1. This process cannot be consistently used on all polynomials in the classical position and momenta on the symplectic manifold R two n according to the "no-go" theorem of Groenewold, which was later expanded by van Hove. In the "first" type of this process, classical particles are assigned wave amplitudes. This process translates states that are points in a phase space into vectors on a Hilbert space and observables that are complex-valued functions on the phase space to bounded linear operators, such as is done by the Weyl transform. If a single magnetic monopole exists, then electric charge must have this property according to the Dirac condition named for it. For 10 points, name this process by which a quantum field theory is constructed from a classical field theory.
ANSWER: **quantization**

2. Ford proved a result showing that for each k, the equation this function of x equals m has exactly k solutions. Jordan extended this function to k-tuples. This function appears in the denominator of the definition of the Silverman Constant. The Dirichlet convolution of one with this function returns the identity function. This function can be used to find the order of the ring Z over n Z, and a polygon is constructable if this function of the number of sides is equal to a power of two. For a prime input, this function returns one minus the input. This function appears in the exponent of its namesake's extension to Fermat's little theorem. For 10 points, name this function that returns the number of integers less than the input that are relatively prime to it.
ANSWER: Euler **totient** function [or Euler **phi** function]

3. Theories for the emergence of these systems include the ding-dong theory and the pooh-pooh theory. August Schleicher proposed organizing these systems into the Stammbaum model. One kind of transfer between two of these systems is called a calque. The largest constructed one of these systems was designed by L.L. Zamenhof. Alternating between two of these systems is a form of code-switching, and if one of these systems is not related to any other system, it is referred to as an "isolate." Stephen Pinker wrote on the "instinct" to develop these systems. For 10 points, identify these systems which can be used for communication through talking, such as English.
ANSWER: spoken **language**s

4. This story relates how a man would move as reliably as a sundial while smoking his pipe and keeping in the shade of a tree. The epigraph of this story is taken from William Cartwright's *The Ordinary* and begins "By Woden, God of Saxons." A character in this story is told that a woman died yelling at a peddler shortly after being asked "on which side he voted" by an orator in the Union Hotel. This story concludes by explaining that summer thunderstorms are caused by a group of ghosts playing ninepins in the mountains. For 10 points, name this story presented as a "Writing of Diedrich Knickerbocker" and set in the Catskills Mountains, in which the title character sleeps through the American Revolution.
ANSWER: "**Rip Van Winkle**"

5. Pius VII greenlighted Gaspare del Bufalo's establishment of an order of missionaries named for this thing. Denizens of Bruges dress up in medieval garb to celebrate a relic of this entity, which was brought there during the Second Crusade. This thing is invoked twenty-four times, each time with the exhortation "save us!," in a "most precious" litany. This is the second of two items mentioned in John 6:53-55 in connection with eternal life. In a literal sense, this substance was produced alongside the Holy Prepuce, and it resulted from the Five Holy Wounds. For 10 points, name this substance, which, according to the doctrine of transubstantiation, is what the wine in the Eucharist really becomes.
ANSWER: **blood of Christ** [or **Jesus's blood**; or **Holy Blood**; prompt on **blood**; prompt on **wine** until it is read]

6. An author with this surname wrote about such topics as the Montreal Massacre in 1997's *Life and Death.* Another author with this surname constructed the "right answer thesis," in which he said that an ideal figure, such as "Judge Hercules," would always be able to come up with an indisputably correct answer in legal problems. The first author with this surname was a frequent collaborator with Catharine MacKinnon, who wrote the book *Intercourse,* which critics claimed could be summarized by the sentence "All sex is rape." This is the surname of the author of the book *Law's Empire* and a woman who claimed pornography was linked to violence against women. For 10 points, give this surname of radical feminist Andrea and constitutional law scholar Ronald.
ANSWER: **Dworkin**

7. Some trace the origin of this style to the album *Crosscurrents* by Lennie Tristano. "La Nevada" begins a 1960 album by the Gil Evans Orchestra titled for their departure from this style. This style was preferred by the composer of the album *It Could Happen to You* and namesake of "Chetty's Song," Chet Baker. It's not bossa nova, but Gerry Mulligan's relocation to California and the presence of Stan Getz helped establish the West Coast's reputation as home to this style's namesake "school." This style was showcased on a classical-music-inspired 1957 compilation album recorded by the nonet of Miles Davis. For 10 points, name this relaxed style of jazz music whose *Birth* was supposedly represented by that Davis album.
ANSWER: **cool** jazz [or **West Coast** jazz until "California" is read; prompt on **West Coast** jazz after "California" is read until "West Coast" is read]

