Efim's brother Ilya was away at war.
answer: "Matronya's House" or "Matrenin dvor"
B. This author of Lenin in Zurich and One Day in the Life of Ivan Denisovich wrote "Matronya's House."
answer: Alexander Solzhenitsyn
C. Vera Gangart enables Oleg Kostoglotov to leave the title place, where he had a relationship with Zoya, in this Solzhenitsyn novel featuring the geologist Zatsyrko.
answer: Cancer Ward or Rakovy Corpus

2. He annexed Bukovina from Turkey in 1775. For 10 points each—
A. Name this Hapsburg emperor, the son and successor of Maria Theresa.
answer: Joseph II
B. At this 1788 pseudobattle, an Austrian army attempting to protect Vidin started shooting at itself following rumors of approaching Turks, causing ten thousand casualties.
answer: Battle of Karansebes
C. This 1781 law of Joseph II guaranteed freedom of religion for all Christian groups.
answer: Patent of Tolerance

3. It purports to answer the question, "if he wants to sell that horse, do I really want to buy it?" For 10 points each—
A. Name this 1967 paper which investigates how the used-car industry works and was a landmark in the study of assymetric information.
B. This author of "Looting" wrote "The Market for Lemons."
answer: George A. Akerlof
C. The motivation of people who only sell bad cars or only buy insurance when they are sick is this form of an assymetric information problem.
answer: adverse selection

4. Gelon and Agathocles were among the tyrants of this city. For 10 points each—
A. Name this Greek colony on Sicily.
answer: Syracuse
B. This employer of Archimedes was the tyrant for most of the third century BCE and allied with Rome against Carthage.
answer: Hiero(n) II
C. Three prior wars with Carthage were fought under the "elder" of two kings of this name, in power from 405 to 367.
answer: Dionysus
5. For 10 points each—answer some questions about quantum chemistry:
A. This theory of many-atom interactions treats electrons as belonging to the namesake regions, which are eigenfunctions of the many-body Hamiltonian.
answer: molecular orbital theory
B. Calculations in MO theory can be done by applying this self-consistent field method to find ground state wavefunctions and energies.
answer: Hartree-Fock method
C. The Hartree-Fock method works by approximating the wavefunctions using these determinants which produce linear combinations of all electron wavefunctions.
answer: Slater determinants

6. They include the commentary of Parson Wilbur from the First Church of Jalaam. For 10 points each—
A. Name this series of satires on nineteenth-century America, which take the form of poetic letters from the title character, Hosea, to Birdofredum Sawin.
answer: The Biglow Papers
B. This author of Heartsease and Rue and A Fable for Critics wrote The Biglow Papers.
answer: James Russell Lowell (prompt on Lowell)
C. This Lowell poem is based on a spurious historical incident in which John Hampden and Oliver Cromwell attempted to emigrate to America.
answer: "A Glance Behind the Curtain"

7. Patmos, Simi, and Cos are among these islands. For 10 points each—
A. Name this group of twelve Aegean islands which were transferred from Italy to Greece in 1947.
answer: the Dodecanese or Dhodhekánisos
B. This island's namesake city is the capital of the Dodecanese department. It is the largest of the group.
answer: Rhodes
C. The most westerly of the Dodecanese, this dumbell-shaped island is home to Analipsi and Vathi.
answer: Astipálaia

8. He was killed while conducting mass in 1980. For 10 points each—
A. Name this archbishop, an opponent of the right-wing regime in El Salvador.
answer: Oscar Romeo
B. These opponents of the FMLN have been the major right-wing party in El Salvador since 1981.
answer: ARENA or Nationalist Republican Alliance or Alianza Republicana Nacionalista
C. This leader of El Salvador's Christian Democrats failed to negotiate a settlement between FMLN and ARENA during his 1984 to 1989 presidency.
answer: José Napoleon Duarte

9. The title figure's cousin Mario Van de Weyer is a layabout until the U.S. enters World War I and Mario enlists. For 10 points each—
A. Name this 1936 novel about the straitlaced Oliver Alden.
answer: The Last Puritan
B. This author of The Last Puritan was perhaps better-known as the philosopher who wrote Realms of Being and advised against repeating history.
answer: George Santayana or Jorge Augustín Nicholas Ruiz de Santayana y Borráis
C. This Santayana treatise says that sensations and other "symbols" of human discourse mediate belief into knowledge, and we must believe this despite its unprovability
answer: Skepticism and Animal Faith
10. This dog-like creature is the guardian of Helheim. For 10 points each—
   A. Name this four-eyed beast who enjoys cake.
      answer: Garm
   B. This cave is the home of Garm.
      answer: Gnipa
   C. Garm and this Norse god, who has a poor history with giant dogs, will kill each other at Ragnarok.
      answer: Tyr