8. A poem titled for this place contains the lines "I hail the superhuman, I call it death-in-life and life-in-death," and describes "flames that no faggot feeds, nor steel has lit." That poem also mentions the "golden smithies" here, while another poem titled for it describes smiths making singing birds "of hammered gold and gold enamel" for the "drowsy Emperor" of this place. In that poem, the speaker claims to "have sailed the seas and come" to this place because his heart is "sick with desire and fastened to a dying animal." That poem about this place begins with the line, "That is no country for old men." For 10 points, name this city which William Butler Yeats wrote about "Sailing to."
ANSWER: **Byzantium**

9. During this event, officials at the Delphi Lodge hunting lodge told people to journey there, with several dying during the trip in what is called the Doolough Tragedy. People escaping this event used the McCorkell Line. Sir Charles Trevelyan's relief efforts during this event were criticized, and Queen Victoria legendarily only gave five pounds to help the victims of it. Despite predictions, conditions failed to improve even after the repealing of the Corn Laws. It resulted in numerous evictions, with 10% of all of them happening in County Mayo. For 10 points, name this 1840's period of mass starvation caused by a crop failure on a European island.
ANSWER: The **Irish Potato** Famine [or **an Gorta Mor**; prompt on **Great Famine**]

10. A contrabassoon solo opens a piece by this composer in which basses play arpeggios on open strings. This composer used a F-E-D-C sharp ostinato throughout the first movement of a piece that ends with a "Feria." A "Pantomime" containing a famous flute solo and a popular "Danse generale" appear in the second suite from one of this composer's ballets, in which the bumbling cowherd Dorcon fails to court a shepherdess. Like Prokofiev, this composer of *Rapsodie Espagnole* wrote a *Piano Concerto for the Left Hand* for Paul Wittgenstein, and he composed a piece in which a repetitive melody is played over a snare drum ostinato. For 10 points, name this French composer of *Daphnis et Chloe* and *Bolero*.
ANSWER: Joseph Maurice **Ravel**

11. A woman in this painting holds a spindle and distaff, with the thread about to be cut by the scissors in her other hand. A masked character in this painting empties several wine flasks. A mass of characters gather behind a shield wall at this painting's right. In this painting, a jester hides underneath a table littered with a backgammon board and playing cards. The right-center of this painting contains a spike-filled tunnel adorned with the cross that people are being herded into, and its background is filled with smoke from burning ships. A man is crushed under the wheels of a cart driven by a hurdy-gurdy player in this painting. For 10 points, name this skeleton-dominated, post-apocalyptic painting created by Pieter Breughel the Elder.
ANSWER: The ***Triumph of Death***

12. H. C. Plummer's model of these structures has a too-steep fifth power dropoff of the density, though that model is often used in toy N-body simulations. These formations are sorted by their central mass density into classes 1 through 12 in the Shapley-Sawyer classification system. The mean value of the relaxation time of these structures is on the order of one billion years, and these structures generally remain gravitationally bound, except in the case of strong tidal forces. Those visible to the naked eye include 47 Tucanae and Omega Centauri, and these formations are general found outside of the galactic disk proper in a spherical distribution. For 10 points, name these collections of stars with a roughly spherical shape.
ANSWER: **globular cluster**

13. This was the primary occupation of a man who informed against suspects in the mutilation of the Herms. Another man of this occupation was jailed for taking twenty talents deposited by the roguish Harpalus. For suggesting that his rival be awarded a golden crown, an irascible man of this occupation accused Ctesiphon of criminal activity, prompting the more famous rival's "On the Crown." In antiquity, there were ten great Attic ones, including Aeschines and Isocrates. The most famous of these men assisted Philocrates in crafting a peace treaty between Athens and Macedon, practiced with pebbles in his mouth to overcome his stutter, and delivered the original *Philippics.* For 10 points, name this occupation held by Demosthenes.
ANSWER: Greek **orator**s [or public **speaker**s]

14. A tumor of this organ common in children produces increased homovanillic acid and can be caused by amplification of N-myc, and these organs are enlarged in 21-hydroxylase deficiency. Overactive tumors in one section of this organ cause Conn's syndrome. One section of these organs contains three layers, called the zona reticularis, zona glomerulosa, and zona fasciculata. One section of these organs secretes a hormone that increases secretion of potassium and whose release is stimulated by angiotensin II. Another section of these organs secretes catecholamines like norepinephrine and epinephrine. For 10 points, name these paired glands that contain a cortex and a medulla and are located on top of the kidneys.
ANSWER: **adrenal** glands

15. This author wrote a play in which some reporters inform the title character that Jonathan and Mary died when their driver was drunk and crashed into a bridge abutment. In that play by this author, an explosion destroys the bank owned by the title character. This author claimed that certain things should be "motionless in time as the moon climbs" and "equal to, not true." In one of his plays, Eliphaz, Bildad, and Zophar appear as three comforters to the title character who denies them. That play of his begins with Mr. Zuss and Nickles putting on masks representing God and Satan. This author wrote, "A poem should not mean, but be" in a Horace-inspired poem. For 10 points, name this author of "Ars Poetica" and the play *J.B.*
ANSWER: Archibald **MacLeish**

16. During the Franco-Dutch War, this man was victorious at the battle of Maastricht along with the Duke of Monmouth. Early in his life, he was imprisoned in the Tower of London for a year under suspicions that he was conspiring to put James II back on the throne. He received many of his positions due to his wife's connections to princess Anne. His most notable military victory came when he took the duc de Tallard captive after decisively defeating a French offensive with the help of Eugene of Savoy. For 10 points, name this English duke who named his home after his victory at Blenheim.
ANSWER: Duke of **Marlborough** [or John **Churchill**]

17. On this holiday, Hans Castorp confesses his love to Claudia Chauchat in French after borrowing a pencil from her to use on a pig. The arrival of Galatea on a shell inspires the Homunculus to kill himself on this holiday. On this holiday, a character exclaims, "Forgive me, but manuscripts don't burn" before producing a supposedly-lost novel. On this holiday, Natasha arrives naked on the back of a pig in a novel in which a ball takes places in Berlioz's apartment. A mouse coming out of a dancer's mouth in an event on this holiday reminds the protagonist of a verse drama to think of Gretchen. For 10 points, name this holiday that occurs on April 30th, when witches' sabbaths occur in scenes from *The Master and Margarita* and *Faust.*
ANSWER: **Walpurgisnacht** [or **Walpurgis Night**]

18. This woman bore a son who indirectly caused Phaethon's death by questioning his claim to be the son of Helios. Book I of Herodotus claims that Phoenician sailors' abduction of this woman provoked all future conflicts between the East and West. In *Prometheus Bound*, Prometheus tells this woman that her descendant, Heracles, will release him from his torment. This mother of Epaphus and daughter of Inachus was taken to bed by a god in the form of a white cloud. Hera sent a gadfly to pursue this woman across the world, leading her to jump across the Bosphorus and end up in Egypt. Hermes rescued this woman by boring and then killing Argus Panoptes. For 10 points, name this mistress whom Zeus turned into a white cow.
ANSWER: **Io**

19. A well-endowed and oft-kissed statue of Victor Noir was built after he was shot dead by a member of this family. A female member of this family invested a lot of her own money into the excavations of Pompeii. Another member of this family justified his rule by drafting the Bayonne Statute, and abdicated soon after the Battle of Vitoria. Niccolo Paganini carried out an affair with a notoriously promiscuous member of this family, and her sister Caroline married a general in the good graces of this family, Joachim Murat. A hapless member of this family, named Joseph, was appointed king of Naples, Sicily, and Spain. For 10 points, name this family, a motley crew of folks related to a Corsican-born French emperor.
ANSWER: **Bonaparte**

20. This country's capital is home to a tourists' ghetto, called Thamel, and a bazaar called Asan. The Newars were this place's original inhabitants. After India, this country has the second-most Hindu population in the world, at up to ninety percent of its population. Shakya, in this modern-day country, is where the Buddha was born. The Annapurna Mountains and Sagarmatha National Park are located in this country. Jon Krakauer's *Into Thin Air* details a distaster which took place in this country. Uniquely, this country's flag consists of two overlapping triangles. For 10 points, name this country, home to eight of the world's ten tallest mountains, including most of Mount Everest.
ANSWER: Federal Democratic Republic of **Nepal**