11. First described as a continuation of the Baffin Current, it flows from the Hudson Strait to the Tail of the
    Grand Banks of Newfoundland. For 10 points each—
   A. Identify this current, which together with the West Greenland current is the major current in its namesake
      sea.
      answer: Labrador current
   B. The water from the Labrador current mixes with shelf water and water from this North Atlantic current
      which passes through the Strait of Florida to form slope water.
      answer: Gulf Stream
   C. The Gulf Stream does not transport nearly as much water as this current, which girds the south pole and
      moves roughly 125 million cubic meters per second.
      answer: Antarctic Circumpolar Current

12. It notes that the creation and elimination of "objective enemies" is an essential part of the title system. For
    10 points each—
   A. Name this 1951 book about the similarities between Hitler and Stalin's forms of government.
      answer: The Origins of Totalitarianism
   B. This author of Eichmann in Jerusalem wrote The Origins of Totalitarianism.
      answer: Hannah Arendt
   C. This Arendt work makes a distinction between "work" and "labor" and discusses how leaving the Earth and
      leading an active life will shape the title state in the future.
      answer: The Human Condition

13. One of the title figures has pink jacket lining and is holding a chain above a glass of water. The other is
    nibbling on the chain. For 10 points each—
   A. Name this painting.
      answer: Boy With a Squirrel
   B. This painter of The Red Cross Knight and Siege of Gibraltar created Boy With a Squirrel.
      answer: John Singleton Copley
   C. Two men in white reach out for a naked long-haired fellow who is about to get himself ate in this Copley
      maritime scene.
      answer: Watson and the Shark

14. Perhaps the most important study of its subject since Francis Steegmuller's book, this work explains the
    "added element." For 10 points each—
   A. Name this 1975 work of criticism that explains its author's admiration for Madame Bovary.
      answer: The Perpetual Orgy or La orgía perpetua
   B. This man, whose own novels include Aunt Julia and the Scriptwriter, wrote The Perpetual Orgy.
      answer: Mario Vargas Llosa
   C. The titular Trotskyist unsuccessfully conspires with Vallejos to found a Communist state in the Andes in
      this Vargas Llosa novel.
      answer: The Real Life of Alejandro Mayta or Historia de Mayta
15. For 10 points each—name these composers of Ave Marias:
A. Also known as Meditation, a well-known Ave Maria was created from a Bach tune by this French composer of The Bloody Nun and Faust.
answer: Charles Gounod
B. This prolific composer of choral Ave Marias was a twentieth-century German associated with Chanticleer, who also tried to create a new Happy Birthday song.
answer: Franz Biebl
C. This fan of long adagio movements composed an Ave Maria, and his other choral pieces include the Abendzauber and a notable 1881 Te Deum.
answer: Anton Bruckner

16. For 10 points each—name these Dallas Cowboys quarterbacks:
A. Now head coach of the Arena League’s Utah Blaze, he brought the Cowboys to five playoff appearances in the 1980s as a QB-slash-punter.
answer: Danny White
B. This Georgia alum lost the Cowboys job to Vinny Testaverde in 2004 due to his problems with drugs and sucking.
answer: Quincy Carter
C. This Navy product won two Super Bowls and appeared in two more as the starter during the 1970s.
answer: Roger Staubach

17. For 10 points each—name these E.M. Forster novels:
A. After marrying Agnes Pembroke, Rickie Elliot dies protecting his newly found half-brother Stephen Wonham, in this novel.
answer: The Longest Journey
B. The title stockbroker pines for Clive Durham and finally takes up with Alec Scudder in this posthumously published novel.
answer: Maurice
C. Cecil Fielding tries to maintain cordiality with both Dr. Aziz and Adela Quested despite a rape accusation in this novel.
answer: A Passage to India

18. For 10 points each—name these musical acts that recorded songs called “Gloria:”
A. This singer became popular in 1982 with such a song and followed it up with “Solitaire” and "How Am I Supposed to Live Without You" before she died in 2004.
answer: Laura Branigan
B. The classic rock song by that title was notably covered by this other woman, also known for "Up There Down There" and the albums Horses and Easter.
answer: Patti Smith
C. This performer of “Into the Mystic” and “Brown Eyed Girl” wrote the rock version of the song for his band Them.
answer: Van Morrison