21. The protagonist of one of this author's novels sees a shipwreck survivor lying on a stretcher and clutching a stamp-album. In one of his novels, a fat man named Jose ignores the pleas of some people in a cemetery and is often asked to "come to bed" by his wife. In another, a woman consults a ouija board while investigating the death of "Kolley Kibber." This author of a novel in which Pinkie blinds himself with acid and jumps off a cliff also wrote of Major Henry Scobie's suicide. In another novel of his, a priest follows the yellow-toothed mestizo to a cave, where he is caught by the Lieutenant. For 10 points, name this author whose novels include *The Heart of the Matter* and *The Power and the Glory.*
ANSWER: Graham **Greene**

22. Oriana Fallaci insisted that a phrase during this mission was scripted, which Pete Conrad later tried to disprove with an ad-lib beginning with the shout "Whoopee!". After a previous mission used vehicles named *Charlie Brown* and *Snoopy*, this mission used more "seriously" named vehicles, such as *Columbia*. Jim Lovell was removed from it in favor of Michael Collins. One phase of this mission's completion was signified with the phrase "The *Eagle* has landed", while its most enduring quote is "That's one small step for man, one giant leap for mankind". For 10 points, name this NASA mission which culminated in a historic July 20, 1969 moonwalk by Neil Armstrong and Buzz Aldrin.
ANSWER: **Apollo 11**

23. The murder of this man's secretary Juan de Escobedo overshadowed this guy's capture of Namur late in life. This man, the author of the quote "There is no paradise for cowards," ratted out Don Carlos, namesake of the Schiller play. This man signed the Perpetual Edict in his role as Governor-General of the Netherlands. Following his best-known feat, this overeager man was only allowed to conquer Tunis. This man commanded the *Real* alongside the future Doge of Venice and an admiral from Genoa in a battle in which Cervantes lost his arm. This man led the Holy League against the Ottomans in that 1571 battle. For 10 points, name this illegitimate son of Charles V who won the Battle of Lepanto.
ANSWER: **John** of Austria [or **Don John** of Austria; or **Don Juan** de Austria; or Ritter **Johann** von Österreich]

1. This model uses a production function "Y equals A times K to the alpha times L to the beta," where for simplicity's sake alpha plus beta often equals one, implying constant returns to scale. For 10 points each:
[10] Name this doubly-eponymous model of a firm's output, empirically tested by its namesakes against measures of the U.S. economy.
ANSWER: **Cobb-Douglas** model
[10] In the Cobb-Douglas model, L represents this capacity of humans to do work, as opposed to other factors of production like land and capital, the latter of which is represented by K.
ANSWER: **labor**
[10] Alpha and beta represent the percent change in output with respect to percent change in input, making them this kind of measure of the effect of a change in one variable, such as price, on the change in another, such as demand.
ANSWER: **elasticity**

2. This event is planned after one of its participants flirts with Olga at the name day ceremony of Olga's sister Tatiana. For 10 points each:
[10] Name this fatal incident related in fourteen-line stanzas, which Guillot and Zaretsky, the seconds, do not prevent. It is survived by a dandyish St. Petersburg socialite.
ANSWER: the **duel** between Eugene **Onegin** and Vladimir **Lensky** [or the **duel** in the poem *Eugene Onegin*; or obvious equivalents]
[10] This part-black poet of *The Bronze Horseman* wrote the duel scene as part of his long poem *Eugene Onegin.*
ANSWER: Alexander **Pushkin**
[10] This author of *King, Queen, Knave* harshly criticized Walter Arndt's English translation of *Eugene Onegin* before producing his own.
ANSWER: Vladimir **Nabokov**

3. It was originally organized as the anti-federalist party, and the whip of this party was withdrawn from Godfrey Bloom after he attacked a journalist in the street. For 10 points each:
[10] Name this far-right political party in the UK led by Nigel Farange.
ANSWER: **UKIP** [or **United Kingdom Independence Party**]
[10] True to its name, one of UKIP's main advocacies is the withdrawal from this supranational group originally created by the Maastricht Treaty.
ANSWER: **European Union** [or **EU**]
[10] Another British right-wing political party, the BNP, was led by this white supremacist and Holocaust-denying member of the European Parliament. He made a controversial October 22nd, 2009 appearance on *Question Time.*
ANSWER: Nicholas John **Griffin**

4. This religion is studied by the scholarly group KOSANBA. For 10 points each:
[10] Name this syncretic, Haitian religion which believes in spirits called loas, some of which include Papa Legba and Baron Samedi.
ANSWER: **voodoo**
[10] Voodoo adherents worship this supreme god, who is nevertheless unreachable, which means practitioners must pray to the loas instead.
ANSWER: **Bondye**
[10] As opposed to a houngan or mambo, these are black magic sorcerers in voodoo who are usually linked to the creation of zombies.
ANSWER: **bokor**s

5. A piece of this kind originally thought to have been by this composer, nicknamed *Adelaide,* all but vanished from the repertoire when it was proven to be composed by Marius Casadesus. For 10 points each:
[10] Name these five orchestral pieces, the third of which incorporates a folk melody called "The Strassburger," and the last of which is called the "Turkish."
ANSWER: Wolfgang Amadeus **Mozart's violin concerto**s [or **violin concerti by Mozart**]
[10] The replacement finale for the first of Mozart's violin concerti is a separately played concert piece of this lively character type. Another such piece by Mozart is the one "alla turca" from his eleventh piano sonata.
ANSWER: **rondo** [or **rondeau**]
[10] Some information about the violin concerti actually comes to us from correspondence with this writer of an influential violin textbook and composer of the *Toy Symphony,* who was Mozart's father.
ANSWER: Johann Georg **Leopold** Mozart [prompt on **L Mozart**; prompt on **Mozart**]

6. "Owl Eyes" compares Jay Gatsby to this man after noticing Gatsby's fake library. For 10 points each:
[10] Name this legendary theatrical producer, who revolutionized the usage of lighting and naturalistic sets in Broadway plays. He wrote the plays *Madame Butterfly* and *The Girl of the Golden West,* that were later turned into operas.
ANSWER: David **Belasco**
[10] In *The Great Gatsby,* Owl Eyes make the Belasco analogy to this man, the narrator of the book and neighbor of Gatsby.
ANSWER: **Nick** Carraway [or Nick **Carraway**]
[10] Belasco also gets a mention in this author's book *Tropic of Capricorn.* This man's semi-autobiographical works like *Tropic of Cancer* featured explicit sexual scenes.
ANSWER: Henry **Miller**

7. An early instance of these items were worn by the Cornuti, but they may have entered popular culture by way of Carl Doepler's costumes for the first Bayreuth Festival. For 10 points each:
[10] Identify these pieces of protective gear which were, contrary to popular belief, more commonly worn by samurai than by Vikings.
ANSWER: **horned helmet**s [or **helmets with horns on them**; or **horned headgear**]
[10] An unhorned Viking helmet was unearthed from the undisturbed seventh century ship burial at this English archaeological site.
ANSWER: **Sutton Hoo**
[10] The aforementioned "Cornuti" were Germanic soldiers working for this Roman Emperor, who used them against Maxentius at the Siege of Verona and Battle of Milvian Bridge.
ANSWER: **Constantine** the Great [or **Constantine** I; or Saint **Constantine**]

8. Answer the following about painting in the Dutch Golden Age, for 10 points each.
[10] Jan Steen's household scenes exemplify this type of painting, made by many artists of the time, which focuses on the daily lives of ordinary people.
ANSWER: **genre** painting [or any answer mentioning **genre**]
[10] *The Milkmaid* and *The Music Lesson* are among the masterpieces of genre painting by this artist, who also painted *View of Delft*.
ANSWER: Johannes **Vermeer** [or Jan **Vermeer**]
[10] This Dutch landscape artist enjoyed using sunlight near sunrise and sunset, as well as depicting cows as his subjects. In most of his paintings, the sky takes up more than half the canvas, but an exception is his most famous painting, the ship-filled *The Maas at Dordrecht.*
ANSWER: Aelbert **Cuyp**

9. Though she was a goddess of impure acts, she mainly served to purify the sins and vices of others, and she is considered either the sister or mother of Centeotl, the goddess of corn. For 10 points each:
[10] Identify this Aztec goddess of sexually transmitted diseases and adultery, who also ate dirt.
ANSWER: **Tlazolteotl**
[10] Tlazolteotl shared sin-confession duties with this evil god of Aztec myth sometimes known as "Smoking Mirror". The psychopomp Xipe Totec is often called the "Red" form of this deity.
ANSWER: **Tezcatlipoca**
[10] During the creation of the world, Tezcatlipoca sacrificed this body part to Cipactli.
ANSWER: his right **foot**