19. It’s notably abundant on the moon, and is a potential fusion fuel. For 10 points each—
A. Identify this isotope of the second-lightest element, which was shown to be superfluid by Osheroff, Lee, and Richardson.
Answer: helium-3
B. A mixture of helium-3 and helium-4 is the basis for this kind of refrigerator in which the cooling takes place as a result of phase separation between the two isotopes.
Answer: dilution refrigerator
C. Helium-3 can also be formed in the atmosphere through this process in which cosmic rays collide with more massive particles and knock out nuclei.
Answer: spallation
20. She was the Attorney General's senior counsel and as the liaison between the Justice Department and the White House. For 10 points each—
A. Name this figure at the center of the fired U.S. attorneys scandal.
answer: Monica M. Goodling
B. Goodling is one of 150 graduates of this phony law school founded by Pat Robertson hired by the Bush administration.
answer: Regent University School of Law
C. Goodling worked under this Attorney General, who replaced John Ashcroft at the start of Bush's second term.
answer: Alberto Gonzales

21. This leader of the National Front came to prominence in the Poujadist movement. For 10 points each—
A. Name this ultra-nationalist French politician, who finished second in the 2002 presidential election.
answer: Jean Marie Le Pen
B. Le Pen and Bruno Megret attempted to organize this coalition of right-wing nationalists in the European Parliament in 2007.
answer: ITS or Identity, Tradition, Sovereignty
C. Le Pen finished fourth in the first phase of the 2007 French elections that resulted in this UMP leader becoming president.
answer: Nicolas Sarkozy

22. They account for about 2% of the lymphocytes in the blood. For 10 points each—
A. Identify these lymphocytes which are neither T nor B cells since they are already specialized to eliminate certain cells.
answer: natural killer or NK cells
B. In contrast to T cells, when presented with a class I variety of this molecule, NK cells trigger an inhibitory response.
answer: major histocompatibility complex or MHC
C. Natural killer cells operate by secreting granules containing granzymes and this protein, which basically punches a hole in the target cell membrane.
answer: perforin

23. For 10 points each— name these roles and films of John C. Reilly:
A. Walk the Line, The Doors, and Ray are among the musical biopics spoofed by this character, who “walks hard” in a 2007 comedy.
answer: Dewey Cox (either or both names)
B. Wine, living alone, and getting leaves off your driveway are among the topics addressed by this Channel 5 news personality on the Tim and Eric Awesome Show.
answer: Dr. Steve Brule (either or both names)
C. Reilly plays a real estate agent who sells a haunted apartment to Jennifer Connelly and her daughter in this 2005 Disney remake of a Japanese horror movie.
answer: Dark Water

24. Thomas Clarke was among the people who planned this event, which Eoin MacNeill attempted to cancel after Roger Casement's arrest. For 10 points each—
A. Name this 1916 attempt to end British rule in Ireland.
answer: Easter rising/rebellion etc
B. This editor of The Sword of Light read the proclamation of the Irish Republic at the post office and was soon shot for his role in the rising.
answer: Patrick Pearse
C. This Clarke-led group, whose motto was "Soon or Never," was the driving force behind the Easter Rising.
answer: the IRB or Irish Republican Brotherhood
25. The CHSH theorem is a generalization of this statement, which was formulated in response to the EPR paradox. For 10 points each—

A. Identify this theorem which states that no local hidden variable theory is compatible with the results of quantum mechanics.
answer: Bell's Theorem or Inequality

B. This 1982 experiment conclusively demonstrated the violation of Bell's inequalities.
answer: Alain Aspect's experiment

C. The failure of experiments to disprove Bell's theorem lends strong support to this concept named by Schrodinger which postulates that the interaction of two quantum systems somehow "binds" their quantum states together.
answer: quantum entanglement

26. He was a two-term president of the national bar association and oversaw the incorporation of Newfoundland into the dominion. For 10 points each—

A. Name this Liberal Party leader who, from 1948 to 1957, was Prime Minister of Canada.
answer: Louis Saint Laurent

B. Saint Laurent succeeded this man, who took office in 1935 and led Canada through World War II.
answer: William Lyon Mackenzie King

C. Saint Laurent was the Canadian delegate to the 1944 conference held in a Georgetown home, which began to design the United Nations.
answer: Dumbarton Oaks