10. This author wrote the play *The Man Who Turned into a Stick.* For 10 points each:
[10] Identify this author who created a character whose personality changes dramatically after his face is burned and he makes a new plastic mask for himself in *The Face of Another.*
ANSWER: Kobo **Abe**
[10] Kobo Abe is most famous for this novel, in which the entomologist Niki Junpei becomes trapped with a stranger in a village digging sand every day.
ANSWER: The *Woman in the Dunes* [or *Suna no onna*]
[10] Abe wrote a novel about a "ruined" one of these. Jim Hawkins acquires one of these from Billy Bones near the beginning of *Treasure Island.*
ANSWER: a **map**

11. Its mythical founder was said to have been sired when a "quinotaur" raped the wife of Chlodio. For 10 points each:
[10] Identify this dynasty whose members were called the "long-haired kings". Its rule was ended by a 752 declaration of Pope Zachary.
ANSWER: **Merovingian** dynasty
[10] The Merovingians ruled over these Germanic peoples, who occupied the region the Romans referred to as Gaul.
ANSWER: **Frank**s
[10] The Merovingians were part of this group of Franks, whose name derives from the IJssel river. They are contrasted with the Ripuarian Franks and created a body of law that governed, among other things, agnatic succession.
ANSWER: **Salic** Franks [or **Salian** Franks]

12. This parameter is used to sort stars into population I, II, and III, and it appears to decrease with the age of a star. For 10 points each:
[10] Name this value, which is the proportion of a star that consists of elements other than hydrogen and helium
ANSWER: **metallicity**
[10] Stellar metallicity is important for measuring the parameters of the nucleosynthesis process predicted by this theory. This theory, which was added to by the inflationary model, posits the universe began in a namesake explosion.
ANSWER: **Big Bang** theory
[10] This middle author of the famous paper proposing the proportions of Big Bang nucleosynthesis also presented the computation of the Lamb shift at the Shelter Island Conference.
ANSWER: Hans **Bethe**

13. Corruption in this state's government has been the target of the FBI investigation codenamed Operation Dollar Bill. For 10 points each:
[10] Name this state that was also the site of the central activity of *Luther v. Borden*.
ANSWER: State of **Rhode Island** and Providence Plantations
[10] *Luther v. Borden* concerned the arrest of a participant in this uprising that aimed to make the electoral system of Rhode Island give all free men suffrage.
ANSWER: **Dorr**'s Rebellion
[10] The Dorr Rebellion was largely settled by the drafting of a new state constitution in this city. This city was also the site of a 1919 sex scandal involving the U.S. Navy, which resulted in criticism of then-Assistant Secretary of the Navy, FDR.
ANSWER: **Newport**

14. Name some things you'd need to know to implement the RSA encryption algorithm, for 10 points each.
[10] The first step in RSA encryption is to choose two numbers, usually denoted p and q, with this property also possessed by numbers that pass through the Sieve of Eratosthenes.
ANSWER: **prime**

[10] The next step is to compute p times q, to find n, which will act as this value for the public and private keys. This value gives an integer when dividing the difference in two integers in a congruence.
ANSWER: **modulus**
[10] The public exponent, which must have a greatest common divisor of one with the Euler's totient function of the modulus, is almost always chosen to be one of these numbers. Only the first five of these numbers – 3, 5, 17, 257, and 65537 – are known to be prime.
ANSWER: **Fermat** primes [or **Fermat** numbers]

15. Answer some questions about hard-soft acid-base theory, for 10 points each.
[10] HSAB theory helps explain the stability of covalently bonded compounds, which is determined by the difference in this value between the two atoms. This quantity is typically measured on the Pauling scale.
ANSWER: **electronegativity**
[10] Hard acids and bases tend to have higher energies for these two orbitals. One of these two orbitals contains the most reactive electrons of an atom, while the other is completely empty.
ANSWER: **HOMO** and **LUMO** [or **frontier** orbitals; prompt on partial answer]
[10] The diars [DEE-arz] ligand, which is great for chelating soft metal cations, contains two atoms of this element. The Marsh test was designed to detect this element in a cup of coffee in a murder case in the 1830's.
ANSWER: **arsenic** [or **As**]

16. Karel Soucek successfully did this in 1984, but was later killed while trying to recreate it at the Houston Astrodome. For 10 points each:
[10] Name this action first done in 1901 by Michigan schoolteacher Annie Taylor as a publicity stunt. Fourteen other people have intentionally done this, despite its illegality, with several drowning in the process.
ANSWER: **going over Niagara Falls** in a barrel [or **going over Horseshoe Falls**]
[10] Niagara Falls is on the border between Canada and this state.
ANSWER: **New York**
[10] This boat tour of Niagara Falls, which is also the name of the boats, goes through the various falls, and takes its name from the spray passengers will presumably be hit with.
ANSWER: **Maid of the Mist**

17. Antonio Salieri set part of this opera's libretto to music, but gave up in a hissy fit. For 10 points each:
[10] Name this opera in which the officers Ferrando and Guglielmo, disagreeing with Alfonso that all women are fickle, agree to dress up as Albanians and seduce each others' fiancees.
ANSWER: *__Cosi__ Fan Tutte, ossia La Scuola degli Amanti* [or *__Thus Do They All__, or The School for Lovers*]
[10] After pretending to poison themselves, the Albanians are "revived" by one of these objects brought in by the maid Despina, disguised as a doctor, in a ludicrous scene that unfolds at the end of Act I.
ANSWER: **magnet**
[10] *Cosi* is an opera buffa by this composer, who tasked the Queen of the Night with singing the comically-hard aria "Der Holle Rache" in *The Magic Flute.*

ANSWER: Wolfgang Amadeus **Mozart** [or Johannes Chrysostomus Wolfgangus Theophilus **Mozart**]

18. After being attacked for the second time by a pack of dogs, this character has a dream in which a preacher delivers a sermon on seventy-times-seven pardonable sins. For 10 points each:
[10] Name this renter of Thrushcross Grange, who is told about Catherine Earnshaw's childhood by Nelly Dean.
ANSWER: Mr. **Lockwood**
[10] Mr. Lockwood learns about Catherine Earnshaw's rejection of Heathcliff in this only novel by Emily Brontë, in which he visits the title Yorkshire estate.
ANSWER: ***Wuthering Heights***
[10] Heathcliff, whose family is unknown, is frequently referred to as one of this group of people, which an Oxford student joins in a poem by Matthew Arnold.
ANSWER: a "dark-skinned **gipsy**" [or **Rom**a; or **Roma**ni]

19. This decree was issued at an imperial diet held in Nuremberg in 1356. For 10 points each:
[10] Name this decree, which set a procedure whereby seven electors from different regions would choose the next Holy Roman Emperor upon a vacancy of that office.
ANSWER: **Golden Bull** of 1356
[10] The secular electors included the margrave of this northeastern German state, which merged into Prussia in the 1600s.
ANSWER: Margraviate of **Brandenburg**
[10] The Golden Bull was promulgated under Charles IV of this house, which held the Holy Roman Emperorship under Sigismund prior to the Habsburgs.
ANSWER: House of **Luxembourg**

20. This compound is released from enterochromaffin-like cells, which acts with gastrin to promote hydrochloric acid secretion. For 10 points each:
[10] Name this compound involved in the inflammatory response and is released when an allergen binds to IgE antibodies, which is why drugs that bind to its receptor are effective at relieving allergies.
ANSWER: **histamine**
[10] Histamine is primarily produced by basophils and these cells, which are involved in the allergen response. These cells are also notable for their fast release of TNF-alpha.
ANSWER: **mast** cells [or **mastocyte**s; or **labrocyte**s]
[10] These receptors bind to antibodies and are named for the tail region of an antibody with which they react. Its epsilon R1 form, which is specific to IgE, is found on basophils and mast cells.
ANSWER: **Fc** receptors

21. A recently published edition of a work by this man includes an introduction by Arundhati Roy, titled "The Doctor and the Saint." For 10 points each:
[10] Name this politician who helped draft the Constitution of India in 1949. This Columbia-educated Dalit campaigned against the caste system with books like *Annihilation of Caste*.
ANSWER: B. R. **Ambedkar** [or Bhimrao Ramji **Ambedkar**; or **Babasaheb**]

[10] Ambedkar urged Dalits to free themselves from the caste system by doing this action. Doing this involves taking the Three Refuges and accepting the Five Precepts.
ANSWER: **conversion to Buddhism** [accept equivalents]
[10] This man began a hunger strike to protest rights that Ambedkar had won for the Dalits in some Round Table Conferences 1932. Aside from his support for the caste system, he is known for espousing *satyagraha* and leading the Salt March.
ANSWER: Mohandas Karamchand **Gandhi** [or Mahatma **Gandhi**]